Health
South Eastern Sydney
Local Health District

SUTHERLAND INTEGRATED HEALTH SERVICES PLAN

2019

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Foreword

The Sutherland Integrated Health Services Plan outlines our aspirations for the future delivery of health care to residents of the Sutherland Shire and beyond. It outlines the changing health needs of the population, emerging health trends, and national and international best practice models of care. It also projects future health service and infrastructure requirements to support people to stay healthy for as long as possible and provide timely and appropriate care when needed.

Extensive consultation was undertaken with a wide range of clinicians and managers, other staff and service providers, the Central and Eastern Sydney Primary Health Network , local general practitioners, local council, consumers and the broader community and a comprehensive review of service activity and projected demand was validated by clinicians.The service needs identified in the Plan are thus robust and support the most effective use of available and future resources.

A key focus of this Plan is on enabling people to maximise their independence and self-manage their own health care for as long as possible. It outlines a way forward that shifts our focus towards community and home based care and building resilient and healthy communities for the future. The Plan is underpinned by the South Eastern Sydney Local Health District's Journey to Excellence Strategy 2018-2021, which guides a major program of transformation that is underway across our organisation.

The Sutherland Hospital and its community services have served the changing needs of the local community since it opened in 1958. The hospital has undergone a series of expansions over the years and in 2017, with investment of $62.9 million from the NSW Government, a new Emergency Department with a dedicated children's emergency unit and new acute, general medical and surgical beds were opened.

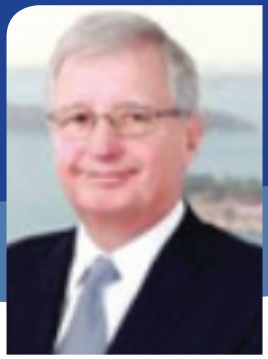
In 2018 – the 60th anniversary of Sutherland Hospital – an Australian-first model of case was launched – the Rapid Assessment, Diagnosis and Intervention Unit Sutherland (RADIUS). RADIUS aims to prevent Emergency Department admissions wherever possible, and better connect patients with community services.

Sutherland Hospital has a proud tradition of leading innovation in health care solutions, and last year its Aged and Extended Care Services model, Southcare, celebrated its 25th anniversary. Southcare's provision of continuous care to patients who are discharged from hospital to their home has since been implemented across the District, and in the UK.

To further support our community's needs, there is now an urgent requirement for an increase in capacity for operating rooms; aged care, rehabilitation, and palliative care beds; increased access to and appropriate infrastructure for ambulatory/outpatient services; enhanced community health and home-based services, integrated with hospital services; and diagnostic imaging, including an MRI. Greater access to research and education facilities on campus will allow skilled staff to apply the latest translational research.

This transformation of services and infrastructure will help meet the future demand from our growing and ageing population, improve whole of hospital flow, reduce length of stay, improve access to services that avoid the need for hospital care and most importantly, improve health outcomes and the patient experience.

We are confident this Plan will transform Sutherland Hospital and Sutherland Community Health services to secure better health and wellbeing outcomes for our community.



Michael Still MBA
SESLHD Board Chair

David Pearce
(Acting) Chief Executive, SESLHD

Executive Summary

Context

The Sutherland Integrated Health Services Plan (the Plan) outlines the transformation we aspire to in order to deliver exceptional care and support our residents to live healthier lives. The Plan outlines how we will empower our local population to optimise their health and wellbeing for as long as possible and the models of care and services required to address their health and wellbeing needs into the future.

The Plan aligns with the South Eastern Sydney Local Health District (SESLHD) Journey to Excellence Strategy 2018 – 2021 and NSW Health strategic priorities. It supports an integrated approach along the life course in order to best address the changing patterns of community needs and expectations and to identify contemporary and emerging models that provide the most effective use of available and future resources.

The Plan was developed after an extensive consultation process with a wide range of clinicians and managers, other staff and service providers and key stakeholders, including the Central and Eastern Sydney Primary Health Network (CESPHN), local general practitioners (GP), local council, consumers and the broader community. The service needs identified in the Plan are based on this advice, international and national evidence and extensive and robust data analysis.

The Plan also acknowledges the current innovative work occurring at the Sutherland Hospital and Sutherland Community Health Services (TSH&SCHS) to address the increasing demand for services, with models of care implemented to reduce the need for hospitalisation and support increased community facing services. Examples include the community facing Rapid Diagnosis and Intervention Unit Sutherland (RADIUS) for patients presenting with non-critical general medical problems for rapid assessment, intervention and supported discharge, the Geriatric Flying Squad (GFS) for geriatric outreach assessment and short term case management in the residential aged care setting, the Osteoarthritis Chronic Care Program (OACCP) for conservative management and support for self-management of joint disease, the Respiratory Co-ordinated Care Program (RCCP) which assists people with advanced lung disease to live optimally in their homes, prevent hospital admissions and decrease hospital lengths of stay, and the Midwifery Group Practice model that provides continuity of care for women throughout pregnancy, labour and the post-natal period. These and further examples are outlined throughout the Plan.

The new Emergency Department (ED) and acute beds that opened in 2017 will help meet the acute care needs of our community into the future and enable staff to deliver high standard clinical care. It is now time to focus on the next stage of our transformational journey, to allow us to:

- Meet the projected increased demand from a growing and ageing population combined with the increased prevalence of long-term disease
- Improve operational efficiency across the campus
- Provide earlier diagnosis and management with improved access to services
- Respond to NSW Health and SESLHD priorities to provide prevention, early intervention and alternatives to hospital treatment
- Ensure integrated care along the care continuum and the life course
- Provide innovative models of care, which will see more services being delivered in a community-based or non-admitted setting
- Deliver safe, quality, value driven person centred care.

This Plan is guided by a set of overarching principles to drive our shared vision:

> **Integrated and safe care**

> **Strong community partnerships**

> **Innovation and Research**

> **Exceptional consumer experience**

> **Sustainable future planning and development**

> **Just workforce culture**

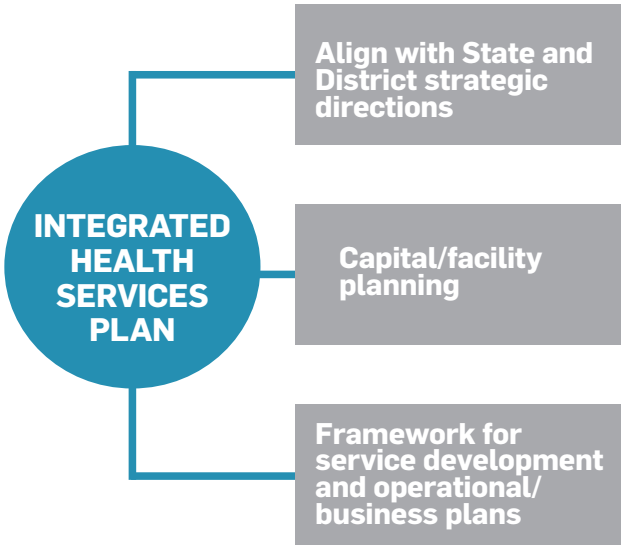
How we will use this plan

The Plan identifies the strategic directions chosen to meet future demand for publicly funded health services in the Sutherland Shire, including for service development and delivery, networking of services, and new models of care to be considered for the future.

It thus provides an overarching framework to guide future strategic, operational and service improvement priorities at TSH&SCHS. These priorities will identify actions and milestones towards achieving the recommendations outlined in this Plan.

This comprehensive Plan will ensure that health services align and grow with changing patterns of need while making the most effective use of available and future resources, and guide the immediate and long-term efforts of TSH&SCHS toward delivering high quality, compassionate health care to our community.

A Health Services Plan is also a requirement of the NSW Ministry of Health and NSW Treasury to provide the case for further redevelopment and secure capital funding that will allow us to continue the process of transformation of TSH&SCHS both on and off campus.



Why we need to change

We are serving a growing number of people, many of whom are experiencing long term health conditions; and there are significant health inequities within the Sutherland Shire

We are currently on an unsustainable path of ever increasing demand for emergency services, hospital beds, outpatient and community services and bigger expenditure

If we do not redesign our system to be more focused on supporting people to remain healthy and manage their own care effectively, we will not have the workforce nor budget to deliver harm-free personalised care to every patient, every time

Our health system is struggling to meet the population health challenges posed by an ageing society and the increasing burden and complexity of physical and mental health comorbidities. This is evident in the Sutherland Shire, where the demand for health services is expected to become increasingly unsustainable if we do not change our way of working.

The resident population in the Sutherland Shire is projected to increase to over 250,000 people by 2031, with the number of older people, who use a disproportionate share of health services, expected to increase the most. The 85 and over age group is projected to almost double. Around 38% of our residents reported having a long term health condition. Many people have more than one long term illness or condition at the same time, requiring considerable resources for acute and long term management. Rates for diabetes and obesity are increasing in the Sutherland Shire and there are increasing numbers of people living with dementia.

Data analysis projects the greatest growth in inpatient activity will be for people with cardiac, respiratory and neurological conditions. Reducing hospitalisations for these conditions includes early diagnosis and treatment and good ongoing management in ambulatory, outpatient and community settings to avoid potentially preventable admissions.

Currently patients often have to navigate through disconnected health and social care systems that make it difficult to meet their needs for co-ordinated, integrated care. Remaining on this same path of healthcare will lead to a continuation of ineffective episodic care, with an increased risk of harm to patients and escalation of health inequalities.

Recent capital developments will help meet our community's need for emergency and acute inpatient services into the future, however there is remaining infrastructure that is ageing and no longer has capacity nor is fit for purpose, does not support care integration and limits the capacity to implement contemporary and innovative models of care into the future.

Our ambition

In order to provide safe, person centred, integrated care we will:

- Strengthen partnerships with community, patients, carers, and families
- Transform services to support people along the life course to stay well, active, continue to live at home and stay positively connected to their community for as long as possible and to experience improved quality of life, particularly for people living with long-term conditions
- Provide timely access to appropriate support, enabling people to maximise their function and independence and self-manage their own healthcare where possible
- 'Turn the curve' on demand for emergency and acute activity by transforming our model of care to be preventive, personalised, predictive and participatory
- Shift the focus of care from hospital to ambulatory/community based care when possible
- Ensure evidence based models of care, informed by the latest translational research
- Provide better value for our patients and the community.

A life course approach is important for achieving population health and wellbeing.

We will focus on giving each child the best start to life and keeping people in the middle and older years as healthy as possible –

in the right setting
at the right time.

What we will do

To avoid the need for hospital care, a flexible range of solutions will be developed to best meet people's needs along the life course. There will be a greater emphasis on prevention and keeping people well, self-management of health conditions and individual responsibility, and stronger links with primary care and social care support to address social determinants and increase resilience to improve health and wellbeing.

New models of care will seek to reduce the barriers between the health and social care sectors, shift and adapt processes of care to a people-centred model, improve access to ambulatory and community-based care and embrace eHealth technology.

Promoting a life course approach to health is an important aspect of contemporary health practice. We will work closely with primary health care providers to identify people who are at risk of ill health and work with them to help keep them well.

Communities themselves often have the resources and assets to support their health and wellbeing. It is critical that we build the capacity and capability of our organisation to identify and leverage these assets through co-production and co-designing services with them and by supporting community led activities that address what matters to them.

To best meet our communities' health and wellbeing needs and to ensure sustainable and affordable clinical services now and into the future, our service delivery will be:

Our services will be designed around people and places, including a built environment that supports health and healing and facilitates the ways in which people interact

We will pursue an increased depth of integration between clinicians, educators, researchers, academics and industry partners

Our services will be co-designed and co-produced with community members, staff and key partners

Anticipatory and predictive:

- With predictive analytics to identify high risk patients and those in need of health care
- Using risk stratification and decision support tools to identify patients with ongoing care needs
- Advancing system wide strategies to acknowledge and reduce health inequities among population groups and localities

Co-ordinated and integrated:

- Ensuring patients are at the centre of the system and are supported by a co-ordinated pathway of health and social care
- In partnership with primary care, engaging people to become educated and supported to manage their own health and wellbeing, to share in decision-making, and to empower them to become partners in care
- Progressing existing and fostering new and innovative hospital avoidance strategies to help reduce Emergency Department presentations and potentially avoidable admissions
- Developing an ambulatory approach to hospital care, with inpatient hospital care focused on those with greatest need, ensuring equitable and timely access to specialist care when required
- Ensuring our chronic care, aged care and rehabilitation models are able to provide care in an ambulatory or home setting where clinically appropriate

Easily accessible and navigable:

- Providing seamless patient transitions into and across services with more easily accessible and navigable services to ensure the right care in the right place at the right time
- Providing specialist advice to primary care and timely, effective tertiary support when needed
- Expanding ambulatory and community-based services and improving integration with other services to prevent people becoming ill and to support people to better manage their long-term conditions
- Ensuring convergent e-Health platforms

Evidence based:

- Working with our research and education partners to foster a well-informed workforce guided by the latest translational research.

What is needed?

Despite recent capital investment, there remains a number of infrastructure challenges for TSH&SCHS. This includes operating theatres that are no longer fit for purpose and at capacity, insufficient ambulatory, outpatient and community facilities to introduce new services and avoid the need for hospitalisation, a lack of aged care and subacute beds which hampers whole of hospital flow, ward configurations that do not allow the introduction of new models of care, mental health facilities that require refurbishment to allow patient centred care, inadequate staff and storage facilities and a lack of educational and research spaces on campus.

The provision of new fit for purpose infrastructure with the flexibility to adapt to future requirements will allow the implementation of new and effective models of care and integrated service delivery so that the long-term health needs of our growing and ageing population, many of whom are living with multiple long term health conditions, can be addressed along the life course into the future.

There is now an urgent need for new fit for purpose operating rooms to meet demand and gaps in services, an increase in capacity for aged care and subacute services (including rehabilitation and palliative care) and the development of a Day Only rehabilitation service, refurbishment of some wards to allow the introduction of new models of care and a better patient experience, refurbishment of ageing critical care medicine beds, more diagnostic imaging including an MRI, double the number of ambulatory/outpatient and community based clinic and treatment spaces, and more space is required for the expansion of community based services to avoid the need for hospital care when possible. The Garrawarra Centre also requires refurbishment to meet best practice guidelines for dementia care.

Providing dedicated research and education facilities on campus will further support our transformation to enable staff to deliver best practice services informed by the latest translational research.

The provision of new fit for purpose infrastructure and the introduction of new models of care will reduce the demand for emergency and acute services by improving efficiencies in access in the most appropriate setting, whole of hospital flow, length of stay and patient outcomes by enabling us to provide the right care in the right place at the right time – every time.

This Plan identifies the capital and service requirements to achieve this transformation.

What our transformed system will mean

Jeannie's Journey

Jeannie and Harry are in their 80s and have lived in the same house in Grays Point for 55 years. They have a beautiful garden which brings them great joy.

One morning Jeannie didn't come in from the garden for her cup of tea, and Harry found her slumped on the garden seat with a drooping face, unable to communicate or move.

Harry immediately called Triple 0 and the paramedics alerted TSH ED that Jeannie was coming in with a suspected stroke.

At TSH the Acute Stroke Pathway was implemented. On arrival Jeannie was urgently assessed and a CT confirmed a blood clot had caused an ischaemic stroke.

Within 90 minutes of Harry finding her, Jeannie was given thrombolysis, an infusion to dissolve the blood clot.

The rapid treatment avoided further damage and she was able to be transferred to the Acute Stroke Unit at TSH. While there, her rehabilitation was started by the in- reach Acute Rehabilitation Team.

Jeannie's condition continued to improve in the Acute Stroke Unit, and after a few days she was transferred to the rehab ward for more intensive rehabilitation.

Jeannie gradually regained her mobility and function with the help of the multi-disciplinary rehab team and Harry's support. She had an ACAT assessment in hospital and was discharged home after 10 days.

Jeannie was eligible for community transport, some home support with cleaning and had a few home modifications to ensure her safety. She had follow up Day Only multidisciplinary rehab for another six weeks to help her reach her goals and her GP was kept up to date with regular progress reports. She was very happy to be able to be at home again with Harry each night.

The multidisciplinary community rehab team from Southcare continued to see Jeannie at home for a few weeks after that to make sure she was safe and had reached her optimal function and potential. She was given a home exercise program to maintain her improvement, which Harry makes sure she does daily. She sees her GP regularly, who supports her to maintain her health.

Jeannie feels very lucky to have had such a good recovery and credits this to her excellent integrated care, from her ambulance journey and hospital care to her ongoing home based care and GP management. She is so happy to be back at home again with Harry, pottering around in their beautiful garden.

1. Background

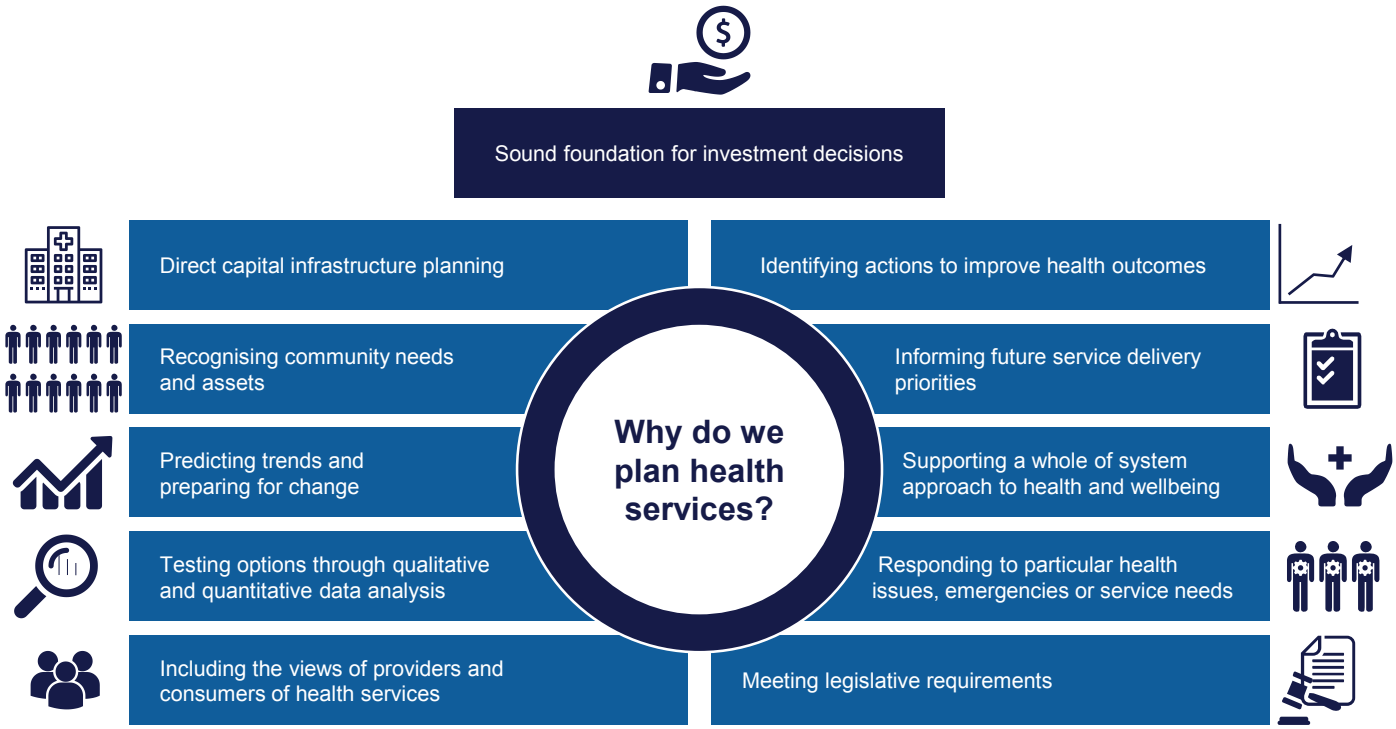
KEY POINTS

The Sutherland Integrated Health Services Plan will articulate our vision for meeting the future health and wellbeing needs of the local community. This Plan will inform hospital and service priorities, access to specialty services, community services and networking within the District.

The recent redevelopment of the Sutherland Hospital and Sutherland Community Health Services' campus provides an ideal opportunity to continue to transform our models of care to meet our community's health and wellbeing needs and expectations into the future.

To realise this opportunity, a rigorous approach to planning has been undertaken, including:

- Agreed purpose, principles, scope and governance
- Broad consultation, extensive literature searches, robust data analysis and scenario planning
- Consideration of other planning activities, government priorities and District strategic plans.



1.1 Principles

This Plan is guided by a set of overarching principles to drive our shared vision:

Integrated and safe care	• Provide integrated, evidence-based, person-centred care which is co-designed and co-produced with consumers and community members • The safety of our staff, consumers and the community is integral to everything we do
Strong community partnerships	• Foster strong relationships with our partners, including with our residents, to achieve better health outcomes for our community
Innovation and Research	• Commit to a strong research culture that embeds translational research and innovation into services to transform the care we provide
Exceptional consumer experience	• Provide an integrated and responsive consumer journey with strong clinical linkages which aims to achieve self-determination and better health outcomes • Support a whole of system approach that ensures people have the knowledge, skills and confidence to stay healthy and manage periods of ill health
Sustainable future planning and development	• Commit to the review and planning of fit for purpose and environmentally sustainable facilities on campus and in the community to meet future demand • Ensure efficient and effective care to provide better value health care and financial sustainability
Just workforce culture	• Foster an adaptive, resilient and accountable workforce committed to personal and consumer wellbeing • Maintain local identity through social connectivity with the community.

1.2 Consultation process to develop this plan

Wide ranging consultation has taken place for the development of this Plan which is summarised below.

55+ consultations
that included 200+ clinicians and other stakeholders

2 Staff Forums
attended by 100+ staff

Community Forum

2 Consumer Advisory Council meetings

GP Workshop
attended by 9 local GPs

Sutherland Shire Council meeting

Throughout the development of the Health Services Plan there were several opportunities for broad consultation. The process involved the following stages:

STAGE 1

- Development of a Consultation Process Plan outlining the objectives of consultation, and who, when and how this consultation will occur
- Establishment of a Governance structure, which included the Planning Advisory Group and the Executive Steering Committee, with both groups inclusive of consumer representation
- Distribution of the Background Paper, comprising of the population profile, activity data, base case projections and the case for change for comment.

STAGE 2

- Meetings held with individual clinical departments to identify service specific issues, proposed models of care and discuss data and projection methodologies
- Consultation with the Consumer Advisory Group to provide an overview of case for change, focus areas, planning process through to capital planning and role of consumers in the planning process
- Consultation with members of the Central and Eastern Sydney Primary Health Network, including a meeting with nine local GPs
- Advice and input sought from education providers and researchers
- A Staff forum was held to inform and seek advice from TSH&SCHS staff members, with over 50 attendees
- A Community Forum was held to inform and hear the community members' views on future service provision
- A meeting was held with Sutherland Shire Council to outline the objectives of the Plan and identify areas for potential future collaboration
- Regular consultations with the Planning Advisory Committee and Executive Steering Committee regarding progress, proposed scenarios and models of care.

STAGE 3

- Draft Plan formulated, based on broad consultation and advice, international and national evidence and advice from Advisory and Steering Committees
- Draft Plan distributed for broad comment to internal and external partners
- Staff Forum and Consumer Advisory Group meeting attended to outline outcomes and next steps
- Draft Plan ratified by the Planning Advisory Committee, Executive Steering Committee and the SESLHD Board
- Submission of the Plan to NSW Ministry of Health.

For more detailed information, refer to Appendix 1: Health Services Plan development process.

1.3 Strategic planning and policy context

In developing an Integrated Health Services Plan, it is important to consider it within the parallel strategic planning contexts of Commonwealth and State government priorities, SESLHD strategic planning, capital planning being undertaken in the surrounding area and other health, education and research partners.

1.3.1 Government Priorities

There are numerous State and Commonwealth priorities to consider in the context of the Plan. Key planning documents are outlined below, and also refer to Appendix 4: Other key Government priorities.

NSW Health State Plan - Towards 2021

The NSW State Health Plan[1] sets out a clear framework and the annual Strategic Priorities for the future direction for our public health system to improve health services and support healthier communities for all of NSW. Its goals are to:

- Keep people healthy and out of hospital
- Provide world class clinical services with timely access and effective infrastructure.

Healthy, Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014–24

This plan[2] sets out how to improve the health of mothers and babies, children, young people and families and the way healthcare is delivered for them across NSW.

NSW Strategic Framework for Integrating Care

The framework[3] sets an overarching vision for how NSW Health approaches integration of care as a whole of system response.

Mental Health Commission of NSW's Living Well, A Strategic Plan for Mental Health in NSW 2014 – 2024.

This Plan[4] sets out directions for reform of the Mental Health system in NSW.

Greater Sydney Commission District Plans

NSW Government's *A Metropolis of Three Cities*[5] establishes a 20 year-year plan to manage growth and change for Greater Sydney. Sutherland Shire Local Government Area (LGA) is part of the South District, which also covers the Canterbury Bankstown and Georges River LGAs. An innovation and research precinct based around the Australian Nuclear Science and Technology Organisation at Lucas Heights, and increased housing targets have been identified for the Sutherland Shire.

NSW State Infrastructure Strategy 2018 - 2038

As part of the State's Infrastructure Strategy,[6] the NSW Government is committed to the planning and delivery of world-class health infrastructure that supports a 21st century health system and improved health outcomes for the people of NSW. It includes investment in new types of infrastructure, technology-enabled out-of-hospital healthcare models, digital connectivity and data storage and environments that promote health.

Sutherland Shire Council Planning

Sutherland Shire Council has developed a Caringbah Medical Precinct strategy[7] with a cluster of new medical and residential facilities in close proximity to Sutherland and Kareena Private Hospitals to help meet the health needs of Shire residents and provide specialist medical services to the region.

Additional local government strategies have identified opportunities to increase housing capacity in the Sutherland Shire, including the Sutherland Housing Strategy (2014) and Sutherland Local Environmental Plan (2015), with a target of 5,200 new housing approvals from 2016-2021.

1.3.2 Universities and Research Alliances

Sutherland Hospital is a teaching hospital of the University of NSW (UNSW), and any development needs to consider the Strategic Intent of the University,[8] including the health and medical research hubs associated with its clinical schools (which includes TSH&SCHS), and provision of space for research and education.

Objectives of the UNSW Medicine Strategy[9] include to deliver progressive coursework programs based on best-evidence and innovation; strengthen success in research grant funding; build capabilities around major health challenges of our society; and with partners build a unique, effective and efficient basic science and translational research and teaching environment.

It should also be noted that nursing and allied health staff education and training is provided from a number of universities, most notably Sydney University, the University of Technology, Macquarie University, the University of Wollongong and the University of Western Sydney.

Maridulu Budyari Gumal - The Sydney Partnership for Health, Education, Research and Enterprise (SPHERE)

The SPHERE network brings together three universities, two Local Health Districts including SESLHD, two Specialty Health Networks, seven medical research institutes, nine major teaching hospitals, and the NSW Ministry of Health.

SPHERE was founded on the basis of partnership and collaboration, recognising that in this new economic and rapidly developing scientific research and healthcare environment, single institutions struggle to remain internationally competitive.

1.3.3 Central and Eastern Sydney Primary Health Network

One of the key priorities for the Primary Health Networks is to address health inequities and improve access for disadvantaged populations. SESLHD is developing partnership arrangements in population health activities such as local health needs assessments to inform overall health planning and data sharing and in delivering joint projects.

The Central and Eastern Sydney Primary Health Network Strategic Plan 2019- 2021[10] articulates how these priorities will be realised into the future.

1.3.4 SESLHD's Journey to Excellence and strategic priorities

The South Eastern Sydney Local Health District is undertaking a process of transformation radically changing the healthcare landscape across the District. This has been guided by the SESLHD Journey to Excellence 2014-2017, and will be guided into the future by the SESLHD Journey to Excellence Strategy 2018-2021, with its vision of "Exceptional care, healthier lives", and its purpose "to enable our community to be healthy and well; and to provide the best possible compassionate care when people need it".

Through its emphasis on system and service improvement and innovation, continued efforts to reduce waste and duplication and commitment to ensure the organisation has the right structures in place, SESLHD is confident it can secure financial sustainability whilst keeping high quality patient care at the centre of every decision.

The Strategy describes five priority areas for action to improve our community's health: safe, person centred and integrated care; workforce wellbeing, better value, community wellbeing and health equity and to foster research and innovation. These priorities are supported by partnerships that deliver; responsive information management systems; data and analytics, fit for purpose infrastructure and a culture of continuous improvement.

The Strategy is underpinned by the Triple Aim,[11] a framework that describes an approach to optimising health system performance, with three dimensions that work simultaneously to:

- Improve the health of populations
- Improve the patient experience of care (including quality and satisfaction)
- Reduce the per capita cost of health care.

Providing more care in the community, primary care or outpatient based settings, investing in health data and information sharing technology, and forming partnerships and alliances with primary and social care services will help us to support health and wellbeing and reduce the demand on hospital based services into the future.

SESLHD is working towards developing an increasingly integrated approach to its activity along the healthcare continuum, with partnerships across health disciplines, with other health and social care services and importantly, our community.

Transformation will also include implementing the three strategic directions of *SESLHD's Equity Strategy* [12]:

- Transform our health services to systematically improve equity
- Invest to provide more care in the community and more prevention and wellness programs
- Refocus our work to better address the social determinants of health and wellbeing.

The development of the Sutherland Integrated Health Service Plan will also draw upon a suite of SESLHD strategic plans (refer to Appendix 5: SESLHD's strategic planning framework), and the Sutherland Hospital Clinical Services Plan July 2014, which informed the recent redevelopment.

1.4 South Eastern Sydney Local Health District

Our Purpose:
To enable our community to be healthy and well; and to provide the best possible compassionate care when people need it.

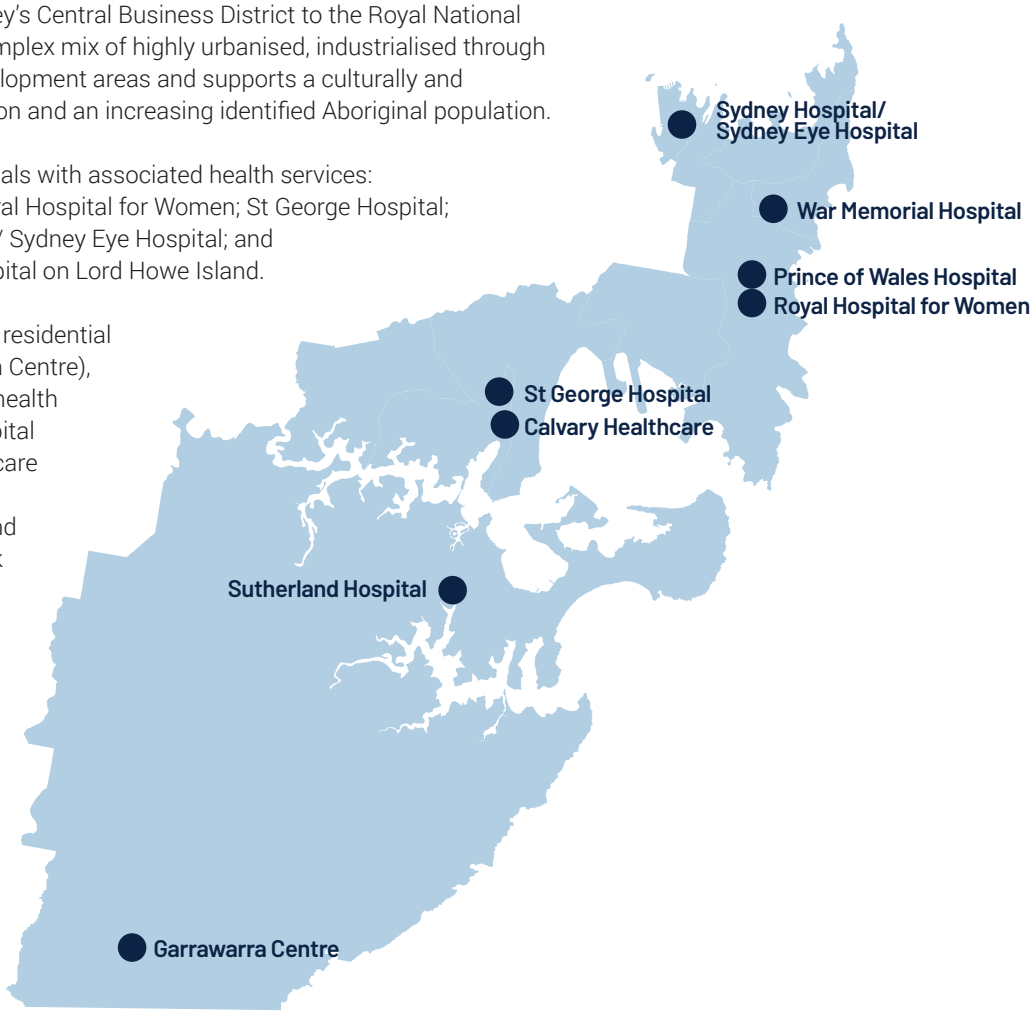
Our vision:
Exceptional care, healthier lives

SESLHD serves an estimated residential population of approximately 930,000 people, extending from Sydney's Central Business District to the Royal National Park in the south. It has a complex mix of highly urbanised, industrialised through to low density suburban development areas and supports a culturally and linguistically diverse population and an increasing identified Aboriginal population.

SESLHD has six public hospitals with associated health services: Prince of Wales Hospital; Royal Hospital for Women; St George Hospital; Sutherland Hospital; Sydney / Sydney Eye Hospital; and Gower Wilson Memorial Hospital on Lord Howe Island.

The District provides a public residential aged care facility (Garrawarra Centre), oversees two third schedule health facilities (War Memorial Hospital Waverley and Calvary Healthcare Kogarah) and provides organisational governance and clinical support to the Norfolk Island Health and Residential Aged Care Service.

SESLHD operates Child and Family Health and Community Health Centres, Oral Health Clinics and Community Mental Health Services that provide prevention, early intervention, community-based treatment, palliative care and rehabilitation services.



A range of primary health, population and public health services are also delivered to the community to protect and improve their health and wellbeing.

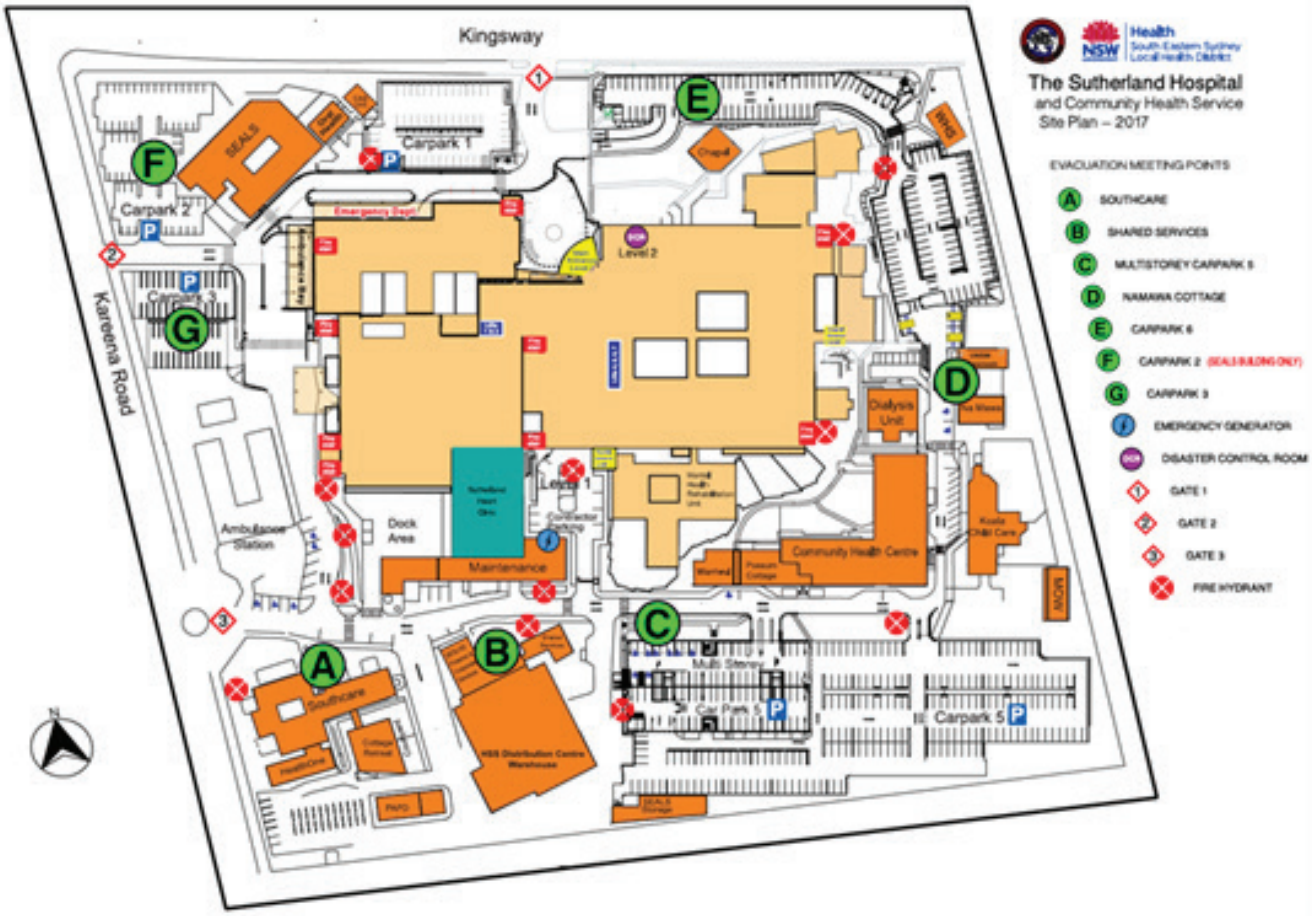
1.5 The Sutherland Hospital and Sutherland Community Health Services

1.5.1 The Sutherland Hospital

The TSH&SCHS campus is located in Caringbah, within the Sutherland Shire local government area (LGA), in southern Sydney, NSW. The Sutherland Shire covers a geographical area of almost 370 square kilometres and has a population of almost 220,000 people.

The Sutherland Hospital (TSH) is a major metropolitan hospital in SESLHD and a teaching hospital of the UNSW, and provides a comprehensive range of clinical and corporate services to the local and wider community, including emergency, critical care, surgery, medicine, cancer care, aged care, rehabilitation, women and children's health, mental health, outpatients, medical imaging, pathology and community health/home-based care. It operates as a networked service with St George Hospital and Community Health Services and a range of other District facilities.

It is held in high regard and well supported by the local community, with the vast majority of activity provided to local residents, and a significant number of community members actively involved in volunteer work with TSH.



Note: SEALS is now referred to as NSW Health Pathology (NSWHP) - Sutherland Laboratory.

First opened in 1958, the hospital has undergone a series of expansions, including a 30-bed children's ward, a 30-bed psychiatric ward, new operating theatres as well as physiotherapy, social work and radiography departments in 1984, further redevelopment occurred in 2003-04 and new car parking in 2014/15. The need for capital expansion and service redesign at Sutherland Hospital was identified in the SESLHD Health Care Services Plan 2012-2017[i] and the SESLHD Asset Strategic Plan 2012 -2017,[ii] which identified the District's top capital priorities for Sutherland Hospital included to expand inpatient accommodation, Emergency Department and Emergency Medical Unit, and redevelopment of ambulatory care/outpatients. In response, a Clinical Services Plan was developed in 2014.

Subsequently, in January 2015, the NSW Government committed $62.9 million to the redevelopment of Sutherland Hospital. This included the provision of a new and expanded Emergency Department providing 44 treatment bays (including three resuscitation bays) and 60 new beds including a new Emergency Short Stay Unit, General Medical Unit, General Surgical Unit and expanded Critical Care Medicine Unit.

The project also included hospital refurbishments, with additional storage space for theatres to increase efficiencies and capacity and expansion of the imaging department. Separate funding allowed the expansion of car parking.

The recent redevelopment has created capacity to efficiently and effectively meet the current and future demand for acute inpatient and emergency services to the local community and across the network, and improved timely access close to home for local residents.

1.5.2 Mental Health Services

The Mental Health Service operates as a district wide network, providing a service for adults, child and youth and for older person's mental health, for the assessment, diagnosis, monitoring and management of people with mental illness in a range of inpatient, outpatient and community settings. Services located at TSH include:

- 28 Acute beds in the adult inpatient unit accessible via the Emergency Department or direct admission
- 20 adult Rehabilitation beds to promote recovery and prevent relapse of mental illness
- Acute Care Service 24 hours a day servicing presentation to the Emergency Department and Community Assessments
- Triage service for assessment of mental health problems
- Ambulatory (outpatient) / community-based services include 12 shared clinic rooms for adults, youth, and older adults within the mental health footprint and an additional 4 shared clinic rooms for the child and adolescent service (CAMHS) at Caringbah Community Health Centre on the TSH&SCHS campus
- Home visits are also provided.

Clinical networking occurs across SESLHD for all mental health admitted patients, including but not limited to:

- Older Adult Mental Health inpatients transfer to St George Hospital specialty unit
- The Rehabilitation inpatient unit at Sutherland was built to serve both St George and Sutherland patients – there are no Rehabilitation beds at St George Hospital
- Child and adolescent mental health transfer to Sydney Children's Hospital or Shellharbour (state wide service) when beds are available and when accepted by the Unit (this is not usually at point of presentation,) and there is still a need to accommodate a degree of pathology within TSH in collaboration with paediatrics (other than for EDs).

i South Eastern Sydney Local Health District Health Care Services Plan. This Plan provides the direction for the development of services and programs to address the health needs of the community, and can be accessed at: www.seslhd.health.nsw.gov.au/HealthPlans/default.asp

ii The Asset Strategic Plan 2012-2017 provides the long-term approach for managing the District's land, buildings, infrastructure, plant and equipment to support implementation of health care priorities and initiatives outlined in the Health Care Services Plan 2012-2017.

1.5.3 Community / Home-based Health Services

Community Health Services are an important provider of a range of services for children and their families, older people, people with disabilities and those at risk of loss of independence who live in the Sutherland Shire.

Community Health Services work closely with members of the primary care team, other departments within Health, Non-Government Organisations (NGO) and community organisations in the provision of quality integrated care across the health continuum.

Community Health Services will need to grow over the next few years in order to provide more services closer to home and help avoid the need for admission or readmission. This will allow significant opportunities to support people better at home with integrated and co-ordinated services and partnerships with a range of providers, including NGOs and primary care.

Southcare

Southcare is a centre of excellence for integrated health care, offering outpatient, respite and community-based services predominantly for frail older people and those with disabilities and chronic disease living in the Sutherland Shire.

To support and allow advancement in the integration of hospital and community services, a range of services are co-located in the Southcare building, located on the TSH&SCHS campus.

These include:

- Aged Care Assessment Team (ACAT)
- Aged Care Services Emergency Team (ASET)
- Allied Health
- Centre Based Socialisation / Respite
- Community Dementia Home monitoring program
- Community Heart and Lung team
- Community Packages i.e. ComPacks
- Continence Advisory Service
- Dementia Advisory Service
- Dementia Home Monitoring Program
- Equipment Lending Pool
- Geriatrician clinics
- Geriatric Flying Squad (GFS)
- Generalist Community Nurses
- Individual Care
- Mobility Clinic
- Nursing clinics for hospital avoidance (7-day service)
- Pharmacist
- Pulmonary Rehabilitation Gym
- Rehabilitation clinics
- Respiratory Co-ordinated Care Program (RCCP)
- Social Work
- Southcare Outreach Service (SOS)
- Support Services
- Support and Education Groups
- Sutherland Heart and Lung Team (SHALT)
- Sutherland Transitional Aged Care Service (STACS)
- The Cottage (Dementia Day Care Respite)
- The Retreat (Frail Aged Day Care Respite)

Directorate, Primary Integrated and Community Health

The Directorate, Primary, Integrated and Community Health (PICH) manages a number of services that work with child, youth and family, adults and priority populations in the Sutherland Shire, including:

- The provision of Commonwealth funded community services to adults in the Sutherland Shire, including Aged Care Assessment (ACAT), Community Packages (ComPacks), Sutherland Transitional Aged Care (STACS), Commonwealth Home Support Program (CHSP) and Safe and Supported at Home (SASH)
- Community Health Centres at Caringbah (on the TSH&SCHS campus), Menai and Engadine that deliver a range of services, including for children, youth, women, older adults, carers, Aboriginal people, culturally diverse communities and people affected by drug and alcohol and mental health problems
- Child and Family Health services, a multidisciplinary service including: Child and family health nursing services; domestic violence counselling services; child and family counselling services; paediatric allied health services; community paediatrics; Out of Home Care Clinic; Child Protection Counselling services and Sexual Assault Counselling services provided at Caringbah, Menai and Engadine Community Health Centres and other Child Health Centres throughout the Sutherland Shire
- The Drug and Alcohol Service located at Caringbah Community Health Service offers a range of treatment and support for people with problems due to alcohol, prescription and/or illicit drug use, and provides support for their families and carers. Services are provided in both inpatient, outpatient and community outreach settings. Core Clinical services comprise intake and assessment, counselling, case management and support, withdrawal management, opioid treatment, medication - assisted treatment, hospital drug and alcohol consultation and liaison services, drug and alcohol hospital admissions and court diversion programs. Additional services provided include consumer support services including Aboriginal oriented workforce, addiction medicine outpatient clinics, post-Emergency Department presentation clinics, Chemical Use in Pregnancy and Parenting consultation and liaison, cannabis clinics, GP shared care, pharmaceutical opioid clinics, Headspace outreach clinics and assertive community outreach
- Services that work with priority populations e.g. Multicultural Health, Carers Program, Homelessness Health, Youth Health, Diversity Health, Women's Health and health services for people with a disability
- Kirketon Rd Centre (KRC) South, a primary Needle and Syringe Program located on the TSH&SCHS campus
- Aboriginal Health services and programs, including an Aboriginal Hospital Liaison Officer for St George and Sutherland Hospitals; Southern Sector 48 Hour Follow Up - 'Just calling to have a yarn' for post discharge support; Bulbuwil 'Healthy Living' - An Aboriginal Healthy Lifestyle Support Program; Narrangy-Booris - Aboriginal Early Childhood and Midwifery service; an Aboriginal Health Education Officer - Chronic Care Services; South East Aboriginal Health Care (SEAHC) —Integrated Care Service; and Cultural Healing through Paint and Colour - a culturally specific art therapy program
- Oral Health services on the TSH&SCHS campus and in the community, including a mobile van
- The Disability Strategy Unit, provides strategic direction for disability inclusion across SESLHD. It also provides guidance, leadership and advice to services on matters relating to the transition and implementation of the NDIS.

HealthOne

HealthOne, located on the TSH&SCHS campus next to Southcare, is a NSW Ministry of Health (MoH) initiative which aims to create a stronger and more efficient primary health care system, bringing together community health services, GPs, acute care services and other health professionals in the areas of chronic, complex and family and child health.

Services offered by HealthOne include:

- CommDiab (diabetes education program)
- Bulbuwil Healthy Living (Aboriginal healthy lifestyle program and smoking cessation)
- Women's Health clinic
- Mental Health cooking classes
- Legal Aid (free legal advice)
- Integrated wound care clinic.

An integrated skin cancer clinic is also offered in partnership with CESPHN, located in Miranda.

Directorate Planning, Population Health and Equity

The Directorate, Planning, Population Health and Equity (DPPHE) is the main provider of planning, population and public health programs and services in SESLHD, delivering both local and state-wide initiatives. The Directorate has a strong focus on those who experience the greatest health inequities and locations that experience the greatest socio-economic disadvantage.

The Directorate provides population health services to residents of the Sutherland Shire, including:

- Responsibility for the local implementation of state-wide health promotion programs that focus on a range of health related risk factors such as smoking during pregnancy and childhood obesity
- Building the capacity of local services and organisations to integrate health promotion activities into their work
- Falls prevention programs
- Ensuring services and the hospital comply with the NSW Health Healthy Food and Drinks Framework that promotes the sale of healthy food and drinks
- HIV/Sexual Health services
- Schools vaccination programs
- Public health programs.

This Directorate also provides District wide services that support TSH&SCHS in the areas of:

- Strategy and Planning
- Community Partnerships
- Health Equity.

1.5.4 The Garrawarra Centre

The Sutherland Hospital also provides governance for the Garrawarra Centre, a Residential Aged Care Facility (RACF) with 104 Dementia Specific beds for people aged 65 and older. The Centre is one of the few purpose-built, dementia specific facilities in New South Wales, and is located in Waterfall, approximately 43 kilometres south of Sydney.

High level multi-disciplinary care is provided for people with a primary diagnosis of dementia who exhibit challenging behaviours related to Behavioural and Psychological Symptoms of Dementia and require a safe and secure environment. These people are admitted because they cannot be managed in main stream Residential Aged Care Facilities. The Centre aims to provide security, while maintaining privacy, dignity and some freedom for the residents. Residents are housed in one of four purpose-build cottages, each able to house a total of 26 residents, with 10 single and 8 double bedrooms, on either a permanent or respite basis.

The multidisciplinary care team specialise in the safety, management and care of people in the end stages of dementia and work closely with the residents' families and friends to ensure the highest possible quality of life. There are comprehensive physiotherapy and diversional therapy programs including group and individual activities suited to residents with dementia. A permanent part-time geriatrician service has been established at the Garrawarra Centre to provide specialist on-site care for residents. Local GPs also provide a regular service to the Centre.

Residents are referred from hospitals, Social Workers, Community Health Aged Care Assessment teams (ACAT) and other Aged Care Facilities. Priority is given to SESLHD residents. Average occupancy of the centre is 98.3% with an average of 51 new residents accepted to the facility each year. The average length of stay is 834 days (2.3 years).

The Garrawarra Centre is recognised as an Aged Care Teaching Facility and offers student placements for nursing, allied health and diversional therapy for the university sector and TAFE NSW.

1.5.5 Volunteers

The benefits of volunteering to the individual, the community and organisations such as health services are well known and documented. Volunteers generally enjoy better physical and mental health, a greater understanding and connection to community as well as a sense of achievement and fulfilment.[13]

The Sutherland Hospital and Sutherland community health Services has around 330 volunteers who give their time, energy, compassion and commitment to make a real and enduring difference to the lives of patients, their carers and families and hospital staff, and to the health and wellbeing of our community. Tailored induction and training programs ensure that volunteers know how to perform their roles and are able to work in a safe environment.

Currently volunteers work across 27 programs, including retail outlets, Ward Grannies, falls prevention and assisted feeding in Aged Care, Information Booth, newspaper services, raffles, Emergency Department Hosts/Hostesses, general helpers on the wards, and assisting at functions, e.g. Hospital Fete, BBQ's, as well as providing community member input into the design, implementation and evaluation of services via committees, working groups and discussion forums.

Retail fundraising produces around $200,000 towards hospital equipment each year. The Hospital Garden Kiosk has donated almost $3 million to the hospital through the work of volunteers since its inception.

1.6 Partners in health care delivery

This Plan recognises that not everyone needs hospital-based health care, and a range of factors influence an individual, family and community's health and wellbeing.

Many people take an active interest in managing their own health and wellbeing, for example by eating a healthy diet, exercising regularly, sleeping well, getting regular check-ups and immunisations, seeking timely medical care, remaining socially active, understanding their medical conditions and treatments and adhering to treatment and managing their condition.

Keeping our community well requires working with many agencies to deliver more accessible integrated care for a better patient journey and improved health outcomes, with more out-of-hospital care delivered in localities where communities have higher health and wellbeing needs.

1.6.1 Primary Health Care

Primary health care is especially relevant to support the growing proportion of the population with multiple chronic health and social care needs, in terms of prevention and health screening, early intervention, treatment and management.

South Eastern Sydney Local Health District has a key responsibility to protect and improve community health and wellbeing. As such, the District delivers a comprehensive range of primary and integrated community health services and activities to prevent disease, illness and injury. The focus is on promoting health and wellbeing through preventive care that tackles lifestyle behaviours such as smoking, low physical activity and poor nutrition and target population groups that are at risk of poorer health and wellbeing, such as those who are socio-economically disadvantaged, subject to homelessness, experience severe mental illness and Aboriginal people.[14]

Promoting a life course approach to health and wellbeing is an important aspect of primary health care practice. It is now recognised that each life stage influences the next, and social, economic and physical environments interacting across the life course can have a profound effect on individual and community health and wellbeing. For example, being breastfed, having a healthy diet with adequate calcium intake throughout life and participating in regular weight bearing exercise promotes improved bone density and helps prevent osteoporosis and fragility fractures later in life.

Another important primary health care approach is the promotion of resilience, the capacity to recover quickly from difficulties in life. This can help offset factors that increase the risk of mental health conditions, such as lack of social support and lack of social connection. In order to build resilience, people living in the most inequitable life circumstances need targeted support to take part in activities that promote wellbeing, a sense of purpose and social connectedness.

Carers

The effectiveness of health care services in Australia relies heavily on voluntary carers (family members, friends etc.) who directly care for people and play an important role in co-ordinating and facilitating formal community care services.

Identifying carers and family on patient admission, with their understanding of the person's needs and issues and including them in discharge planning from the start, will help expedite discharge from hospital, help maintain independence at home and contribute to a reduction in unplanned admissions and re-admissions.

The availability of voluntary carers is expected to decline over the coming decades at the same time as the demand is expected to rise. This is an important consideration for the sustainability of community and home care and will potentially increase the demand for acute and residential care.

The 2016 census identified there were 21,537 carers (people providing unpaid assistance to a person with a disability) living in the Sutherland Shire

Carers often have high levels of anxiety and depression, with issues such as financial stress (many carers cannot work or reduce work hours due to their carer role) and social isolation. Many carers are themselves ageing and living with long-term health conditions, and will increasingly need to rely on community services to remain independent at home.

The *NSW Carers Strategy 2014-19*[15] identifies needed reforms across areas such as carer health and wellbeing. The *NSW Culturally and Linguistically Diverse Carer Framework*[16] recognises that culturally and linguistically diverse carers experience additional barriers and do not access services and support at a rate proportional to their numbers.

Inclusion of carers in the planning, provision of health care and discharge supports health staff to provide person centred care, and aids in the reduction of readmission rates.

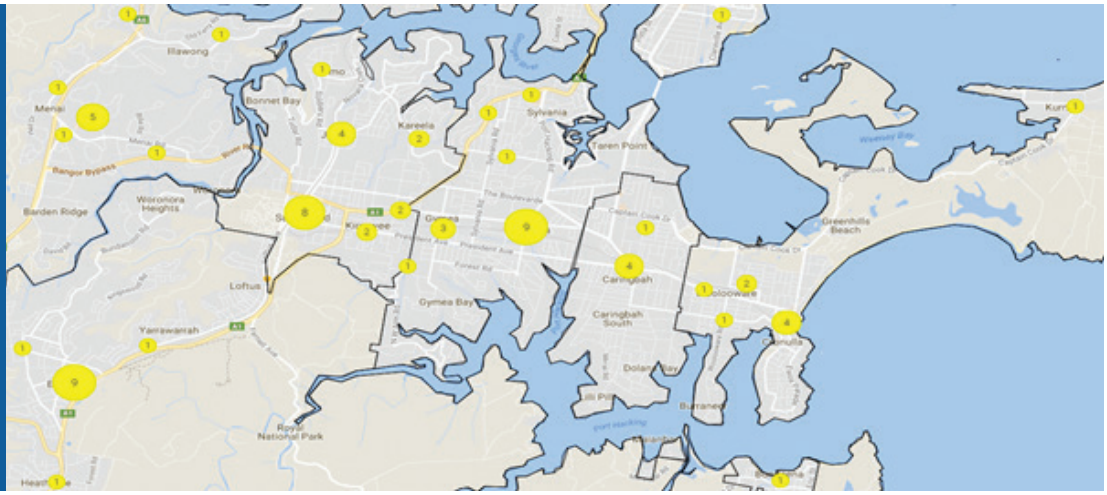
General Practitioners

General Practice is an essential partner in integrated health care delivery. Although the number of GPs in parts of the Sutherland Shire is higher than the NSW average, there is significant variation in the number of GPs within individual suburbs, with a recognised shortage of GPs in the western half of the Shire, as seen in Figure 1 below. There is also limited access to after-hours GP practices in parts of the Sutherland Shire.

Treatment and management of long-term conditions and the prevention of hospital admission for this cohort requires a ready access to GP services, including after-hours services. A lack of GPs, especially those providing services after-hours, will continue to place more pressure on Sutherland Hospital's Emergency Department and inpatient services.

Figure 1

Distribution of GP Practices, Sutherland



Source: HealthDirect Australia HealthMap https://studio.healthmap.com.au/#/map. Accessed March, 2018

Central and Eastern Sydney Primary Health Network

The boundaries of the Central and Eastern Sydney Primary Health Network (CESPHN) encompass both SESLHD and Sydney LHD. Its role is to "…improve the efficiency and effectiveness of medical services for patients, particularly those at risk of poor health outcomes"[17] with a focus on improving outcomes for people with chronic disease.

The CESPHN provides a range of programs focused on delivering integrated care with the LHDs and specialty health networks including Aboriginal health, antenatal shared care, aged care, Health Pathways, immunisation, mental health and sexual health.

Collaboration between SESLHD and CESPHN is underway to introduce HealthPathways, a web-based information portal supporting primary care clinicians to plan patient care. The HealthPathways site provides information on assessing symptoms and outlines management options including information about local services and referral processes. The pathways will allow improved access to the right care in the right place and help reduce the need for emergency presentation, specialist intervention and avoidable admission, reduce follow up appointments and reduce duplication or unnecessary diagnostics and investigations as these will be done in the community prior to attendance at specialist clinics. SESLHD is also currently exploring the potential for co-commissioning of services with CESPHN.

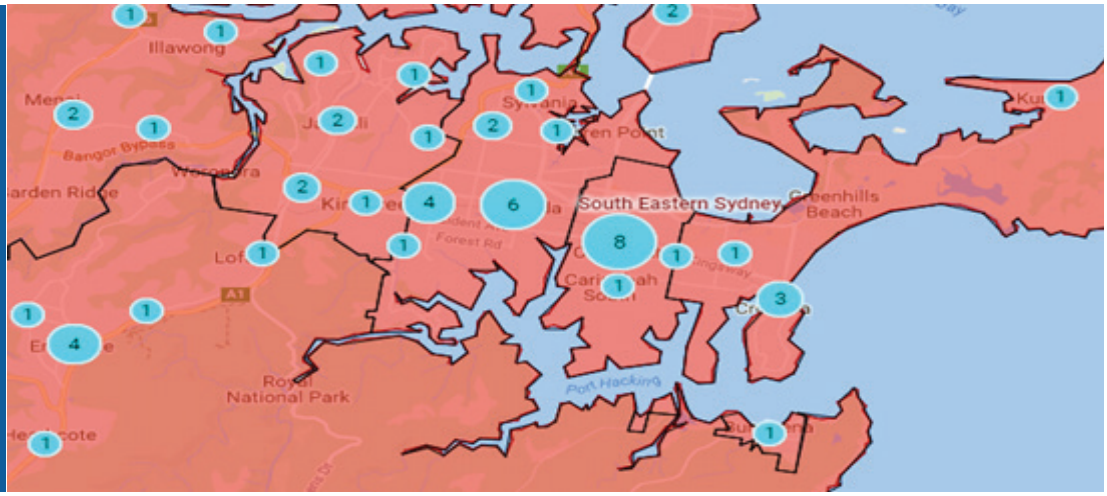
Community pharmacies

There are a large number of community pharmacies in the Sutherland Shire, offering a highly skilled network of primary health care professionals providing quality medicine dispensing, advice and services. Their wide distribution and accessibility provide an opportunity to engage people along the health spectrum, including hard-to-reach population cohorts who do not use other health services. There are areas in the western part of the Shire however, that appear to be under resourced.

The Pharmacy Guild of Australia has identified a number of enhancements including utilising community pharmacies for triage and in the treatment of minor ailments, risk assessment and referral, point of care testing, chronic disease management and some after-hours care.

Figure 2

Distribution of Pharmacies, Sutherland Shire



Source: HealthDirect Australia HealthMap https://studio.healthmap.com.au/ Accessed March 2018.

Social care providers

Many non-government community organisations work in partnership with the NSW Government to provide health services in the community which complement those provided by the public health system.

The NGO Co-ordination Unit is located within the Directorate of Planning, Population Health and Equity. The Unit administers 45 grants to NGOs within the Local Health District. In 2018/19 approximately $14 million will be distributed to NGOs with the aim of improving the health and wellbeing of people in the community. These funded NGOs are incorporated community-based not for profit organisations.

Currently, health-funded NGO projects are aligned with NSW Health/SESLHD strategic directions and cover a range of health program areas including:

- Aged and Disability Services
- AIDS Prevention
- Community Services Program
- Drug and Alcohol
- Health Care Standards
- Health Promotion
- Mental Health
- Women's Health.

Aged care providers

Recent Commonwealth Government policy has resulted in increased access to community care places and transition care. The Home Care Packages Program provides older people who want to stay at home with access to a range of ongoing personal services, support services and clinical care that help them with their day-to-day activities and assist older people to stay in their own homes for longer.

In the Sutherland Shire as at June 2018, there were also

- 2,621 residential care places in 27 residential aged care facilities
- 38 transitional care places.[18]

Allied Health providers

A large number of allied health providers in the Sutherland Shire work in a variety of settings, such as private clinics, NGOs, residential aged care facilities, primary care, community-based settings and domiciliary care. They provide privately funded and some Medicare rebated services to community members, delivering services that span the spectrum of health from wellness and prevention, acute and subacute care, long-term disease management and palliative care.

New models of care in allied health have been introduced to better service patient's needs and integrate care, for example shared care models between allied health practitioners and primary care for complex care patients. Other models under investigation for the future include limited prescribing rights for physiotherapists, and new Medicare items for allied health services.

1.6.2 National Disability Insurance Scheme (NDIS)

The National Disability Insurance Scheme (NDIS) gives participants the ability to choose and control the disability supports they require to achieve independence, social and economic participation. It provides disability support for people who have a permanent and significant disability aged 0-65 years, with a designated pathway, Early Childhood Early Intervention (ECEI), for children with a disability or significant developmental delay 0-7 years. People aged 65+ are eligible for the services of My Aged Care, however existing clients of the NDIS may choose to continue to receive NDIS disability supports once they are over 65.

The Disability Strategy Unit, a unit within the Primary, Integrated and Community Health Directorate provides guidance, leadership and advice to services on matters relating to the transition and implementation of the NDIS.

As the full impact of the NDIS on provision of services becomes clearer it is recognised that:

- The introduction of the NDIS represents large scale social policy reform leading to momentous changes in disability support funding. In 2018 we saw the cessation of the Community Care Supports Program (CCSP) and the introduction of Safe and Supported At Home (SASH) funding. SASH funding has been established to support people with a disability who are not eligible for the NDIS but have a reduced functional capacity
- The NDIS eligibility process requires staff to develop a thorough understanding of the NDIS disability and eligibility requirements. Without this, the process for NDIS application can become lengthy and has the potential to result in discharge delays
- The NDIS disability supports planning process also requires staff to develop a thorough understanding of reasonable and necessary disability supports. Without this, the access to disability supports in the community can be impacted resulting in preventable hospital admissions for people with a disability
- The introduction of the NDIS provides TSH&SCHS with an opportunity to develop strong working partnerships with NGO's, disability support providers, carers and other government agencies to reduce the adverse impacts of a changing disability landscape and improve outcomes for people with a disability
- The introduction of the NDIS provides TSH&SCHS with an opportunity to actively implement the recommendations policy directive: Responding to the Needs of People with Disability during Hospitalisation (PD2017_001)[19] to further improve the health journey of people with a disability.

The 2013 introduction of the NDIS builds further on the person centred approach and strives to build a more inclusive society.

1.6.3 Other SESLHD Facilities

Residents of the Sutherland Shire also access specialist health services from other SESLHD facilities.

St George Hospital and Community Health Services

The St George Hospital and Community Services campus, located in Kogarah, is a major tertiary and teaching hospital of the University of NSW, and provides a number of networked services for TSH&SCHS and Sutherland Shire residents.

Recent construction has eased pressure for mental health, ED and acute care, including a new Emergency Department and an acute services building. Planning has also recently been undertaken for the proposed expansion and redevelopment of further services including refurbished birthing suites, expanded theatres, subacute beds, mental health and ambulatory care.

A comprehensive range of services are currently offered at St George Hospital, including:

- Level 1 trauma service for SESLHD, Illawarra/ Shoalhaven and Murrumbidgee LHDs
- Emergency
- Critical care
- Surgery
- Cancer Care
- Medical
- Rehabilitation
- Aged care
- Women's and children's health
- Mental Health
- Ambulatory care
- Outpatient clinics
- Community health / home based care
- Medical imaging
- Nuclear medicine
- Bone marrow transplant
- Brachytherapy.

Calvary Healthcare Kogarah

District activity and demographics demonstrate there will continue to be a growing need for both community and inpatient subacute services now and into the future. It is envisioned that Calvary Healthcare Kogarah (CHCK) will continue to provide palliative care, rehabilitation and aged care services to the local community and continue to network closely with St George and Sutherland Hospitals.

The Calvary Strategic Plan 2016-2020 identified the continuation of palliative and end of life care as a key focus area, with a goal to "actively explore growth opportunities for quality aged, palliative and end of life, hospital and community care services".[20]

Other Specialised Health Services in SESLHD

Sutherland Shire residents also access specialised services from the following SESLHD facilities:

- Sydney/Sydney Eye Hospital (SSEH) for ophthalmology and hand surgery services
- Royal Hospital for Women (RHW) for some obstetrics and gynaecology and neonatal services
- Prince of Wales Hospital (POWH) for a variety of specialised services including spinal injury and renal transplant
- Garrawarra Centre at Waterfall for public residential dementia specific aged care.

1.6.4 Other health services

Other public hospitals

Residents of the Sutherland Shire also flow to non-SESLHD public hospitals based on:

- Access to specialised services not available in SESLHD hospitals e.g. Sydney Children's Hospital Network for paediatric and adolescent services
- Patient preference.

Private sector hospitals

The majority of inpatient separations for Sutherland Shire residents occur at private hospitals and Day Procedure Centres. In general, residents from the least advantaged areas are significantly less likely to have overnight hospital admissions at private hospitals than other residents of NSW.

Kareena Private Hospital, located opposite Sutherland Hospital in Caringbah, provides a range of medical and surgical inpatient services to residents of the Sutherland Shire and beyond. Services include: Day Surgery Unit, Operating Theatres, Endoscopy Suite, Coronary Care Unit, Intensive Care Unit, Special Care Nursery and Rehabilitation services. There are 5 other private hospitals and 13 day only hospitals[21] in southern SESLHD.

Ambulance Service of NSW

The NSW Ambulance is expanding their role in the healthcare spectrum by developing new models of care that are safe alternatives to hospital care. The range of services NSW Ambulance provides include telephone advice and referral, assessment and service provision in the residence or at the scene as well as the historic "See, Treat and Transport" mode.

The Extended Care Practitioner model of care involves the assessment and management of patients with low risk, lower acuity illnesses and injuries in their usual place of residence, with referral to other health professionals if appropriate. NSW Ambulance plans to deliver more services which may lead to a reduction in ED presentations, such as in-reach services to residential aged care facilities and advanced care planning for end of life.

Patient Transport Service

The provision of patient transport is critical to support the delivery of health services to our community for both higher and lower acuity patients and to ensure equitable access to services:

- Emergency transport is provided to the TSH campus by Ambulance NSW, by both road and air based service
- Non-emergency patient transport to and from the Sutherland Hospital campus is co-ordinated through a centralised booking hub and provided by:
    - Patient Transport Service (PTS) for patients who require transport to or from a health facility and who are assessed as medically unsuitable for community, public or private transport
    - NSW Ambulance 'green fleet' managed by HealthShare NSW, for patients not suitable for PTS transport, e.g. that require stretcher transport or medical observation
- Other subsidised patient transport service options include community transport (provided by Transport for NSW) and NGO provided transport.

NSW Health Pathology

NSW Health Pathology's vision is to 'Lead through innovation and collaboration to deliver excellence in service and outcomes'. NSW Health Pathology – East (formerly SEALS) is committed to providing SESLHD with a comprehensive range of diagnostic testing to ensure the highest quality of care for patients. The strategic plan for NSW Health Pathology is aligned with the NSW State Plan Towards 2021 which lists NSW Health Pathology as one of the key agencies who provide a 'state-wide service in support of high quality, value for money patient care'.

BreastScreen NSW

The BreastScreen NSW South Eastern Sydney and Illawarra screening and assessment service is co-ordinated and managed by The Cancer Institute NSW and provides free mammography to women 40 years and over for the early detection of breast cancer, particularly targeting women aged 50-74. It aims to reduce mortality associated with breast cancer with early detection improving survival and enabling treatment options to be less invasive. Fixed screening and assessment units located at Miranda and St George Hospital provide services to the local community.

2. The Case for Change

KEY POINTS

At TSH&SCHS, we are currently on an unsustainable path of ever increasing demand for health services and bigger expenditure.

Recent redevelopments of the Emergency Department and the provision of new acute beds will help meet the acute health care needs of our community into the next decade. Ongoing planning for TSH&SCHS, in partnership with our community, provides an ideal opportunity to continue a system transformation that will best meet the long-term health and wellbeing needs and expectations of all of our community sustainably into the future.

On an average day at TSH in 2016/17 approximately

The population served by TSH&SCHS is growing and ageing, with an associated increase in chronic and complex diseases. The prevalence of long-term conditions and multi-morbidity is rising worldwide.[22] This growth has placed increasing demands on existing acute-oriented healthcare systems. If we continue on this unsustainable path we will have:

- Increased risk of harm to patients due to insufficient infrastructure, workforce and inadequate technology
- Escalation of health inequalities, despite the cause of the greatest health inequalities being considered potentially avoidable
- Episodic care for a single health condition rather than addressing the whole needs (physical, mental and social wellbeing) of the individual with:
  - Lack of continuity and connectedness between health and social care providers
  - Unnecessary and avoidable admissions and/or readmissions and/or delayed discharges
  - Inappropriate and/or delayed access to treatment
  - Compromised patient care and choice
  - Poorer patient outcomes
- Increasing levels of patient, carer and family, community and staff dissatisfaction
- Significantly increased waiting times
- More costly interventions and services
- Lack of translational research opportunities.

To ensure sustainability for our health system, we need to keep people healthy and in control of their own health and wellbeing for as long as possible. To support this, we will need to identify population health needs and with our health and social care partners, help address the drivers of poor health such as socio-economic status and the social determinants of health, to ensure equitable access to health care and health outcomes. This will require implementing effective models of integrated multi-disciplinary care to ensure TSH&SCHS can best use its resources to meet our patient and population health needs sustainably into the future.

2.1 What others are doing well around the world

As the demand for ongoing care increases, high performing health care systems have 'shifted the balance of care' by focussing on expanding integrated community-based services and primary care to avoid siloed, fragmented care and reduce demand on acute hospital services, with a particular focus on those with complex and long-term health conditions.

Canterbury, NZ shifted activity into community based programs such as Acute Demand Management and Community Rehabilitation Enablement Support, **saving 45,000 bed days each year**

Jönköping, Sweden redesigned the care for elderly people by redeploying resources to the community, reducing overall hospital admissions by over 20%, hospital days for heart failure by 30% and wait times for referral appointments with specialists were reduced by 30 days over a 3-5 year period

Clalit Health Services, Israel shifted the balance of funding and resources from hospital to community-based and primary care services. Patients have a single electronic record, with data available in real time across all care settings. This has improved communication and integration across the system, and enabled targeted interventions to prevent hospital readmissions

The Route 66 Accountable Health Community Collaborative screen patients for social needs: housing insecurity, food insecurity, utility assistance, interpersonal violence, and transportation. Using this information, "navigators" at health departments can help connect patients to the appropriate social service organizations rather than to health care, to more directly address underlying social determinants of health.

Torbay in the UK worked closely with general practice and expanded community services to provide support for older people to live independently in the community, with a resultant reduction in the use of hospital beds, low rates of admission for people over 65, minimal delayed discharges, and reduced use of nursing homes. Support included care planning for the most vulnerable and rapid response services for crisis management of problems overseen by health and social care coordinators.

Montreal, Canada achieved a **50% reduction in hospital alternate-level inpatient stays and increased patient satisfaction** after the introduction of a program of integrated care for vulnerable community-dwelling elderly persons, which serves as a single point of entry for care, with local professionals responsible for the full range and coordination of community, acute and long-term health and social services

The Dutch home care provider, Buurtzorg, provides teams of nurses who are responsible for organising and providing all home care to around 40 to 60 clients. They also act as health coaches and support clients and families to develop their own capabilities and support networks, resulting in improved patient outcomes, higher patient and staff satisfaction, reductions in unplanned hospital admissions, reduced length of stay and lower costs

The Southcentral Foundation, Alaska, redesigned primary and community care services to develop a generalist model, bringing specialists into integrated multidisciplinary primary care teams, with active community involvement in designing and managing care. The changes have led to substantial reductions in ED attendances and hospital admissions, and health outcomes are among the best in the United States.

The National University Health system in Singapore initiated a model where patients with multiple comorbidities are assigned to one coordinating physician, with shared care between primary care and multidisciplinary team partners. Enrolled patients have had fewer specialist outpatient clinic visits, fewer ED presentations and admissions and shorter lengths of stay.

2.2 Our community and their health and wellbeing

Our Population Demographics

We have a total population of approx

220,000 people

(2016 Census)

By 2031 the population is projected to grow by 15% to

252,000 people

with people aged 70 years and in particular those aged 85+ the fastest growing age group

11% of our residents are 70 years or older

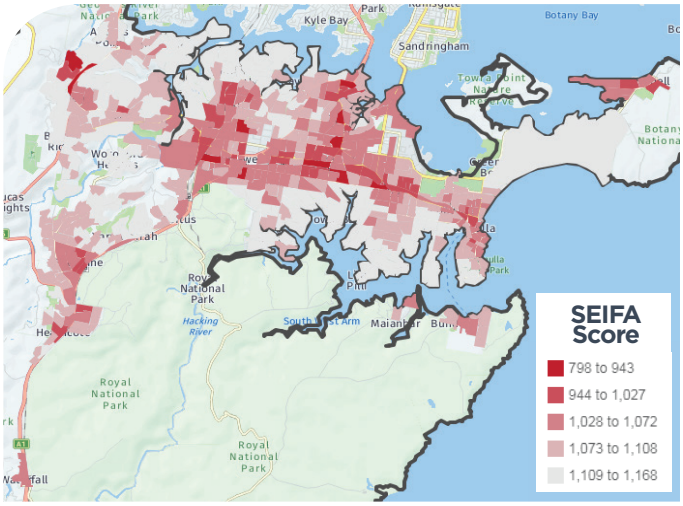
19% of our residents are 15 years or younger

about **2,435** residents or 1.1% of our population identify as Aboriginal

1,404 babies were born at TSH in 2016/17

17% **speak a language other than English at home**

(Mandarin, Cantonese, Arabic are most common)



Our Socio Economic Index score for relative disadvantage (SEIFA) compares favourably with NSW, however there are pockets of disadvantage in parts of Menai, Lucas Heights, Sutherland, Engadine, Loftus, Heathcote, Miranda, Caringbah, Cronulla and Kurnell

Fast facts Sutherland Shire health and social determinants

Socioeconomic context

5,750 (4.5%)
of the labour force are unemployed

4,050 (9%)
children live in low-income welfare dependent families

27,300
adults had government support as their main source of income in the last 2 years

2,950
adults experienced a barrier to accessing healthcare in the last 12 months, mainly due to cost of service

Social and physical environment

21,550
people provide unpaid assistance to a person with a disability

3,450
residents receiving HACC services live alone (41% of HACC clients)

5,000 (23%)
of low income households were under mortgage / rent stress

4,325 (6%)
private dwellings have no motor vehicle

Vulnerability

2,300 (1.1%)
report poor proficiency in English

7,400 (3.5%)
residents are living in the community with a profound or severe disability

15,550
adults have high or very high psychological distress

138 (5%)
children are developmentally vulnerable on two or more domains

Health measures and consequences

1,850
residents died prematurely

19,500
people aged 15 years and over self-assessed their health status as fair or poor

23,650
adults are current smokers

45,050 adults &
2,500 children
were obese

Source: PHIDU Social Health Atlas of Australia. New South Wales and Australian Capital Territory.
Data by Local Government Area. Published 2018: October 2018. Accessed November 2018.

2.3 Drivers of demand on the healthcare system

To deliver a sustainable health system that responds more effectively to health demands, particularly for chronic conditions, we need to move from episodic care to services and care provided by a range of providers across the health system over extended periods of time. Greater emphasis on identifying and supporting priority populations is needed to reduce the impact of, and the risk of developing, higher rates of long-term conditions. Key drivers of demand are outlined below.

Population growth

The population living in the Sutherland Shire is expected to increase by 1.01% per year through to 2031 and reach over 250,000 people. As the number of people increase, particularly the proportion of older people, so will the demand for health services. See the accompanying Technical Paper for more information on our projected population growth.

Ageing Population

The growing aged population is expected to increase from 11% to 16% of the population by 2031 and will result in a steadily increasing demand for health and social care, as older people are proportionally higher users of health services. Much of this will relate to long-term conditions – such as diabetes, hypertension, cancer, musculoskeletal impairment and dementia.

This will be compounded by higher rates of dementia and delirium, increased risk of falls and fractures, and improved survival rates from long-term conditions and cancers. Older people are also often carers, may be socially isolated, have poorer access to transport, and may be affected by the availability of aged care places (home based and residential).

In 2016/17, people aged 70 years and older used a much higher proportion of TSH&SCHS services: [iii]

- 40% of all acute separations
- 58% of all acute bed days
- 86% of sub-acute separations
- 78% of sub-acute bed days
- 45% of outpatient occasions of service.

People aged 70 years and over currently make up only 11% of the Sutherland Shire population, but use a disproportionate share of health services

Frail older people

Frailty is a key issue for modern health and social care services. As the total number of older people increases, so will the number of frail older people. Frailty is common in people requiring care and support at home, those who are housebound, long-term care residents, recipients of home care, and among older people admitted to hospital. They may have greater risks from polypharmacy, under-nutrition, falls and deconditioning, with personal cost to patients, their carers and families. Clinically, older people who are frail have poor functional reserve, so that even a relatively minor illness can present with sudden catastrophic functional decline – causing the person to fall, become immobile or rapidly confused, or to present non-specifically with failure to thrive.[23]

iii Source: CaSPA FlowInfo v 17.0. Inclusions: TSH (excl CC), TSH CC, SRG v50. Day Only and Overnight. Exclusions: SRGs – chemotherapy, renal dialysis, unqualified neonates, psychiatry - acute, psychiatry - non acute. ED Status: excluding ED only activity.

Aged care providers

In 2016, the population of the Sutherland Shire aged 70 years and over was approximately 25,730. This equates to the need for over 2,000 places for residential aged care, which is currently being met. By 2031, there will be a requirement for over 3,000 residential aged care places[iv] to meet the demands from our rapidly increasing ageing population.

A lack of affordable residential age care places creates demands on length of stay for subacute beds as the number of people waiting for placement increases. Similarly, the number of people transferred for care from residential aged care facilities is expected to grow, despite the introduction of hospital avoidance models such as the Geriatric Flying Squad.

There will similarly be increased demands placed on the number of home care packages (high and low) required, with subsequent workforce implications.

Delirium

Delirium is an acute disturbance of attention and cognition and is most common in people with dementia, though it can affect any older person in hospital.[24] Signs and symptoms of delirium include acute confusion, fluctuating altered attention and alertness, often with hallucinations. Delirium is associated with high mortality and is more difficult to diagnose in people with dementia or people who do not speak English. Delirium can be predictive of physical, functional and cognitive decline, leading to a decline in independence and a need for a higher level of care. It can also result in longer length of stay and further complications for the patient. Managing delirium in an acute care setting requires prompt identification and treatment of precipitating factors to prevent deterioration.

At Sutherland hospital in 2016/17, there were 84 admitted overnight patients with a primary diagnosis code of Delirium, with an average length of stay of 7.8 days.[v]

People with dementia

Dementia becomes increasingly common with age and primarily affects older people. In the absence of effective prevention or cure options, the Australian Institute of Health and Welfare projects that the number of people with dementia will treble between 2010 and 2050.[25]

While the majority of people with dementia manage to live at home with support from informal carers and family, the disease is steadily progressive and without advances in prevention or treatment of dementia, the demand for health and social services will continue to increase.

According to HealthStats NSW,[26] "less than 10% of hospitalisations of persons with dementia in NSW are specifically for dementia or conditions which are often characterised by dementia (such as Alzheimer's or Parkinson's disease) and where presence of dementia was noted in the hospital record. The remaining 90% of hospitalisations are for other, unrelated conditions with dementia identified as a comorbidity, which in some way has affected the hospital stay."

Common reasons for hospitalisation included hip fractures and other injuries, lower respiratory tract infections, urinary tract infections and delirium.[27] In addition, people with dementia often experience adverse outcomes, including physical and cognitive functional decline, under-nutrition, skin tears and falls. Those with dementia also usually also have higher associated costs of care.[28]

At Sutherland Hospital in 2016/17 there were 76 admitted overnight patients with a primary diagnosis code of dementia, with an average length of stay of 7.4 days.[vi]

It should be noted that the hospitalisation rate in 2015/16 to 2016/17 for dementia as a principal diagnosis or as a comorbidity in the Sutherland Shire is not significantly higher than NSW or other SESLHD LGAs, however the number of separations is higher, as seen in the figure below. These separations reflect the number of people living with dementia as a comorbidity in the Sutherland Shire, and thus place an additional burden on hospital resources.

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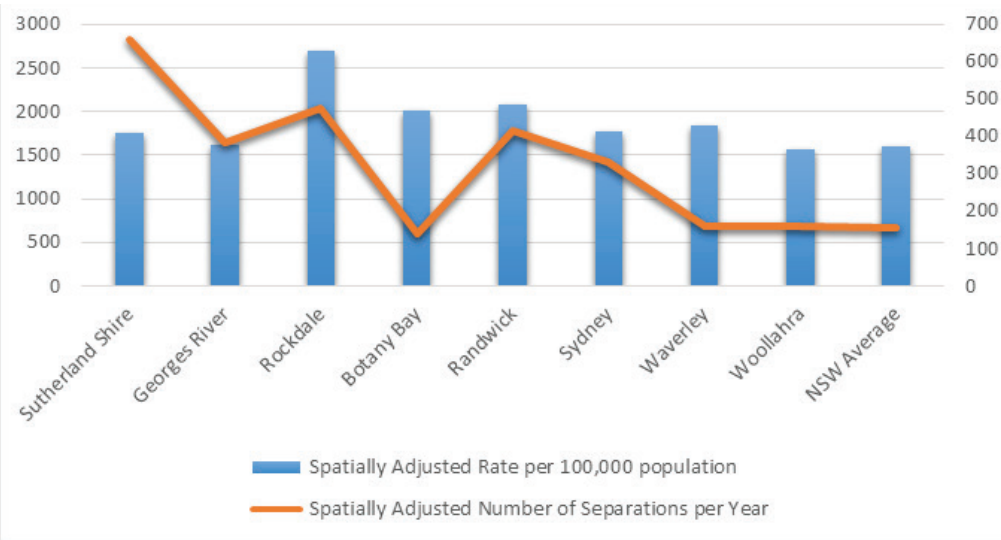
iv The Commonwealth target for residential aged care places is 78 places per 1,000 people aged 70 years and over.

v Source: CaSPA FlowInfo v16.1 Inclusions: Sutherland Hospital; ESRG V50 code 280-Delirium, Exclusions: Day Only; episode entirely within ED. SRGs – chemotherapy, renal dialysis, unqualified neonates, psychiatry - acute, psychiatry - non acute.

vi Source: CaSPA FlowInfo v16.1 Inclusions: Sutherland Hospital; ESRG V50 code 281-Dementia. Exclusions: Day Only; episode entirely within ED; SRGs – chemotherapy, renal dialysis, unqualified neonates, psychiatry - acute, psychiatry - non acute.

Figure 3

Dementia as a principal diagnosis or as a comorbidity, hospitalisations by Local Government Area, persons aged 65 and over, NSW 2015-16 to 2016-17



Note: The data for Sydney LGA includes the area outside the SESLHD catchment of Sydney Inner and East

Source: Centre for Epidemiology and Evidence. Health Statistics New South Wales. Sydney: NSW Ministry of Health. Dementia hospitalisations by LGA 2015/16- 2016/17. Accessed 13 April 2018.

URL: http://www.healthstats.nsw.gov.au/Indicator/bod_dementhos/bod_dementhos_

People with long-term conditions

Core consumers of health resources are now people with long-term conditions, including people with multiple long-term conditions and mental health problems.[vii] Long-term, or 'chronic' conditions: [29]

- Have complex and multiple causes
- May affect individuals either alone or as comorbidities
- Usually have a gradual onset, although they can have sudden onset and acute stages
- Occur across the life course, although they become more prevalent with older age
- Are long-term and persistent, and often lead to a gradual deterioration of health and loss of independence
- While not usually immediately life threatening, are the most common and leading cause of premature mortality.

About half of all Australians have a long-term condition, and around 20% have at least two, with nearly 40% of Australians aged 45 and over having two or more.[30] People living with multiple long-term conditions are associated with more frequent use of health services and higher healthcare costs, with resultant increased stress on individuals, families and communities and the healthcare system. In southern SESLHD, 38% of people reported having a long-term health condition.[31] Many people have more than 1 chronic illness or condition at the same time. In SESLHD, an estimated 21% of the resident population live with multi-morbidities, increasing to 82% for those aged 85 years and over.[32]

The Sutherland Shire compares similarly with NSW in terms of risk factors for long-term conditions and their outcomes, however there is marked variation between sub group populations. There is over-representation of Aboriginal and some culturally and linguistically diverse (CALD) patients with long-term health conditions:

- The overall burden of disease for Aboriginal people is more than twice that for non-Aboriginal Australians, of which a large proportion is due to chronic conditions [33]
- A review conducted in 2014 by the SESLHD Multicultural Health and Chronic Disease Management Program concluded that CALD patients presenting to Emergency are likely to be older, stay for longer and are more likely to be admitted
- Those in the lowest socioeconomic status groups are also twice as likely to die from diabetes or chronic obstructive airways disease and 1.5 times more likely to die from lung cancer than those in the highest groups.[34]

vii It is noted the definition of chronic disease for Aboriginal people is those "with or at risk of developing the disease" and includes 15 years and older.

While the incidence (age-adjusted) of many chronic conditions (e.g. heart disease, dementia) is not actually increasing, there are many more people living with these conditions, given that the population is ageing and growing, and people are living longer with these conditions. Rates for diabetes and obesity are however, increasing in the Sutherland Shire. Reducing hospitalisations for these chronic conditions includes early diagnosis and treatment, and good ongoing management of risk factors and conditions in community settings to avoid potentially preventable admissions.

Premature mortality rates in the Sutherland Shire compare favourably overall to those for Greater Sydney and NSW (see accompanying Technical Paper for more information), however three major long term diseases - Congestive Cardiac Failure (CCF), Chronic Obstructive Pulmonary Disease (COPD) and Cancer - create a significant disease burden for residents of the Sutherland Shire, and require considerable resources for acute and long term management.

Cardiovascular diseases

The most common types of cardiovascular diseases (CVD) include coronary heart disease, stroke and heart failure. CVD remains a major health problem in Australia, despite declining mortality and hospitalisation rates. It generally has a greater impact on males, the elderly, Indigenous Australians and people living in remote and socioeconomically disadvantaged areas.

According to the AIHW, [35] in Australia in 2014/15, one in five adults had CVD, 11% of all hospitalisations were associated with CVD (as a principal and/or additional diagnosis) and 29% of deaths had CVD as an underlying cause. Coronary heart disease is Australia's leading cause of death.

Chronic Obstructive Pulmonary Disease

Chronic Obstructive Pulmonary Disease (COPD) is a serious long-term disease that includes conditions such as emphysema and chronic bronchitis. The prevalence of COPD increases with age, mostly occurring in people aged 45 and over, with one in twenty Australians aged 45 and over reporting having COPD in 2014/15. COPD ranked in the top three causes of total burden for those aged 65-74 and 75-84, and was the second highest ranked cause of total burden for men aged 75-84 in Australia.[36] The prevalence of COPD is higher among Aboriginal populations.

People with COPD often have other long term chronic conditions such as asthma, respiratory cancers, diabetes and diseases of the heart and blood vessels due to shared risk factors and the effect of COPD on other parts of the body.

Cancer

The Australian Burden of Disease Study showed that cancer as a disease group was the leading cause of burden in Australia in 2011, accounting for 19% of the total disease burden.[37] Cancer is a major disease burden in an ageing population, with 71% of newly diagnosed cancers in those aged 60 and over.

Breast cancer in females is expected to be the most common cancer in Australia, followed by colorectal cancer, prostate cancer and melanoma of the skin.[38] In the Sutherland Shire, age standardised rates for prostate cancer and melanoma are both higher than in the rest of Australia.[39]

Effective management of people with cancer in a variety of settings, from investigation to treatment, is important to reduce complications, suffering, costs, improve efficiency and provide a better patient experience. This includes the long term management of people with cancer as survival rates improve, and palliative care when required.

Diabetes

A key indicator of health status is the prevalence of diabetes mellitus in the population and the resulting major impact on demand for health services from chronic disease.

In the Sutherland Shire, the rate of hospitalisations for diabetes as a principal diagnosis is 101.6 per 100,000 population, which is lower than NSW rates of 147.3 per 100,000 population, however it remains a significant health burden.[viii] At TSH in 2016/17, diabetes accounted for 14% of acute inpatient separations (recorded as either a principal or secondary diagnosis) and the average length of stay was substantially higher at 7.2 days compared to the overall average overnight length of stay of 4.6 days.[ix]

This is an important consideration for the planning of diabetes services and diabetes related conditions will increasingly impact the number of hospital admissions and length of stay at TSH.

Obesity in Adults

Over the last decade, the prevalence of overweight and obesity has increased by about 5% in our District, and the Sutherland Shire has the highest rates of overweight and obesity in SESLHD. There are approximately 45,000 obese adults living in the Sutherland Shire.[x] Obesity is responsible for an increased burden of disease, particularly for ischaemic heart disease, Type 2 diabetes, many common cancers and obstructive sleep apnoea, as well as increased demand for bariatric and hip and knee joint surgery.

In addition, "... obesity was related to a higher risk of mortality after certain procedures, including colorectal resection, colostomy formation, cholecystectomy, hernia repair, mastectomy and wound debridement." [40]

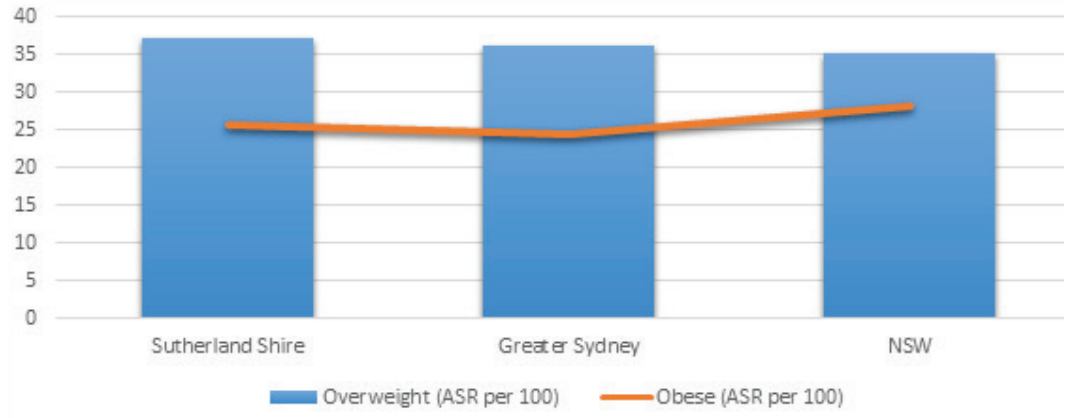
The increasing incidence and prevalence of obesity is expected to continue.[41] In the Sutherland Shire in 2015, people over 18 had higher rates of being overweight than both Greater Sydney and NSW, and for obesity higher than Greater Sydney, as seen in Figure 4 below.

Obesity prevalence in the Sutherland Shire is the highest in SESLHD and above the NSW average.

The BMI attributable hospitalisation rate is the second highest in SESLHD.

Figure 4

Rates of Overweight or Obesity 2014-15, people aged over 18.



Source: Social Health Atlas of Australia.New South Wales and Australian Capital Territory.
Data by Local Government Area Released: April 2017; Amended: July 2018

viii Source: HealthStats NSW. Diabetes as a principal diagnosis: hospitalisations by Local Government Area, NSW 2014-15 to 2015-16 Accessed Feb 13, 2018

ix Source: HIE. Accessed Jan 12, 2018

x Source: PHIDU Social Health Atlas of Australia. New South Wales and Australian Capital Territory. Data by Local Government Area. Released: April 2017; amended: July 2018 Estimated Population aged 18 years and over who were obese.

Overweight and obese people are thus likely to be a growing cohort of patients with specific treatment and infrastructure requirements. For example, the risk of osteoarthritis (OA) of the knee in overweight people is double that in people of normal weight; in obese people, it is four times as high. An estimated 43% of knee osteoarthritis and 53% of total knee replacements in Australia are due to obesity.[42] In the western part of the Sutherland Shire (SA3 of Sutherland-Menai-Heathcote), the age and sex standardised rate of 338 per 100,000 for knee replacement is significantly higher than the rest of NSW (265).[xi] It is noted that many knee replacements are performed in the private sector, however the demand in the public sector will continue to increase.

Child and Adolescent Obesity

Children aged up to 14 years make up 19% of the Sutherland Shire population, with 6.2% of the population children aged 0-4 years (the early years). Since 1997, the prevalence of overweight and obesity has remained stable in NSW primary school aged children but has increased in adolescents. Those from lower socioeconomic backgrounds are more likely to be overweight or obese; and this pattern holds for some of the related risk behaviours.[43]

Childhood overweight and obesity increases the likelihood of adult overweight and obesity, and associated increased risk of chronic disease, including diabetes, cardiovascular disease and cancer. It also has immediate negative physical and mental health consequences for children and adolescents, including bullying and early onset diabetes and liver disease.

The current high prevalence of childhood overweight and obesity is complex, with a multitude of interrelated social, environmental and economic causes which ultimately influence children's eating, activity, sedentary and sleep behaviours. Prevention efforts seek to address these social, economic and environmental factors, as well as influence behaviours directly. The scope of action required extends far beyond that of the health sector, and many sectors and agencies have a role to play.

While the risks and issues associated with childhood obesity are of serious concern, the changes required are fundamental to good health and wellbeing generally, so that they are of immediate relevance to families and children on a day-to-day basis.

People with a disability

In the 2016 census, 7,398 (3.5%) of Sutherland Shire residents were recorded as living with a profound or severe disability.[xii] This is an increase from 5,950 people (3%) in the 2011 census and will have an impact on demand for hospital and community services. Despite recent increases in NGO supported accommodation, transition to accommodation suitable for people with a disability has the potential to create delays, as Health staff and the disability sector continue to build their capacity to operate under the new processes brought on by the introduction of the National Disability Insurance Agency (NDIA).

Compared to people without a disability, people with a disability:

- Experience longer stays in hospital
- Often require intensive and complex health care
- Experience reduced positive health outcomes
- Experience increased avoidable adverse health impacts
- Experience a higher range of chronic health conditions
- Require complex discharge planning in a constantly changing disability reform landscape.

It is important to acknowledge people with disability are a diverse group within our community with diverse needs. The *NSW Health Disability Inclusion Action Plan (2016-2019)*[44] offers a commitment to planning for this diversity based on the belief that people with disability have equal rights to health, employment and equitable treatment in the health system.

Currently a local Disability Inclusion Action Plan is being developed by the SESLHD Disability Inclusion Action Plan Implementation Committee. This will present an opportunity for TSH&SCHS to identify key actions to enhance the Health journey for people with a disability.

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xi Source: The Second Australian Atlas of Healthcare Variation, 2017. Surgical Interventions. URL: http://acsqhc.maps.arcgis.com/apps/MapJournal/index.html?appid=d385b9facde44ff3b99c51ab750e1c28

xii Source: PHIDU Social Health Atlas of Australia. New South Wales and Australian Capital Territory. Data by Local Government Area. Published 2018: October 2018. Accessed November 2018

Technological change and advances in care

Demand for healthcare is increasingly influenced by the emergence and evolution of technology, with impacts on both clinical practice and costs:

- Diagnostics equipment and tests -expanded capabilities, less invasive and earlier detection
- Information technology – timely access to information across settings e.g. electronic records, telehealth, smart devices, etc.
- Appliances and prostheses – new or better alternatives e.g. 3D computer designed prostheses tailored to the user
- Pharmaceuticals – development will reduce hospitalisations and surgery
- Minimally invasive surgery – fewer major operations, complications.

Changes in practice will continue to affect both the volume and mix of clinical services and demand for alternate configurations of operating rooms, recovery and pre-discharge areas, pre-admission and hospital avoidance services, inpatient beds, outpatients and ambulatory care. For example:

- The introduction of a Thrombolysis Service for the acute management of stroke will impact presentations to the Emergency Department, the demand for CT scans, Neurology and Rehabilitation inpatient services and post discharge community services
- Future consideration of expansion of the Interventional Bronchology Service at TSH.

3. Strategies for future development

KEY POINTS

We will transform our model of care to healthcare that is

"Predictive, Preventive, Personalised and Participatory."[45]

3.1 Shifting the balance of care

In order to support people to stay in their own homes and communities for as long and as independently as possible, it will be necessary to prioritise investment in community based health and social care to allow alternatives to admission to be developed where it is clinically appropriate to do so. This may include increased investment in hospital-based outreach services to the community.

To enable this, TSH&SCHS cannot work in isolation, and collaborations with other services, such as CESPHN, Family and Community Services (FACS), local councils, Non-Government Organisations (NGOs) and volunteer organisations are required to optimally address these needs.

This will require a radical shift in focus from health systems arranged around hospitals, to health systems centred on communities and community services. Engagement of staff and communities will be required to allow this shift in focus to occur.

"The goal should be to bridge the gulf between the rhetoric and the reality of care in the community by delivering a higher proportion of care at home or closer to home, reducing fragmentation in service delivery and improving overall population health."

The Kings Fund 2018. Reimagining community services. Making the most of our assets.

There will need to be a shift in the balance of care from acute hospital services to "comprehensive and responsive primary, community and social care services, along with comprehensive approaches to improving public health and the ability of patients to self-manage their long-term conditions." [46]

Community services are critical to delivering co-ordinated care, and strong integration with other health and social care services is required to avoid duplication, fragmentation and gaps in services.

Examples that currently provide support to enable the delivery of integrated health and social care to our local community include the services provided at:

- Southcare, which integrates our community services and hospital services and also with our GPs, CESPHN and NGO services. There are close linkages with all these through referrals, education sessions and meetings, as well as links with universities for research and education
- HealthOne, with services that support people with chronic conditions and their carers and families with education and support for healthy lifestyles and management of their chronic conditions
- A public private partnership between SESLHD and Integrated Specialist Healthcare Education and Research Foundation (ISHCERF), based at Miranda. ISHCERF provides education for GPs as well as GP run clinics for the community covering skin cancers, chronic wounds, weight management and breast health - all with direct access to specialists as required. This service will expand into many other areas of need in the future.

It is important to note that although evidence supports community-based alternatives to improve the quality of care, they are unlikely to deliver significant net savings.[47] In the current climate of activity based funding (ABF), this is an important consideration in implementing new models of care and workforce transformation.

3.2 Recognising health inequity

Health inequities are avoidable, unjust systematic differences in health between groups with different levels of social advantage and disadvantage. In order to tackle inequality in health it is crucial to tackle the social determinants of health, 'the causes of the causes'.

The Sutherland Shire is one of the healthiest areas in NSW and Australia, however despite relatively high standards of health and health care, not all residents fare equally well in terms of their health, wellbeing and longevity.

"Where systematic differences in health are judged to be avoidable by reasonable action they are, quite simply, unfair." [48]

Those most at risk of experiencing health inequities are our most vulnerable population groups. The numbers within some of these vulnerable populations are increasing, particularly as the population ages, with social disadvantage likely compounded by poorer general health than the more advantaged. Chronic illnesses and the impact of these illnesses are generally more prevalent among vulnerable populations. These health and healthcare problems intersect with social factors, including housing, poor social capital and inadequate education.

People who are most disadvantaged tend to die younger, get sicker, experience more risk factors and use preventive health services less than those who are most advantaged. They may have increased risk behaviours, such as alcohol misuse, smoking and HIV risk behaviours which may result in associated illnesses and premature death, making difficult situations faced by people in these groups even more challenging.[49]

As occurs in the rest of Australia, the greatest variation in health status between population groups resident in SESLHD is between Aboriginal and non-Aboriginal Australians. Other vulnerable populations include:

- People from low socioeconomic backgrounds, including people who are homeless, long-term unemployed, or living in public housing or households in rental stress
- People living in single parent households with dependent children
- Socially isolated, disengaged people (e.g. older people and young people not working or studying)
- People who experience mental illness, particularly moderate to severe mental illness
- People living with a disability
- Many elderly people with multiple long-term health conditions
- People from some culturally and linguistically diverse backgrounds, particularly refugees
- People who are gay, lesbian, bisexual, transgender, questioning, queer and in-between.

Socioeconomic disadvantage may also contribute to hospitalisations, for example due to greater disease severity, multiple comorbidities and poor health literacy. People with unmet resource needs may also be less healthy, have more 'no-show' appointments, more ED visits and be less likely to meet care targets.[50]

It is noted that modifying individual health behaviours cannot address all disparities in health. For example, health issues amongst culturally and linguistically diverse communities, particularly refugees, may be related to experiences of physical and psychological trauma; exposure to infectious diseases; or malnutrition and vitamin deficiencies from migration and settlement experiences.

The South Eastern Sydney Local Health District is committed to reshaping our entire health system through delivering services and programs which reduce health inequities and lead to better outcomes for vulnerable and marginalised population groups. The goal is to reduce inequities in health and wellbeing within a generation, using engagement of people and communities as equal partners and a population health system approach.

The SESLHD Equity Strategy[51] conveys how improvements in equity will reduce demand for health services and provides a framework for this to be achieved.

Social determinants of health

The social determinants of health are the conditions in which people are born, grow, live, work and age. Much research has demonstrated a close association between an individual's social and economic status and their health status. It affects the way people live, their consequent chance of illness, and their risk of premature death.[52]

Health and wellbeing are strongly influenced along the life course by a range of factors outside of the health system. Factors such as access to food security, affordable housing, income security, social support, low education levels and social isolation shape future health and wellbeing and people's ability to participate in society and are strongly linked to disadvantage and subsequent health inequities.

For those in the Sutherland Shire experiencing inequities in health and social determinants, affordable housing can be a real issue. Renting privately is often the only housing option for low-income households, as access to public housing is limited. For many low income renters, shortages of affordable rental housing, rising rents, and tight vacancy rates moves them closer to the poverty line.

A family or individual is considered to be in housing stress if they are in a low-income bracket (bottom 40% of income distribution) and pay more than 30% of their income on rent or mortgage repayments. Acute housing stress occurs when 50% of income is spent on housing. In the Sutherland Shire in 2016, 7% of households were receiving rent assistance, and 21% of low-income households were experiencing rental stress.[xiii]

See the accompanying Technical Paper for more information on health determinants and outcomes.

Aboriginal people

The gap in health outcomes and life expectancy between Aboriginal and non–Aboriginal people remains. While most women in NSW can expect to live to an average age of 83.1 years, Aboriginal women can expect to live to only 74.6 years. This is even more evident for Aboriginal men, whose life expectancy is just 70.5 years, compared to 79.8 years for non-Aboriginal men in NSW. [xiv]

This gap is particularly evident in cancer outcomes. According to the AIHW, "Indigenous Australians experienced 1.7 times the cancer burden of non-Indigenous Australians. In particular, Indigenous males experience 2.3 times the lung cancer burden of non-Indigenous males, and Indigenous females 2.6 times the lung cancer burden of non-Indigenous females. The improvements observed in cancer burden nationally were not reflected in the Indigenous population, with a small increase in the age-standardised rates of overall cancer burden between 2003 and 2011." [53]

Aboriginal people also often have poorer outcomes when accessing health services, and experience substantially higher prevalence of risk factors such as smoking, overweight and obesity, have higher prevalence of long-term conditions and multiple morbidities, and Aboriginal people suffer much higher morbidity across a range of conditions, including diabetes, renal, cardiovascular and respiratory diseases, and both intentional and unintentional injury.[54] Potentially preventable chronic diseases account for 50% of the life expectancy gap between Aboriginal and Torres Strait Islander peoples and non-Indigenous peoples in Australia.[55] Mortality, morbidity and service usage are likely to be underestimated, as Aboriginality is not always accurately recorded.

Aboriginal people in SESLHD also had higher rates of potentially avoidable hospitalisations: 3,539 per 100,000 population as opposed to 1,768 for the non-Aboriginal population in 2015/16; and for rates of admission for a variety of causes, including infectious diseases, endocrine disorders, dialysis, respiratory diseases, injury and poisoning, mental disorders, and others.[xv]

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xiii Source: PHIDU Social Health Atlas of Australia. New South Wales and Australian Capital Territory. Data by Local Government Area. Published 2017. Accessed Nov 28, 2018. URL: http://phidu.torrens.edu.au/social-health-atlases/data#social-health-atlases-of-australia-local-government-areas

xiv Source: HealthStats NSW. Life Expectancy by Aboriginality 2010-2012. URL: http://www.healthstats.nsw.gov.au/Indicator/bod_lexbth/bod_lexbth_atsi_snap

xv Source: Health Stats NSW. SESLHD. Aboriginal Health. URL: http://www.healthstats.nsw.gov.au/Indicatorgroup/LocationBasedAllIndicatorGroup?code=atsi+dqi&name=Aboriginal%20Health&locationcode=18391&LocationType=Local%20Health%20District

Aboriginal people also live in many of the locations with entrenched high levels of social disadvantage, e.g.in relation to employment, education and income. For example, Census 2016 data shows that the unemployment rate is significantly higher among Aboriginal people (6.7%) than non-Aboriginal people (3.5%) in the Sutherland Shire.[xvi]

For Aboriginal people, the most important social determinants of health[56] include:

- Connectedness to family, culture, identity, country and land
- Community functioning and participation
- Access to early childhood services and education
- Access to, participation and levels of attainment in primary, secondary, tertiary and vocational education/ training
- Health literacy
- Access to employment and participation in the labour force
- Income levels
- Housing factors such as overcrowding, homelessness, housing tenure, infrastructure
- Access to transport
- Racism and racial discrimination.

Good health for an Aboriginal person involves viewing health holistically. This involves addressing wellbeing socially, emotionally, culturally, physically, spiritually and environmentally. Wellbeing of family and the community are also important.[57]

The *National Aboriginal and Torres Strait Islander Health Plan 2013-2023*[58] recognises the centrality of culture and wellbeing in the health and wellbeing of Aboriginal and Torres Strait Islander people. As well as culturally appropriate welcoming spaces, culture can also influence Aboriginal people's decisions about when and why they should seek health services, their acceptance of treatment, the likelihood of adherence to treatment and follow up, or premature discharge, and the likely success of treatment.

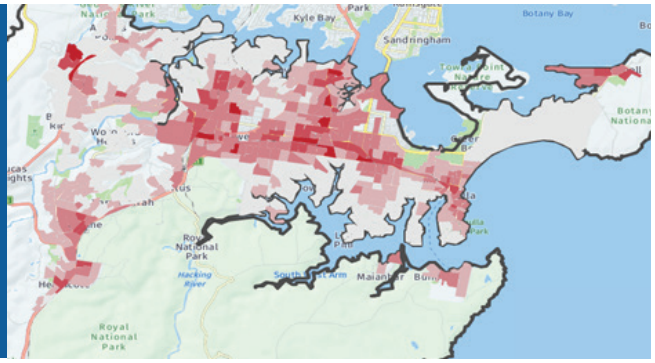
Socio-Economic Status

"Low socioeconomic status has been linked to a wide range of health problems including low birthweight, cardiovascular disease, hypertension, arthritis, diabetes and obesity as well as to contributing factors of increased tobacco use, sedentary lifestyles and poor diet. Responding to health challenges and making inroads in combatting chronic disease will require that hospitals understand the health disparities within communities and the patient populations they serve." [59]

Residents of the Sutherland Shire LGA are on average, less disadvantaged than the average NSW and Australian resident, with a Socio-Economic Indexes for Areas (SEIFA)[xvii] score greater than 1,000 (1088). At a smaller (SA2) area however, there is evidence of variation, as seen in the diagram below, for example ranging from 862 to 1,164 in the Menai-Lucas Heights-Woronora SA2 area and 893 to 1,189 in the Sylvania-Taren Point SA2 area. [xviii]

Figure 5

SEIFA Index of Disadvantage 2016: Sutherland Shire



Source: .id Community Profiles. Social Atlas: SEIFA index of disadvantage 2016. Sutherland Shire Council.
URL: https://atlas.id.com.au/sutherland/maps/socio-economic-disadvantage

xvi Source: ABS 2016 Census Community Profiles. Table G43 Labour force status by age by sex, and table I16 Labour force status by age by sex for indigenous persons, by LGA of Sutherland Shire. URL: http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/communityprofile/LGA17150?opendocument

xvii Socio-Economic Indexes for Areas (SEIFA) is a suite of indexes which uses data from the Census of Population and Housing and summarises a number of variables associated with socioeconomic disadvantage. The index score is based on an Australian score of 1000. A score below 1000 indicates disadvantage.

xviii Source: ABS 2016 Census of Population and Housing, Snapshots of Australia Socio-economic Indexes for Areas (SEIFA) by SLA2. URL: http://stat.data.abs.gov.au//Index.aspx?QueryId=404 Accessed 23 October, 2018.

3.3 Opportunities for transformation

We need to consider the totality of the patient experience across the continuum of care, not just in the hospital; ensure staff engagement and joy in work; and make changes that matter to patients. This requires a shift in the balance of care towards community facing care and an ambulatory approach to hospital care where possible, with innovative and integrated models of care.

We can achieve this by:

- Progressing existing hospital avoidance strategies to help reduce ED presentations and avoidable admissions, with strategic use of primary care, outreach and community services, outpatients, ambulatory care and short stay models to deliver care as close to home as possible, when clinically appropriate
- Integrating care across disciplines, sectors and organisations to ensure seamless transitions across health and social care services, with more easily accessible and navigable services
- Providing specialist advice to primary care to avoid the need for hospitalisation where possible and timely and effective specialist tertiary support when needed
- In partnership with primary care, supporting people to manage their own health and wellbeing, to share in decision-making, and to empower them to become partners in co-designed care
- Being anticipatory and predictive, with the use of data analysis, risk stratification tools and decision support tools to inform change, focus and direction and improved communication
- Designing system wide strategies to identify priority populations and reduce health inequities among population groups and localities with co-designed care
- Taking a pro-active 'life-course approach' to improving health outcomes by tackling the socio-determinants of ill-health, not just siloed episodes of care or disease-based approaches
- Fostering a well-informed workforce, guided by the latest teaching and translational research
- Considering releasing workforce resources for reinvestment, to free up highly specialised acute care resources for those requiring more complex and intensive treatment
- Strengthening partnerships with primary care, communities, universities, research organisations and other agencies
- Providing new infrastructure to ensure a fit for purpose environment for safe, reliable care, with the flexibility to adapt to future requirements.

4. Making it happen

KEY POINTS

Transformational change requires a fundamental rethink to create completely different, more effective ways of addressing health and wellbeing issues in our community. It is not just changing how a service operates, but also about finding better ways of working and new solutions.

Health cannot work alone to bring about this change, and it is critical to engage with other agencies and in genuine partnership with local communities in order to bring about collective change and keep people in control of their own health and wellbeing for as long as possible.

Our priorities for change

SHIFTING THE BALANCE OF CARE

Right patient... Right Time ... Right Place

An ambulatory care precinct to drive efficiency and integration across disciplines

Increasing capacity for prevention and self-management of long term conditions

Increasing access to aged care and subacute beds to improve capacity and whole of hospital flow

Provision of new fit for purpose operating rooms to meet demand

Fostering translational research activity

Building capacity for new models of care to avoid the need for admission

Improved access to diagnostic imaging for rapid diagnosis

Technological solutions to support safe and timely handover of care, with convergence of e-health platforms for all services

Provision of new day only / outpatient rehabilitation

Effective person centred care for residents of the Sutherland Shire requires a whole of community approach to health to ensure that care is provided 'at the right place at the right time'.

For TSH&SCHS this means:

- Increased ambulatory, outpatient, community and place-based services and infrastructure to keep people well at home for as long as possible and to provide care closer to home
- More shared care with GPs and other health and social care providers
- Improved access to a range of diagnostic services, including MRI, to allow rapid diagnosis, the introduction of new models of care and avoid costly transfers to other facilities
- More purpose-built operating rooms to allow streaming of unplanned and planned surgery, including high volume short stay surgery (HVSS)
- More rehabilitation beds and a Day Only rehabilitation service to allow earlier discharge home and care of people closer to home, with integrated community rehabilitation services
- Creation of an Aged Care Centre of Excellence, with more outward facing models of care delivered from Southcare to avoid the need for admission where possible, integrated with hospital and community services, and more aged care beds, including for acute dementia assessment, to meet demand, improve whole of hospital flow and provide expert care
- Improved whole of hospital flow, with better access provided for acute medical beds by having the 'right patient in the right bed at the right time' and fewer outliers
- Better support for the management of palliative care, in partnership with Calvary Health Care Kogarah
- Improved support for research and education on campus and with our research and education partners.

4.1 Community wellbeing and health equity

GOAL

We will work together with our partners to achieve health, wellbeing and equity for our shared communities

A comprehensive community wellness approach is one that "values and supports all people achieving their highest possible levels of health by simultaneously addressing all determinants of health. It is a system in which health care professionals, public health, social services, and community-based organizations partner to address acute and chronic illness and injury and the upstream environmental factors, community conditions, and barriers to preventive care that contribute to poor health outcomes in the first place." [60]

Promoting Wellness across the life course

Wellness is a philosophy that focuses on whole of system support to maximise a person's independence and autonomy.[61] It encompasses the connected physical, social, career, emotional and financial aspects of wellbeing and is based on the premise that even with frailty, long-term illness or disability, people generally have the desire and capacity to make gains in their physical, social and emotional wellbeing and to live autonomously and independently.

Early life experiences, such as good or poor health, or exposure to trauma in childhood, will also affect health and wellbeing later in life.[62] The first 2000 days of a child's life provides an opportunity to shape a healthier and more prosperous future.[63]

Service design needs to support an individual's aspirations to maintain and strengthen their capacity to continue with their activities of daily living and social and community connections along the life course, with an emphasis on prevention, optimising physical function and active social participation to prevent social isolation.

Preventive Health Care

The increasing prevalence and cost of long-term health conditions means that prevention, whether primary, secondary or tertiary, is important at all ages, including among the elderly, to ensure that further increases in life expectancy translate, as far as possible, into healthy years where the need for hospital and other health services is minimised. There is also an economic imperative to ensure the health of the working population is maintained as it ages.

Building in prevention as a part of normal activity in service delivery should be a priority e.g. in the management of healthy lifestyle (healthy weight and physical activity advice and interventions), smoking cessation, communicable disease prevention, and osteoporosis and falls prevention activity.

SESLHD objectives for community health and wellbeing include:

- Focusing on wellness, early intervention and prevention
- Enabling people to stay well and be equipped to manage periods of ill health
- Our community will experience improved health outcomes
- Health inequities will be reduced
- Giving every child a healthy start to life.

Managing obesity

The management of obesity needs to consider a broad range of influencing factors, including social determinants and medical, psychological and physical comorbidities. Interventions for obesity need to occur at a whole of community level, including planning for healthy environments and ready access to healthy food.

Patient centred treatment strategies for obesity are essential to support weight loss and avoid relapse and requires ongoing management and monitoring from medical and other allied health professionals. General practice is well placed to manage first-line treatment with lifestyle modification and micro-environmental interventions, with escalation to more intensive interventions to support weight loss as needed with specialist weight loss support services including multidisciplinary medical and surgical management.[64]

About one-third of Australians' energy is from discretionary foods. This is highest for teenagers aged 14–18, at 41%.

AIHW: Nutrition across the life stages. Oct 26 2018

Improving Health Literacy

Health literacy, the ability to access, understand, and use information in ways that promote and maintain health,[65] is an important enabler for health. Almost 60% of the Australian population have less than adequate health literacy skills.[66] Health literacy is poorest amongst the socially and economically disadvantaged, people from non-English speaking backgrounds and older Australians.

Low health literacy creates barriers to equitable access to health care, and makes self-care a challenge. Individuals with low health literacy are less responsive to health education, less likely to use disease prevention services and are less likely to successfully manage chronic disease.[67]

Health services thus need to be responsive to the health literacy needs of our community, including in the development of websites, information provided and communication between clinicians and patients. The first step is to make information and education easy to understand. This requires:

- Use of simplified text and teach-back methodologies
- Use of plain language, involving consumers in the development of information, wayfinding and education materials
- Use of new technologies, e.g. video based interpreting
- Ensuring interpreter access.

Avoiding social isolation

Social isolation can be an issue for individuals of any age and occurs across the spectrum of demographics, personal circumstances and life choices. Long periods of loneliness and/or social isolation can have a negative impact on physical, mental and social health.

Social isolation and loneliness may also impact on the way people access support and services, their health literacy, health skills and their life choices, and may increase the risk of early death.

Social connectedness thus reduces the long-term costs for healthcare. Reducing social isolation and loneliness requires partnering with other agencies (government and non-government) to work together with communities to foster stronger social relationships and community connections to allow people to develop social networks and a sense of belonging and trust.

Social prescribing allows health professionals to refer people to non-clinical services to improve their health and wellbeing, with partnerships that may foster activities that promote health, prevent social isolation or encourage healthy built environments.

Building strong community engagement and genuine partnerships

Community partnerships aim to improve population health and wellbeing by improving community empowerment and resilience, promoting healthy behaviours, improving health literacy, and providing more accessible care. Examples include collaborations with local councils to promote safe and healthy environments, with easy access to public transport, and the provision of healthy built environments that promote physical and social activity.

The concepts of co-production and an asset based approach use the strengths and resources of people and communities in order to empower people to make decisions about their own health and to be more responsible for their own health care, building their capacity and resilience for the future.

The Healthy Communities program in British Columbia has been designed to reconnect the health system and local government sectors through meaningful joint partnership agreements to specifically address chronic disease prevention and the promotion of healthy weight.

BC's Guiding Framework for Public Health. March 2017 Update

By recognising and leveraging community assets, frontline service providers can increase their impact by developing solutions better tailored to service user need, particularly for self-management of long-term conditions.

Consumers should thus be important partners and co-creators of any new care models, and included at all stages of design, testing, implementation and review, in order to support engagement in their own care.

Patient Activation

Patient activation "provides a simple, evidence-based mechanism for establishing the capacity of individuals to manage their health – and then using that information to optimise the delivery of care."[68] It increases individual's knowledge, skill, and confidence for self-management with research showing that appropriately designed interventions can be used to reduce health inequities and deliver improved outcomes, better quality care and lower costs.

Our current actions to focus on community led wellbeing and health equity

A number of improvement programs have been implemented to address prevention, wellness and population health needs and provide care in a more appropriate setting. These include:

- An interagency intergovernmental response to addressing the needs of children in the early years[69]
- Programs delivered from HealthOne on the TSH campus, such as the Bulbuwil Aboriginal healthy lifestyle program, South East Aboriginal Health Care (SEAHC) for care co-ordination for Aboriginal people across SESLHD and a variety of educational programs
- Southcare services and programs including for falls prevention, exercise groups, social support groups and respite groups
- Carer programs
- Volunteer network
- Staff Health and Wellbeing Program, aimed at promoting and enhancing wellbeing both physically and mentally for staff: "To care for others well, WE must be well"
- SESLHD health promotion programs e.g. for childhood obesity and healthy eating, healthy built environments, smoking cessation, falls promotion
- SESLHD is initiating a multi-disciplinary Metabolic Disorders and Bariatric Surgery Service for suitable patients as a District wide service, in partnership with general practice. The model will support equity of access for publicly funded obesity management services for our residents to improve the quality of life and reduce morbidity for these patients.

Our vision for the future

- Ensure services are co-produced and take an asset-based approach to improve community involvement in service design and delivery and ensure community voices are heard
- Ensure responsiveness to community input
- Work with our community and government partners (e.g. NGOs, Ambulance, FACS, Education, Councils and CESPHN) to identify and reduce people who are socially isolated and lonely and co-design activities that improve social connectedness

- Ensure services are equitable and consider the needs of marginalised and vulnerable communities, e.g. address service gaps in publicly available specialist clinics, as many patients cannot afford the gap to see Specialists privately and may in turn present to ED
- Provide more community based care, e.g. services in community centres to reach harder to access clients, such as oral health services at Engadine Community Health Service and Menai Community Health Centre, which will also support the Narrangy- Booris Aboriginal Child and Family Health service, and early childhood services
- Embed formal structures to support person centred care, e.g. patient reported outcome measures, co-designed with patients and clinicians, which enable patients to provide direct, timely feedback about their health related outcomes and experiences[70]
- Ensure organisational support to achieve community engagement and build meaningful partnerships
- Ensure staff receive education in how to educate patients, how to create resources and to deliver programs to the local communities
- Implement strategies that contribute to reducing tobacco use across the LHD, including:
    - Embedding brief interventions for smoking cessation and managing nicotine dependence in all clinical care and community settings
    - Embedding interventions for smoking cessation and managing nicotine dependence in cancer diagnosis and treatment services
    - Documenting tobacco history in patient's medical records
    - Partnering with DPPHE (health promotion) and PICH (Aboriginal Health) to enhance the reach of health promotion initiatives such as Quit for New Life (Aboriginal)
- Consider:
    - A place based initiative for an identified vulnerable community
    - Further development of a community based integrated health service response for vulnerable young people and their families
- Build a community-recognised identity around research, education and service delivery.

4.1.1 Reducing inequities in priority populations

An important strategy to reduce demand for health services and improve quality of life is to identify priority populations and target specific programs and services to prevent ill health and inequity of health outcomes. Targeted groups may include those outlined below.

People from low socio-economic groups

People in the lowest quintile of income groups use about twice as much health care services as those in the highest quintile.[71] Being from a relatively low socioeconomic group is a predictor of many measures of health risk, such as smoking, obesity, oral health and cancer survival.

Although the Sutherland Shire is relatively advantaged area, there are significant pockets of socio-economic disadvantage. (See 2.3 Drivers of demand on the healthcare system for more information.)

The interaction between health and disadvantage is evident in a higher percentage of people from lower socio-economic areas having their planned short stay surgery at TSH as non-chargeable patients rather than in a private hospital.

Aboriginal people

Aboriginal people have relatively poorer health than all other population groups in SESLHD. There is a significant disparity between Aboriginal and non-Aboriginal people across most population health indicators, highlighting the importance of addressing the determinants of health and health risk factors. In NSW, there has been no significant change in the gap in life expectancy between Aboriginal people and the total NSW population over the past 10 years. [72]

Social disadvantage is one of the many factors that contribute to the gap between Indigenous and non-Indigenous health. Aboriginal people live in many of the locations with entrenched high levels of social disadvantage, e.g.in relation to employment, education and income. Even within these relatively disadvantaged areas, Aboriginal people are consistently more disadvantaged than the non-Aboriginal population. (See 2.3 Drivers of demand on the healthcare system for more information.)

People who experience mental illness

The life expectancy gap between people with mental illness and the general population is as much as 16 years less for males and 12 years for females, and appears to be rising. Many causes of death are due to preventable illnesses caused by increased high risk behaviours such as smoking, substance abuse, and exposure to communicable diseases such as hepatitis C. Some medications prescribed for people with mental illness are associated with weight gain and new onset diabetes. Mental illness also affects a person's ability to manage their diabetes, especially those on insulin treatment, which may result in multiple diabetic complications.

Other social disadvantage factors also often overlap with mental illness, such as homelessness, social isolation and unemployment, which may exacerbate mental illness and poor health and wellbeing.

People who are homeless

There is a small but significant population of homeless in the Sutherland Shire. People who are homeless typically have complex health and psychosocial issues, and face significant barriers to accessing health services. Many have other compounding health and social issues, such as mental ill health, family breakdown, domestic violence issues, financial stress, unemployment, etc.

Vulnerable children and young people

Children aged up to 15 make up 19% of the Sutherland Shire population. There are considerable numbers of children in the Sutherland Shire who are in Out of Home Care (OoHC) and have significant support and health needs due to past experiences of abuse and neglect.

Many of the risk factors for poor adult health are adopted in adolescence and are influenced by adverse childhood experiences. Investment in the early years of life with prevention, early intervention and clinical care is thus critical for potential long-term investment in health and wellbeing.

Vulnerable older people, particularly those who are socially isolated or frail

The proportion of older residents in the Sutherland Shire is expected to grow much faster than the rest of the population. This will drive demand for health services to meet the needs of this cohort, in emergency, acute and subacute and ongoing community-based care for long-term management.

Many older people have additional social burdens such as financial hardship, social isolation (approximately 1 in 4 older people live alone) and many older people may be carers of partners or family members.

Culturally diverse people

The Sutherland Shire is less culturally diverse than other parts of SESHD, however language and cultural barriers may result in a poor or different understanding of the health system and inequity in accessing health care, different understanding of the concepts of self-management, different beliefs about health and illness and its management, and perceived discrimination. This may result in poor participation in preventative health care, and over representation in long-term disease statistics.

The demand for interpreter services is rising. Evidence indicates patient safety, experience and compliance is compromised when professional interpreters are not used for patients with limited English proficiency, with potential for adverse events, higher readmission rates, delays to theatre and medico-legal action and associated costs.[73]

Gay, lesbian, bisexual, transgender, queer or intersex

Individuals who identify as gay, lesbian, bisexual, transgender, queer or intersex (GLBTQI+) are especially susceptible to being placed at a socioeconomic disadvantage, to suffer discrimination in the workplace, to experience violence against them, and GLBTQI+ youth experience homelessness at a disproportionate rate. Those who undertake transgender reassignment or are intersex also face unique endocrine and metabolic challenges. This may result in significant inequalities in health and wellbeing outcomes, including mental illness and social isolation.

People with a profound or severe disability

In the Sutherland Shire in 2016, 9,350 (4.5%) people were living with a profound or severe disability. People with a disability are more likely to have lower socio-economic status, fewer educational qualifications, be out of work, and experience discrimination. People with a disability often require more and complex health resources and services. The impact of the National Disability Insurance Scheme (NDIS) on health services can mean delays to assessment of care needs, discharge and transfer of care, and there is little support for staff within the facility for managing behavioural issues or ongoing medication management planning.

Women and families experiencing domestic and other violence

Domestic and family violence has long-reaching effects on women and children and contributes significantly to the burden of disease for women. This covers interpersonal violence including all forms of child abuse and neglect, sexual assault, domestic and family violence. The Australia's National Research Organisation for Women's Safety (ANROW) notes that domestic and family violence contributes an estimated 5.1 percent to the disease burden in Australian women aged 18-44 years and 2.2% of the burden in women of all ages.[74] The research identifies the impacts on women and children of domestic and family violence include: poor mental health; problems during pregnancy and birth; alcohol and illicit drug use; suicide; injuries; and homicide. In addition to these personal and familial impacts of reducing violence, addressing prevention of violence against women has major social and economic benefits.[75]

People who have experienced trauma

The impact of trauma and its interrelationship with social disadvantage and the physical and mental health of these priority populations should also be considered, for example intergenerational trauma and loss for Aboriginal people, and people who have experienced violence and sexual trauma, or childhood trauma. Ensuring trauma informed care is a crucial step, by "recognising the impact of trauma on consultations; tailoring consultation length to client needs; providing trauma therapy as well as physical healthcare; offering long-term, safe relationships with staff; trauma-sensitive gynaecological care; and the importance of self-care for health practitioners." [76]

Our current actions for priority populations

Priorities for SESLHD investment to promote equity include:

- > Engage communities to identify and co-produce more local actions that build community capacity and resilience
- > Build environments that enable safe, active and socially inclusive lifestyles for good population health and wellbeing
- > Build stronger intersectoral working partnerships – the scope of this undertaking is more than we can achieve alone
- > Embed the principles of addressing social determinants throughout our entire organisation.

Some activities delivered by SESLHD with priority populations in the Sutherland Shire include:

- In 2018/19 approximately $14 million will be distributed to NGOs within SESLHD with the aim of improving the health and wellbeing of people in the community. These NGOs support Aged and Disability Services, AIDS Prevention, Community Services Program, Drug and Alcohol, Health Care Standards, Health Promotion, Mental Health and Women's Health
- Consistent features of the Mental Health Service's ambulatory / community model of care include multi-disciplinary community teams providing "packages" of care to clients in a recovery oriented, strengths based service model. In addition, a range of group programs operate to support clients, families and carers
- An Aboriginal hospital liaison service is provided at TSH and community health programs for Aboriginal people are provided at HealthOne and Menai Community Health Centre
- Cultural Healing through Paint and Colour : A culturally specific art therapy program for Aboriginal and Torres Strait Islander patients to undertake whilst being hospitalised which aims to improve health outcomes, reduce patient stress and anxiety and to improve the patient journey through the healthcare system
- The Implementation of SESLHD Kids and Families Action Plan
- The establishment of a multidisciplinary community based Child, Youth and Family Health Service
- The Out of Home Care Health Pathway Program offers multidisciplinary health assessments for Children and Young People in Statutory Out of Home Care - offered at Caringbah Community Health Centre
- Counselling services for Domestic and Family Violence, Sexual Assault, Child and Family, Child Protection
- Building Stronger Foundations Maternal and Child Aboriginal Service based at Menai
- KRC Outreach provides a needle and syringe program on the TSH&SCHS campus
- Drug and Alcohol hospital liaison services are provided at TSH and outpatient services are provided at Caringbah Community Centre on campus
- The NDIS provides support for clients with a disability aged 0-65 years, with a designated pathway for children 0-7. Those aged 65+ are eligible for the services of My Aged Care, however existing clients of the NDIS may continue with this service once they are over 65. Disability and NDIS support services are provided by the SESLHD Disability Strategy Unit
- A collaboration between Community Mental Health and the Oral Health Service assists eligible Clozapine clients to access dental treatment at the Sutherland Hospital.

Our vision for the future

Service Solutions

- Increase interagency work including linking with GPs and CESPHN to keep people healthy in the community
- Improve equity of access for Sutherland Shire residents to local outpatient rehabilitation services, particularly for those without transport who cannot access services at SGH
- Improve access to outpatient clinics at TSH to promote equity of access to those who cannot afford private services
- Implement strategies that contribute to reducing tobacco use in priority populations across SESLHD, including embedding brief interventions for smoking cessation and managing nicotine dependence in all clinical care and community settings, and referral to the NSW Quitline
- Utilise the Mobile Dental Clinic for priority populations such as residential aged care clients who may be unable to access mainstream services
- Improve health literacy by ensuring verbal communication (such as use of health care interpreters); written communication (such as translated health information) is understandable
- Conduct hospital tours for newly arrived migrants and refugees
- For people with a disability, consider:
    - Developing expertise at TSH&SCHS around managing people with a disability to support behavioural and medication management planning for hospital staff and in RACFs with support of the Metro Regional Intellectual Disability Service
    - Partnerships with NGO's, disability support providers, carers, government agencies such as FACS and the National Disability Insurance Agency (NDIA) to develop strategies to better support people with a disability in the community setting to prevent avoidable hospital admissions and decrease length of stay
    - Partnerships with Ability Links, a NSW government funded organisation for care co-ordination of clients with disabilities
    - Formalised partnerships or memorandums of understanding between TSH&SCHS and providers for client transfer to community placements
    - Expansion of Metro-Regional Intellectual Disability Network to increase ward level interface for the early identification of people with disabilities to avoid longer lengths of stay and early discharge planning support
- Address homelessness issues prior to discharge to avoid representation
- Improve health service delivery for Aboriginal people by addressing some of the factors that have historically affected how Aboriginal people can be disadvantaged when accessing health care services in an urban setting, by providing:
    - Welcoming and culturally appropriate models of care and a welcoming environment
    - Working in Partnership with Aboriginal people to enable the health service organisation to identify priorities, understand cultural beliefs and practices, and involve Aboriginal and Torres Strait Islander people in determining their own health priorities
    - Engagement with the appropriate Aboriginal stakeholders from the community in the development of services [77]
    - Maintain and foster strong relationships with Aboriginal specific services and acute and community-based services (e.g. Drug and Alcohol, Oral Health, Women's Health, Child and Family, Integrated care), Mental Health and DPPHE Sexual Health services
    - Engage SESLHD executive to address institutional racism and how the organisation can address Aboriginal people feeling anxious about how they will be treated
    - Improve communication between Aboriginal services to improve utilisation of Aboriginal GPs and access of Aboriginal residents to services and programs in the community

- Consideration needs to be given to funding sources and accommodation options to enable relatives/families who travel long distances the opportunity to reside close by while their family member is in hospital
- Other key services that Aboriginal people will increasingly access at TSH&SCHS include: services for women, babies and families; surgery; services for dementia and frailty; Mental Health Services, in combination with other health conditions – Aboriginal people are now engaging with Mental Health Services at significantly higher rates than Non-Indigenous Australians [78]

- Improve health service delivery for Aboriginal people with increased resources to support the Building Stronger Foundations Maternal and Child Aboriginal Service based at Menai in response to a significant increase in the Aboriginal population within the Sutherland area and expected continued growth
- Ensure integrated prevention and response services for children, young people, women and families affected by violence abuse and neglect with enhanced violence, abuse and neglect (VAN) services
- Implement the provision of trauma informed care
- For people affected by drug and alcohol use, provide high quality clinical services for clients with moderate to severe substance use disorders and prioritise services to individuals with complex treatment needs related to their substance use, health or social conditions
- Consider provision of a community bus service to provide transport for appointments, treatment, etc.
- Consider use of Library resources and spaces.

Infrastructure Solutions

- Provide an Outpatient and Ambulatory Care Precinct to increase access to outpatient and community-based services on campus to provide equitable access to services and help avoid the need for ED presentation or admission
- Create a place where Aboriginal and Torres Strait Islander people feel welcomed, safe, comfortable, accepted, and confident that they will be respected, will be listened to and will receive high-quality care. Negative experiences can lead to reluctance to access services, disengagement with clinicians and care in these settings, and high rates of discharge against medical advice, which in turn, affect health and wellbeing. (See section 5.1.12 for examples)
- Ensure any new building is disability friendly e.g. ensuring disability access, space for wheelchairs in waiting areas, provide adult change tables
- Ensure any new building and environment is dementia friendly e.g. consider colours, falls risks, access to clocks, etc.
- Consider a monthly 'connection desk' in the TSH foyer for St Vincent de Paul's Local Area Co-ordination to provide patient's families and carers access to information and support for people with a disability
- Investigate opportunities for more off campus community-based services closer to areas of need, e.g. in Menai and Engadine Community Health Centres.

Workforce Solutions

- Promote employment opportunities for a diverse population, e.g. aboriginal people, people with disabilities and refugees
- Consider funded social work position for SESLHD Drug and Alcohol services (DAS) for capacity building at local facilities
- General workforce education on Drug and Alcohol issues to improve screening and referral processes and to avoid stigma and reduce inequities for DAS clients
- Increase FTE of Aboriginal Health Liaison Officer staff and address gender mix
- Promote role of Aboriginal consumer workers.

4.1.2 Supporting the early years of life

A positive start in life helps determine a child's future health, development, learning and wellbeing, with benefits to the whole society through increased productivity, greater social inclusion and reduced public expenditure in health, welfare and crime related to disadvantage over the life course.[79]

Conversely, evidence suggests that adverse childhood experiences such as poverty, parental mental illness, neglect, substance misuse, domestic violence and intergenerational trauma affect the development of parts of a child's brain that are essential to integrate new knowledge, suppress inappropriate behaviour and regulate emotions such as aggression, anxiety and fearfulness.[80]

Biological events during foetal and early life also predispose a child to a greater risk of physical and mental health problems as an adult, for example, adults who had low birth weight are at increased risk of coronary heart disease, diabetes, hypertension and stroke in adulthood. [81]

Children who have a poor start in life are thus more likely to develop learning, behavioural, physical health or emotional problems which may have consequences for themselves and to society into the future, due to increased social inequity, reduced productivity, and the high costs associated with entrenched intergenerational disadvantage.[82] People who have adverse experiences in childhood are also more likely to experience physical and mental illnesses as adults, and their illnesses are also less likely to respond to treatment.[83]

Supporting vulnerable children and their families provides a sound long-term investment in health and social wellbeing.

It helps to reduce the uptake of high risk behaviors such as drug and alcohol use, domestic violence and criminal activity, and builds the resilience of parents, carers and children to prevent high cost interventions in later life.

Importantly, these relationships can be modified by positive patterns of postnatal growth. Programs aimed at reducing disadvantage during the early years of life have been shown to improve child outcomes and may yield higher returns on investment than interventions offered later in life.

Support for breastfeeding is important for optimal infant nutrition, growth and development and is a long-term investment in the health and wellbeing of our children. Evidence shows that breastfed babies are less likely to suffer from necrotising enterocolitis, diarrhoea, respiratory illness, middle ear infection, type 1 diabetes and childhood leukaemia.[84] Breastfeeding has also been shown to result in lower mean blood pressure and total cholesterol, as well as higher performance in intelligence tests, and the prevalence of overweight/obesity and type-2 diabetes is lower among those who are breastfed.[85] Our vulnerable populations (see Section 4.1.1) have lower exclusive breastfeeding rates and these families also have higher rates of obesity and diabetes, so breastfeeding support services (inpatient and outpatient), particularly targeted at these population groups, is vital.

Our current actions to support the early years of life

To support vulnerable children and families in our district, strategies and programs include:

- In SESLHD:
  - SESLHD works in partnership with NSW Health, NSW Department of Education, FACS and Housing NSW, NGOs and communities to implement the NSW Health Strategy: Healthy, Safe and Well to address the health of women and their partners during pregnancy, babies, children and young people
  - The SESLHD Kids and Families Action Plan identifies actions to protect and improve the health and wellbeing of pregnant women, children and young people
  - A key priority of the SESLHD Equity Strategy is to make greater investments in the early years of life
  - Child Youth and Family Health Service advocates for improved health outcomes for children, youth, women and families, whether they are at home, in the community, in hospital, or homeless
  - Transitional care (in partnership with Sydney Children's Hospital Network – SCHN) supports the transition between children and adult services
  - Participation in an interagency intergovernmental response to addressing the needs of children in the early years[86]
  - Child development services provided by Child Youth and Family Health Service including the specialist Development Assessment Service for pre-school and school aged children with intellectual disability based at Kogarah
  - The SESLHD 'Optimising health program', a nurse led screening of school students from refugee and vulnerable migrant populations
  - Out of Home Care (OoHC) Program in SESLHD and Sydney Children's Hospital, which co-ordinates health pathways for children and young people entering OoHC placements within SESLHD
  - Population Health programs such as school vaccinations programs, Commonwealth healthy eating and active living programs supported by DPPHE's health promotion service in preschools and primary schools, e.g. 'Crunch n Sip', 'Munch n Move' and Go4Fun
  - SESLHD Children's Healthcare Network Clinical Nurse Consultant
  - Youth Health Co-ordinator to enhance the access of young people to health services across the District
- TSH supports breastfeeding women by their successful accreditation in the Baby-friendly health initiative (BFHI)
- Clinics and home visiting services at Caringbah Community Centre and in the community, provided by PICH, including assessment and care for patients by child and family nurses and paediatric allied health in an ambulatory setting, to identify and care for children and families that require early intervention and intensive follow up
- The Drug and Alcohol Service has recently strengthened the capacity of Chemical Use in Pregnancy Services (CUPS) at Sutherland
- Other community-based services provided for children and families include:
  - Midwifery Link Service and Narrangy-Booris Maternal, Child and Family Health
  - Implementation of the Quit for New Life smoking cessation program in the Aboriginal Maternal and Infant Health Services and Child and Family Health
  - Child and Family Counselling Service
  - Domestic and Family Violence, Sexual Assault and Child Protection Counselling Services.
- For inpatient services supporting children at TSH see section 4.2.4 Caring for women, babies and children for more information.

Our vision for the future

Service Solutions

- Improve the continuity of care across acute, ambulatory, community and primary health care continuum within an interdisciplinary framework
- Consider prevention as part of routine care e.g. for obesity, smoking, diet – and provide early intervention activity in the community to get families off to a good start
- SESLHD, SCHN and human services agencies are collaborating to develop a Child Health and Wellbeing Plan to guide service delivery and address shared priorities for all children with a focus on priority populations. It will advance equity and support prevention and early intervention in the early years across SESLHD
- Expand Violence Abuse and Neglect services to ensure they are co-ordinated integrated and comprehensive
- Investigate new models of care incorporating maternity services and other community care services alongside Child, Youth and Family Health in community based settings
- Consider the establishment of a SESLHD weight management service for overweight and obese children and young people, potentially based at TSH and including a community paediatric dietician (there is currently no paediatric dietician available)
- Establish a collaborative partnership between Drug and Alcohol, maternity and paediatric services, Child and Family counselling and Child and Family Health nursing to deliver a multidisciplinary community based service to support families with a baby or young children where a parent is experiencing substance use issues (CUPS/SUPS clients)
- Negotiate ongoing arrangement for Child and Family Health clinics.

Infrastructure Solutions

- Establish a local centralised referral system for outpatient appointments
- Establish a centralised intake and access system for Child and Family Health Services
- Improve communication and IT systems within local Child and Family Health clinics that will support the use of the eMR (CHOC) system and other NGO online reporting systems.

Workforce Solutions

- Resources to support GP training for Shared care model of antenatal care e.g. a midwife working alongside GPs
- Improved access to community-based allied health for early intervention and treatment:
    - Enhance Paediatric allied health services (Paediatric Speech and OT have a combined waiting list of 800 children with a maximum waiting time of 12 months)
    - Enhanced Social Work support for Child and Family Health nursing services
- Increased community paediatric FTE: Child, Youth and Family Health service is only resourced for 0.2 FTE across the whole of SESLHD, forcing stress on ambulatory paediatrics, CAMHS and Kogarah DAS. All three services acknowledge a huge gap in access to community paediatrics services, particularly for school aged children requiring learning and behavioural assessment. Currently enhanced community paediatric services are provided in-kind by Kogarah DAS, these services are provided for vulnerable populations only such as children in out of home care and the Narangy Booris clinic at Menai. There is a lack of community paediatric presence in the Sutherland area to respond to prominent child health issues at a population level such as childhood obesity
- Enhance the skills capabilities and confidence in the workforce to prevent and respond to Violence Abuse and Neglect, and proactively provide supervisions to support staff to improve their clinical practise to address current safety issues and the challenges of this work including the risk of vicarious trauma.

4.1.3 Supporting our youth to stay well

Many young people face significant challenges in relation to their health and wellbeing and do not fit neatly into mainstream health services that target adults or children. Young people (12-25 years) represent approximately 17% of the population of the Sutherland Shire. The Sutherland Shire also has a relatively high number of young Aboriginal people, with nearly 1,200 people aged under 25, which is 49% of the Sutherland Shire's Aboriginal population.[xix] The proportion of young parents is also the highest in SESLHD.

Adolescence and early adulthood are a dynamic period of development, marked by major psychosocial and physical change that may influence their health and wellbeing, health choices and can increase risks of harm. The diversity of young people (including gender, culture and sexuality) may impact on how they approach and manage their health.[87] Adolescent and young women are at greater risk of some mental health problems (than adolescent men), have increasing sexual activity and may be susceptible to teenage pregnancy or sexually transmitted diseases.[88] Suicide is the leading cause of death in this age group.

Many of the health-related behaviors that arise during adolescence have implications for both present and future health and development. Risk factors for the development of chronic disease in later life, such as diabetes, heart disease and some cancers, often emerge in adolescence. Consultation with clinicians has also indicated the growing prevalence of child and adolescent eating disorders in our community. This life stage thus presents an important opportunity for early intervention, with health services that are creative, diverse and responsive to young people's particular needs.

Addressing obesity in children and youth requires a whole of community, as well as health service, effort. This recognises the fundamental contributions of social, economic and environmental factors to childhood obesity, and the importance of providing conducive conditions for community members themselves to take action to promote the health of their families.

xix ABS 2016 Census

Our current actions to support youth to stay well

- SESLHD is working collaboratively with community members, local government and other government and non-government agencies to remove barriers to children and families' health and wellbeing, with a focus on weight-related factors to help address childhood obesity
- The Youth Health Program managed by PICH co-ordinates a district-wide response to youth health to improve health outcomes and service access for young people across the district, particularly those who are at higher risk of poor health. The Program works in partnership with consumers, SESLHD services, and government and non-government organisations
- Public dental services are available for all children (0-17 years), including general dental services, dental education and oral health promotion services. Within the Sutherland Shire, SESLHD Oral Health services are currently provided at Sutherland Hospital Outpatients Department (6 chairs for adults and children)
- SESLHD Youth Mental Health and Early Psychosis Services provide specialist assessment and mental health care to young people who are experiencing first episode psychosis or who are assessed as being at risk of developing psychosis. These community-based multidisciplinary teams work with the young person and their family/carers to minimise the impact of illness and promote recovery
- The Sydney Youth Cancer Service based in Randwick, is a specialised treatment and support service for adolescents and young adults with cancer, aged between 15 – 25 years and their families
- Child and Adolescent Mental Health clients requiring inpatient care are transferred to SCH or Shellharbour (state wide service) when beds are available and when accepted by the Unit (this is not usually at point of presentation,) and there is still a need to accommodate a degree of pathology within TSH in collaboration with paediatrics (other than for EDs)
- Young parents antenatal group
- Primary health care delivered by KRC and a sexual health outreach service for youth at risk of HIV, STIs and viral hepatitis
- Southern Sydney Sexual Assault Service delivers the Lovebites program in partnership with Sutherland Shire Family Support Service in high schools in the Sutherland Shire
- Sexual Assault Service.

Our vision for the future

Service Solutions

- Consideration of an integrated Eating Disorder Service, in line with the SESLHD Local Service Plan for People with Eating Disorders 2019-2021, including:
    - Initial priority placed on the Outpatient Eating Disorder clinic (OEDC), as the vast majority of children and adolescents (C&As) with eating disorders are treated in a community setting. An OEDC would enable safe medical monitoring of C&As engaged with community treatment and reduce demand on Children's Acute Review Service (CARS)/ Outpatient Paediatrics, who are currently seeing this complex and high risk patient group with no extra funding or resources. An OEDC would create a clear discharge pathway for medical monitoring of C&A with eating disorders, thus reducing length of stay
    - 2x funded paediatric beds for C&A with eating disorders and Psychiatric Liaison consultation for a growing cohort of paediatric eating disorder patients who have an extended length of stay (3-4 weeks) and require intensive nursing (1:1) support. Care needs to be multidisciplinary and requires nursing, mental health, social work and dietician support. This would create a clear pathway for inpatient admission to manage acute medical and/or psychological risk and medical stabilisation, before transfer to the community for treatment of their eating disorder.
- Introduction of a Young adult's clinic to meet the needs of a growing volume of young people with type 1 diabetes, to provide comprehensive care, optimise glycaemic control, prevent complications, improve quality of life and reduce hospital presentations, length of stay and readmissions
- To address the social factors influencing obesity, work by the DPPHE will focus on:
    - Improvements in the built environment that facilitate physical activity and active transport
    - Social initiatives to engage community members and ensure that their social and physical needs are recognised and addressed
    - Facilitate children and families in reducing consumption of energy-dense, nutrient poor foods, increasing physical activity, reducing screen time, and promoting regular, adequate sleep
- Consider prevention/health education opportunities via local sporting associations – Sutherland soccer, netball and hockey are the largest junior associations in the country
- Consideration of referral to the CESPHN commissioned The Think, Eat and Move Program, an innovative new approach to adolescent weight management for young people aged 13 – 17 years who are above a healthy weight, which provides a free eight-week program delivered via interactive online sessions and weekly health professional phone coaching
- Consider the establishment of a SESLHD weight management service for overweight and obese children and young people, potentially based at TSH and including a community paediatric dietician (there is currently no paediatric dietician available)
- Establish an integrated health service response for vulnerable young people and their families and support the workforce for this.

Workforce Solutions

- The establishment of an Eating Disorders Service will generate increased presentations to the Children's Acute Review Service (CARS) and outpatient clinics, requiring medical staff, clinical nurse consultant (CNC), dietician and physiotherapist
- Support to establish an integrated health service response for vulnerable young people and their families.

4.1.4 Keeping people well at home with supported self-management and community and home-based services

Most adults are able to manage their own health needs with the support of primary care. Many long-term conditions are responsive to lifestyle changes and medications, and ideally self-managed with primary care support.

Services delivered to people closer to where they live are not only more convenient but may be the only way of reaching some socially excluded groups and older people with multiple comorbidities. In order to realise our ambition of moving more care out of hospital and closer to people's homes, greater integrated service provision between hospital and community-based services and primary care is required to ensure joined up holistic care.

Substantial numbers of hospital bed days could be avoided and length of stay reduced if patients could be cared for in home or community settings by suitable and easily accessible services. Specialised care will still be required for early detection and optimal management of complications and/or when severe events occur (e.g. for people with unstable diabetes requiring surgery, or acute complication such as foot infection, or an acute exacerbation of COPD).

Improving health outcomes and reducing health inequalities for those in the population who do not engage with their health requires a targeted anticipatory and preventative care approach **outside of the hospital system** to address health risk factors before they become long-term health issues requiring more intense care and hospitalisation.

People at risk can be targeted either through their general practice, workplaces, or by outreach into the 'hard to reach' communities, such as the homeless, drug users, and people living with mental health issues.

Supporting self-management

Health professionals can increasingly focus on helping people to successfully manage their own health.

"This isn't just about shifting responsibility onto the patient, but about recognising that patients themselves are a valuable resource and, with the right support, training and technology, can be empowered to manage and improve their condition."

Wilson S. and Langford K. Innovation Unit.10 Ideas for 21st century healthcare.

Strategies to help people live well with simple or stable long-term conditions (for example diabetes, heart disease, kidney disease, asthma, osteoarthritis, some cancers, or HIV) and prevent deterioration in their health and wellbeing include:

- Population risk stratification, with a graded response from health promotion activities in the community through to supported case management and tailored interventions as risk and complexity levels increase
- Ensuring health and social care is co-produced with consumers and the community to leverage their own assets to support their own health and self-management goals[89]
- Providing better joined up care between primary and tertiary care, with pathways to allow early identification of long-term health issues, better care planning and co-ordination, better referral processes and co-ordinated care on discharge
- Promoting greater patient responsibility for improved mental and physical health outcomes, quality of life, wider social outcomes and optimal investment for healthcare sustainability [90,91]
- Improving health literacy to help ensure patients understand their condition, available treatment options and success rates of treatment.

For our health system, transforming our care with larger multidisciplinary community-based teams providing joined up holistic care with specialist services will allow a more rapid and accessible response for every patient. Community services *"need to be more closely connected to all other parts of the health and social care system if they are to be a driving force in improving the health of individuals and communities. They need to be much more closely involved in key decisions about patients at an earlier stage in their journey through the system."* [92]

The Kings Fund[93] outlines 10 design principles to guide future models of community-based care:

- Organise and co-ordinate care around people's needs
- Understand and respond to people's physical health, mental health and social needs in the round
- Make the best use of all the community's assets to deliver care to meet local needs
- Enable professionals to work together across boundaries
- Build in access to specialist advice and support
- Focus on improving population health and wellbeing
- Empower people to take control of their own health and care
- Design delivery models to support and strengthen relational aspects of care
- Involve families, carers and communities in planning and delivering care
- Make community-based care the central focus of the system.

Our current actions to support people to live well at home

A wide range of community and home-based services are provided from Southcare, PICH, HealthOne and DPPHE to support people along the life course, including those with long-term conditions, to live well at home, and avoid the need for hospital, provide supported discharge and prevent readmission. See Section 1.5.3 for a list of these services. Other examples to support people to live well at home include:

- NSW Health Pathology- Sutherland Laboratory provides a pathology home collection service and the geriatric flying squad uses point of care testing
- Community-based exercise/activity programs to improve functional ability, prevent falls and help maintain healthy weight supported by SESLHD, e.g. Self Help Association through Responsibility and Enrichment (SHARE), Stepping On for falls prevention
- The Sugar Fix Collaborative project between SESLHD and CESPHN, which provides timely and appropriate navigation of newly diagnosed diabetes clients accessing outpatient clinics
- Patient education programs in self-management, e.g. for osteoarthritis, diabetes management, smoking cessation, falls prevention, pain management, etc.
- Sutherland Heart Clinic, an outpatient service where patients at risk of heart failure can be seen quickly by a specialist
- Health coaching to improve lifestyle behaviours, self-efficacy and physical and mental health. SESLHD is providing health coaching training and support to district staff and local primary care providers in collaboration with the Organisational Development and Learning unit
- The Respiratory Co-ordinated Care program (RCCP) provides home visits to patients with advanced lung disease to assist them to live optimally in their homes, prevent hospital admissions and decrease hospital lengths of stay.

Our vision for the future

For our community health services to provide best value, service provision needs to be directed towards the most vulnerable, to keep them well in the community for as long as possible and avoid the need for hospitalisation where possible. This requires strong relationships with acute services, aged care, maternity and paediatric services for support when needed and supporting integration of services e.g. between PICH Child, Youth and Family Health Services, Paediatrics and Child and Adolescent Mental Health Services.

To achieve transformation, there will need to be greater collaboration between primary and tertiary health services; partnerships with social care services; changes to the distribution of workforce; and leveraging the assets of the wider community to support people in their own homes, combat social isolation, and create healthier communities.

Service Solutions

- **In the community:**
  - Continue and enhance prevention and wellbeing programs such as the Doing it Differently community grants program, a collaboration between Sutherland Council and DPPHE
  - Maintain support for and promotion of healthy lifestyles such as smoke free environments, outdoor gyms, etc.
  - Explore further partnership opportunities to promote community wellbeing, e.g. with Sutherland Shire Council, NGOs, businesses, etc.
  - Align long-term disease management e.g. for diabetes, osteoporosis, respiratory disease, heart failure, with the NSW Agency for Clinical Innovation (ACI) model guidelines and provide support to primary care for long-term disease management to avoid hospital admission
  - Investigate new models of care for community nursing to address community needs for post-acute and chronic care management
  - Investigate opportunities for expansion of services delivered in existing community health centres off campus e.g. new outreach clinics
  - Consider an expanded multidisciplinary hub and spoke model incorporating dental clinics in community health centres
  - Investigate the introduction of outreach services to permit the safe care of women with hypertensive disorders and other medical complications in pregnancy, e.g. extend the RAP service at St George to provide outreach or networked services at Sutherland on site or approach the Obstetric Medicine service at RHW to consider developing an outreach service
  - Change the community perception of receiving non-urgent healthcare from the Emergency Department via a proactive approach to educate and inform the public of alternative services, e.g. via communication through social media, local newspapers or community releases, Seniors magazines and politician's new sheets; and in private and public places such as child care centres and GP waiting rooms and at point of care
  - Continue to develop flexible and innovative community oriented models of care in partnerships between the Drug and Alcohol Service and GPs and community pharmacy providers

- **At Home:**
  - Continue the provision of Commonwealth funded community services (ACAT, RAS, STACS, CHSP and ComPacks) for Sutherland Shire residents
  - Develop an integrated care pathway for patients on home dialysis to increase the number receiving home delivered haemodialysis and peritoneal dialysis (requires training, currently managed at SGH)
  - Provide medical governance for the RCCP to support rapid medical assessments and medical home visits if required, similar to the Geriatric Flying Squad (GFS) model, to avoid the need for ED presentation and keep people as well as possible at home
  - Chemotherapy at home is an emerging area for development to improve patient wellbeing. A potential model includes GPs for administration of medications and a team of trained Practice Nurses with back up support from cancer services and on call specialist, and a drop in clinic at TSH

- **In outpatients and ambulatory care:**
  - Implement new outpatient clinics to meet gaps in services (see section 4.2.2 for further information on suggested new outpatient clinics)
  - Develop a referral pathway for Secondary Fracture Prevention to reduce the burden of fracture, particularly costly hip fracture, later in life. Fracture prevention programs have shown a reduction in the number of subsequent fractures, usually the more expensive hip, spine or pelvis fractures, with both cost benefits to health services and quality of life benefits for the patients involved[94,95]
  - Take a more proactive approach to managing obesity and its related complications, according to established and verified models of care in an ambulatory setting in partnership with other stakeholders, primarily CESPHN and GPs
  - Introduce new integrated and community-based multidisciplinary models of care led by the Respiratory and Sleep Service, e.g. smoking cessation service (with drug and alcohol, psychiatry and obstetrics and gynaecology integrated with CESPHN and GPs), dyspnoea service (with cardiology, palliative care, aged care), pulmonary hypertension service (with cardiology, rheumatology, aged care), Interstitial Lung Disease (ILD) clinic (with Rheumatology

- Maintain and enhance relationships with:
  - Calvary Community Health, e.g. for community-based palliative care
  - Sydney Children's Network
  - CESPHN and GPs
  - Residential Aged Care Facilities
  - Department of Family and Community Services
  - Department of Education
  - NGOs

- SESLHD to continue to work with the Ministry of Health and Ageing, Disability and Home Care (ADHC) to improve services for people requiring NDIS-like services but who are currently ineligible
- Ensure culturally appropriate health care is provided to Aboriginal people
- Consideration of permanent SESLHD funding for community facing services separate from ABF model.

Technology Solutions

- Implement HealthPathways in partnership with the CESPHN to assist people to be managed by primary care and appropriate referral to hospital services as required
- Investigate the potential for an integrated shared care record across health and social care to provide seamless care across community, primary and tertiary service components
- Promote the use of My Health Record
- Centralise referral service with a single point of access for referral and booking appointments, registration for appointments and SMS reminder system for appointments
- Investigate telehealth services to support people at home where possible
- Ensure a centralised information management and technology system to promote information sharing between clinicians and GPs, including for new services and referral processes
- Consider the needs of community-based services to improve access to data and provide efficiencies e.g. in-car access to eMR, Tablets
- IT infrastructure to support service delivery in community based locations and to support centralised intake systems
- Provide mobile phones and tracking system for community staff to enhance safety.

Infrastructure Solutions

- **For community-based services:**
  - Consider refurbishment of existing Community Centres to allow more services to be delivered closer to home
  - Provide a fit for purpose community services base in the outpatient and ambulatory care precinct to allow greater collaboration with hospital services, including office and storage space
  - Provide access to meeting, education and training rooms and adequate storage space for educational material, equipment, etc.
  - Provide sufficient fleet car parking space on campus for community-based staff to minimise manual handling risks (due to the transfer of stock and equipment from office to vehicles) and increase clinician efficiency
- **For Outpatient and Ambulatory Care services:**
  - Relocation of outpatient services/ clinics into a dedicated and centralised outpatient and ambulatory care precinct to provide a one stop shop for ease of access
  - Expansion of Ambulatory Care Service space to meet increasing demand, reduce length of stay and/or avoid hospitalisation.

Workforce Solutions

- Ensure increased workforce capacity across all Community Services to meet increasing demand and changing models of care that work to avoid hospitalisation and allow rapid and accessible services
- Explore the potential for workforce redesign to enable the most efficient use of staff and to avoid duplication of services
- Upskill the workforce to be specialised in outpatient clinics and ambulatory care, e.g. nurse and allied health practitioners in specialty clinics, to keep people well and out of hospital
- Ensure adequate administrative support is provided to outpatient and community services
- New services will require commensurate staffing (medical, nursing, allied health, administrative and hotel services).

4.1.5 Empowering older people to be independent and active

Many people live happy, healthy and independent lives well into old age, however as people age, they are more likely to live with disability, long-term health conditions and increasing frailty and loss of independence. Encouraging older people to keep physically and mentally active and socially engaged supports their ability to maintain independence, lead healthy lifestyles, and participate in and contribute to the community. [96]

A life course approach to health and wellbeing helps to contain long-term health and social care costs. With older people the focus becomes on preventing ill health, disability, dependency and loss of skills, and empowering older people to make their own decisions about their care needs and to improve their quality of life.

Health and social care systems that facilitate these focus areas help to reduce emergency admissions and re-admissions, reduce permanent admissions to residential and nursing care, improve the quality of life for consumers and their carers and family and increase the proportion of people that feel supported to manage own condition.

Interventions to enable older people's independence, health and wellbeing include: [97,98]

- Early identification and proactive interventions for problems that limit independence, wellbeing and social engagement, e.g. problems with mobility, foot health, balance, osteoporosis, chronic pain, visual and hearing impairment, incontinence and malnutrition
- Ensuring housing is adapted with aids and technology to maximise their independence and safety, to enable them to live in their own homes for as long as possible
- Preventing social isolation, e.g. with volunteering programs and greater involvement of families and age friendly communities
- Promoting healthy lifestyles and wellness, e.g. regular suitable exercise, cessation of smoking, reduced alcohol consumption, healthy eating and weight control, vaccinations
- Screening programs and health checks to identify health risk factors in older people, e.g. for cardiovascular and renal disease, osteoporosis, falls risk, diabetes, dementia and cancers
- Prehabilitation programs for those identified at risk of frailty or decline, or prior to surgery.

Our current actions to help empower older people to be independent and active

- Suitably designed exercise/activity programs to improve functional ability, prevent falls and help maintain healthy weight, e.g.:
  - Stepping On program for falls prevention, which has been shown to reduce participants' risk of falling by 31% [99]
  - Steady Steps: Moving Towards Better Balance program, which engages older adults in falls prevention through dance and music (run by Southcare)
  - "Strengthening for the Over 60's", a 9 week strength training supported by the Commonwealth Department of Veterans Affairs, provides classes in the Sutherland Shire
  - SHARE, a not-for-profit organisation supported by NSW Health for residents living in SESLHD, deliver gentle aqua classes and community-based exercise programs throughout the Sutherland Shire

- TSH is a pilot site for NSW ACI Osteoarthritis Chronic Care Program (OACCP). The objective of the OACCP is to reduce pain, improve function and quality of life for residents with osteoarthritis, who have elected conservative management of their joint disease, or who are waiting to undergo elective lower limb joint replacement surgery, with support for self-management through goal setting and individual plans for long-term behaviour change [100]
- Southcare Outreach Service (SOS), a service for older people presenting to the ED, offering a rapid response multi-disciplinary integrated service pathway to community-based care and avoiding hospital admission
- Aged Care Services in Emergency Team to provide specialised care, assessment and treatment to older people presenting to the ED, in order to improve their health outcomes and to minimise their requirement to remain in hospital and avoid the need for readmissions
- Southcare aged care community nursing and allied health programs
- Outpatient services including Allied Health to prevent deterioration, including for falls and mobility, cognitive disorders, geriatric medicine, pain, etc.
- Sutherland Transitional Aged Care Service (STACS) for short-term therapy interventions (up to 12 weeks) including low intensity therapy, social work, nursing support, and personal care.

Our vision for the future

The continued support and enhancements of existing hospital avoidance and outpatient programs is required to support older people to maintain their health and wellbeing.

Service Solutions

- Continue to develop networks and referral pathways in partnership with CESPHN for integrated primary care services to support older people to remain independent in their home
- Foster integrated services across primary and secondary care (including supported hospital discharge) to provide seamless pathways to keep older people well at home and prevent avoidable admissions
- Support an Osteoporosis Refracture Prevention service at TSH to meet the unmet demand for fracture and refracture prevention. There is currently no structured care/ clinic or follow up
- Create a collaborative care service with Centre for Eye Health (CFEH) for glaucoma, similar to diabetic retinopathy collaborative care service now active; to meet significant demand and provide early intervention to prevent blindness
- Develop community carer support and education programs to assist families in maintaining patients at home
- Improve health literacy, in partnership with primary care.

Infrastructure Solutions

- The redevelopment of the ageing Southcare building, as part of an integrated outpatient/ambulatory care “one stop shop”, will allow enhanced service provision to the older population in purpose-built premises, including clinic rooms, group rooms, space for community-based services, offices, etc.
- Provision of a Day Only rehabilitation service will allow prehabilitation activities.

4.1.5 Improving access to Mental Health Services

Sutherland Mental Health Service, located on the TSH&SCHS campus, provides acute and rehabilitation inpatient services and outpatient and community-based services.

At the population level, mental illnesses are the leading cause of non-fatal disease burden in Australia. The experiences and needs of people with a mental illness vary significantly, based on the duration, type and severity of their illness. Serious and enduring mental illnesses are widely recognised as debilitating conditions that are closely associated with suffering, disability and premature mortality.

The life expectancy of people with serious mental illness is typically between 10 and 32 years shorter than the general population. Around 80% of this higher mortality rate can be attributed to the much higher rates of physical illnesses, such as cardiovascular diseases, respiratory illnesses, diabetes and cancer experienced by this population.

Many of these causes of premature death are due to preventable illnesses caused by increased high risk behaviours such as smoking, substance abuse, and exposure to communicable diseases such as hepatitis C. As many as 40% of adult smokers have a mental illness. Further, some medications prescribed for people with mental illness are associated with weight gain, obesity and new onset diabetes. Mental illness also affects a person's ability to manage long-term illnesses, especially those on insulin treatment, which may result in multiple illness complications.

People living with mental illness are also more at risk of experiencing a range of adverse social, economic and health outcomes, such as homelessness, social isolation, and unemployment which may exacerbate mental illness and poor health and wellbeing.

People living with mental illness can and do recover to live productive lives in their communities. Recovery emphasises the need for a comprehensive community-based service system that works to address the full impact of mental illness. The improvement of mental health treatment services in isolation will not address all the issues related to the support of people with mental illness and their recovery.

Improving the mental health of the community requires integrated and collaborative models of care with many partners to be responsive to an individual's often changing needs. These include the primary and private healthcare sector (GPs and other clinicians), the non-government sector, other SESLHD health services, government services provided by education, employment, housing and homelessness, aged care providers, police and the justice system.

Our current actions to support mental health

Programs provided by Sutherland Mental Health Services or available to Sutherland Shire residents to maintain the health and wellbeing of those with mental illness include:

- Role delineation Level 5 Adult Mental Health Service, Level 4 Child and Youth Mental Health Service and Level 4 Older Person's Mental Health Service
- 28 acute adult inpatient beds accessible via the Emergency Department or direct admission
- 20 adult inpatient rehabilitation beds to promote recovery and prevent relapse of mental illness
- Acute Care Service 24 hours a day servicing presentation to the ED and Community Assessments
- Triage service for assessment of mental health problems
- Clinical networking: occurs across SESLHD for all Mental Health admitted patients however the following specialties require transfer due to no on site specialty beds:
    - Older Adult Mental Health transfer to SGH specialty unit
    - Child and Adolescent Mental Health transfer to SCH or Shellharbour (state wide service) when beds are available and when accepted by the Unit (this is not usually at point of presentation,) and there is still a need to accommodate a degree of pathology within TSH in collaboration with paediatrics (other than for EDs)
- Ambulatory (outpatient) / community-based services include 12 shared clinic rooms for adults, youth, and older adults within the TSH Mental Health Service footprint and an additional 4 shared clinic rooms for the Child and Adolescent Mental health Service (CAMHS) at Caringbah Community Health Centre on the TSH campus. Home visits are also provided
- The ambulatory / community model of care includes multi-disciplinary community teams providing "packages" of care to clients in a recovery oriented, strengths-based service model. In addition, a range of group programs operate to support clients, families and carers
- A collaboration between Community Mental Health and the Oral Health Service assists eligible Clozapine clients to access dental treatment at TSH&SCHS
- Statewide programs - the Housing and Accommodation Support Initiative (HASI) and Community Living Supports (CLS) – are available to provide support to people who have a severe mental illness so that they can live and participate in the community, in the way that they want to. Under the programs, the Ministry of Health funds specialist community managed organisations to deliver a full range of flexible psychosocial supports, in close partnership with LHD Mental Health Service clinicians and the Department of Family and Community Services. Allocation of these programs within the Sutherland Shire is less than required. The high intensity HASI Plus program is currently hosted in NSLHD, WSLHD and HNELHD however consumers from SESLHD can access the state-wide beds subject to eligibility criteria and availability. Under the mental health reform investment a small enhancement is also planned for the program which will likely establish a new site in one new host LHD.

Our vision for the future

Service Solutions

The future of Mental Health Services at TSH requires a continued comprehensive, integrated acute inpatient service as well as facilities and resources to provide assertive community care to target chronic and complex patients and reduce the need for ED presentations and admissions.

Potential new clinics/ services identified include:

- Psychiatric Emergency Care Centre (PECC)/ acute assessment
- Behavioural observation unit with pathways from ED to a general medical unit model
- Consideration of an integrated Eating Disorder Service, in line with the SESLHD Local Service Plan for People with Eating Disorders 2019-2021, including:
    - Child and Adolescent (C&A) Outpatient Eating Disorder clinic (OEDC), as the vast majority of C&As with eating disorders are treated in a community setting. An OEDC would enable safe medical monitoring of C&As engaged with community treatment and reduce demand on CARS/Outpatient Paediatrics, who are currently seeing this complex and high risk patient group with no extra funding or resources. An OEDC would create a clear discharge pathway for medical monitoring of C&A with eating disorders, thus reducing length of stay
    - 2x funded paediatric beds for C&A with eating disorders and Psychiatric Liaison consultation for a growing cohort of paediatric eating disorder patients who have an extended length of stay (3-4 weeks) and require intensive nursing (1:1) support. Care needs to be multidisciplinary and requires nursing, mental health, social work and dietician support. This would create a clear pathway for inpatient admission to manage acute medical and/or psychological risk and medical stabilisation, before transfer to the community for treatment of their eating disorder
    - Consideration of a service for Adults with Eating Disorders living in the Sutherland area. There is a significant unmet need for this patient group. Adults with eating disorders often requite prolonged inpatient admission(s) for nutritional rehabilitation and medical stabilisation, require 1:1 nursing, and use of coercive treatment. Length of stay and re-admission rates are increased with poor co-ordination of care and a lack of outpatient pathways. Further, the state-wide tertiary eating disorder service (located at RPAH) has extensive waiting times (>1-2 months) and a high threshold of severity for admission
- Enhanced funding and resources for the Perinatal and Infant Maternal Health Service (PIMHS), including a dedicated Clinical Midwife Consultant to co-ordinate the service and a social worker as engagement and follow up.

Access to residential care and increased provision of community support packages e.g. Community Living Program, HASI and HASI Plus, subject to negotiation with the MoH, would enhance community care for chronic and complex patients and reduce ED presentations and length of stay in inpatient units. Opportunities may arise in the near future to apply for increased access, with further investment of the MoH in these and other Mental Health reform initiatives.

Infrastructure Solutions

- A purpose-built and easily accessible ambulatory care building with separate services/ wait areas for child and adolescent patients/clients and their families would provide increased capacity for ambulatory (outpatient) Mental Health Services and reduce demand on acute inpatient and ED services
- Provision of additional CT and MRI services to avoid difficult patient transfers for all specialties in TSH including mental health patients
- Enhanced rehab gym space or access to outpatient rehab gym
- Access to education and group rooms in ambulatory (outpatient) community settings
- Potential for a short stay unit on a medical ward for assessment of patients with mental health conditions who do not fit the Emergency Department Short Stay Unit (EDSSU) criteria.
- Provide 2 funded Paediatric beds for a multidisciplinary eating disorders service.

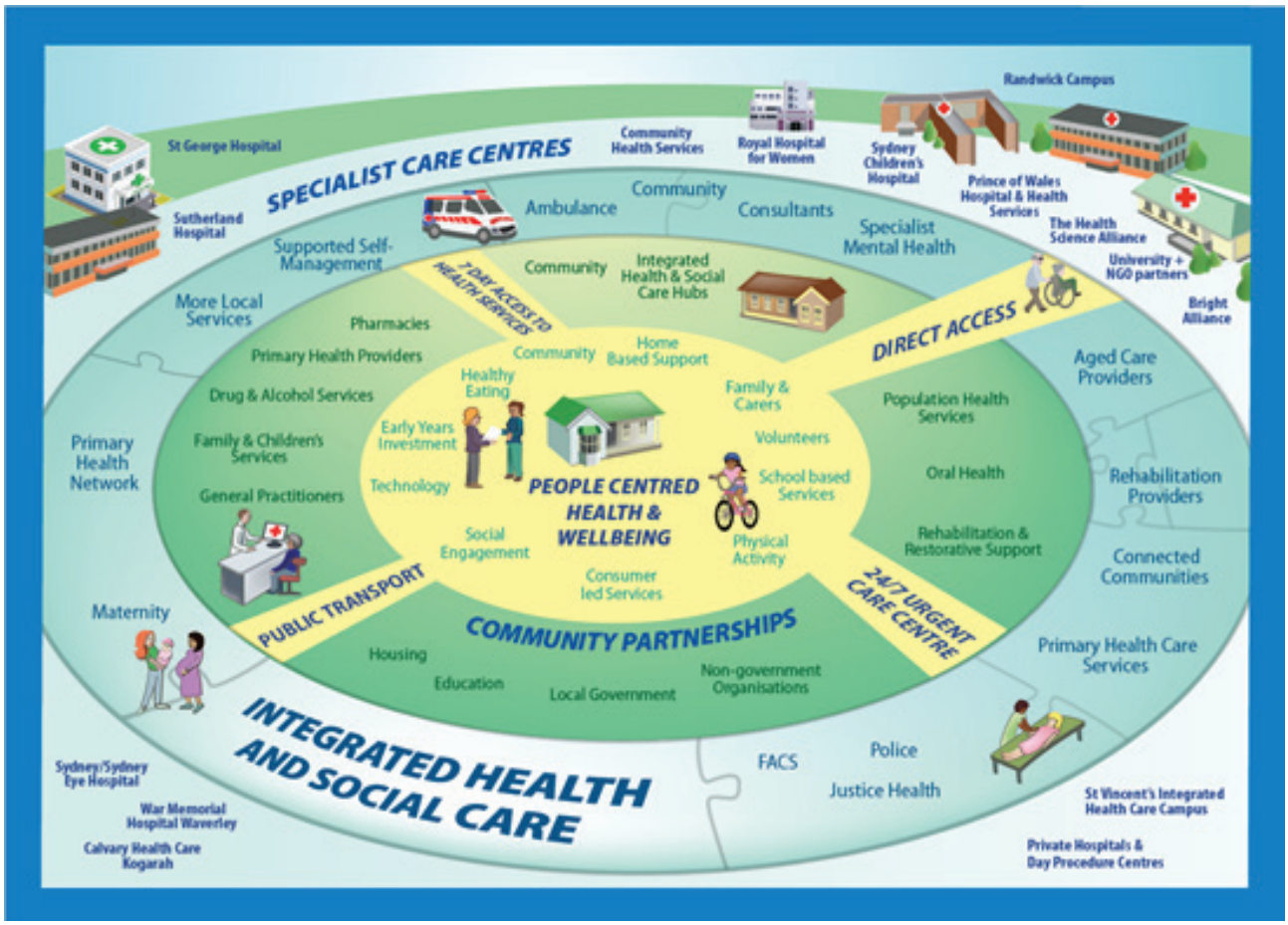
Workforce Solutions

- Attract, develop, support and sustain a skilled Mental Health workforce
- Expand the consumer workforce and develop sustainable structures
- Staffing should be enhanced in line with any service enhancement.

4.2 Safe, person-centred and integrated care

GOAL

Everyone in our community will have access to safe, compassionate and high quality healthcare, provided either at home or as close to home as possible.



Adapted from Kings Fund Visualised, sourced from Timmins N and Ham C. The Kings Fund: The quest for integrated health and social care. A case study in Canterbury, New Zealand. p. 9

4.2.1 Integrating across the health and social care system

SESLHD objectives for integrated care include to:

- Maintain safe hospitals and health services, and strive to continuously reduce harm to our patients
- Embed a person-centred and compassionate approach into our culture, placing the patient at the heart of everything we do
- Integrate our IT systems so that they provide real time information for providing care
- Our patients and consumers will have better experiences in our healthcare facilities/services
- Our patients and community will be able to navigate the healthcare system.

Integrated care is a system transformation that "involves the provision of seamless, effective and efficient care that reflects the whole of a person's health needs; from prevention through to end of life, across both physical and mental health, and in partnership with the individual, their carers and family. It requires greater focus on a person's needs, better communication and connectivity between health care providers in primary care, community and hospital settings, and better access to community-based services close to home." [101] Ageing and long-term and complex conditions are the key drivers for care integration.

"Supporting integrated services does not mean that everything has to be integrated into one package, or necessarily delivered in one place. It does mean arranging services so that they are not disjointed and are easy for the user to navigate. This in turn means providers have management support systems that help make this happen, and also make the best use of resources."

World Health Organisation Technical Brief No.1, May 2008. Integrated health services- what and why?

A lack of integration in a fragmented and complex healthcare system causes enormous inefficiencies in healthcare delivery. Currently care support to people with complex needs may come from a diverse web of services, resulting in poor care co-ordination and potential overlap of services for people with long-term conditions, with potentially adverse outcomes and experiences.

Population based models of integrated care, designed around data analysis, local risk stratification [102] and shared population registries, anticipate and address care at an early stage, and are tailored to a person's needs. Care is delivered where possible in the community by multi-agency teams with clear care pathways, shared health records, and a focus on personalised support to help individuals manage their own health conditions. Targeting health services at people with multiple long-term conditions according to their levels of need and improving integration across the care continuum is an effective way to reduce unwarranted variation and costs and improve outcomes—for the health care organisation, the community, and the individual.

Technological advances mean that soon many conditions will be treated in the home or community (remote monitoring, telehealth, etc.) rather than in a hospital, and this will require an effective system of integrated health care. Acute hospital services will need to work seamlessly with primary and community sector service providers and care delivery will need to pro-actively engage and empower people and communities as partners in their own health care.

The South Eastern Sydney Local Health District has commenced on a journey of healthcare integration and has collaborated with partner organisations to create a whole-of-system integrated care model, adopting the "House of Care" model,[103] with a focus on person-centred co-ordinated care to reduce avoidable hospitalisations, frequency of hospital admissions and ED attendance, and length of stay in hospital.

This model aims to provide sustainable care co-ordination for people with long-term conditions; localised needs analysis and risk assessment; system enablers such as clinical pathways and single point of access; staff training in health coaching; and improved patient self-management through health behavioural change techniques. [104]

Our current actions for integrated care

Current models of integrated care available to people in the Sutherland Shire that work to avoid the need for admission and readmission, help reduce length of stay and encourage ongoing care management in the community include:

- The community facing Rapid Diagnosis and Intervention Unit Sutherland (RADIUS) for patients presenting with non-critical general medical problems for rapid assessment, intervention and supported discharge
- Southcare, an integrated health care centre offering a range of services predominantly for frail older people and those with disabilities and chronic disease living in the Sutherland Shire
- PICH offers a range of services for community-based management of health-related issues, including child, youth and family services, sexual assault and domestic violence services
- The Drug and Alcohol Service (DAS) promotes a co-ordinated, integrated approach with systematic screening and referral for community follow up and support. Drug and Alcohol will continue to focus on community-based care and hospital avoidance
- HealthOne works with primary care including GPs and Community Health Services and patients to focus on preventative care and self-management of their long-term conditions
- South East Aboriginal Health Care (SEAHC) –Integrated Care Service for Aboriginal and Torres Strait Islander people that provides care co-ordinators and Aboriginal Health Outreach workers, working with the client's Doctor to help co-ordinate client care, organise and communicate with appropriate health providers and may be able to assist with financial assistance for specialist appointments, transport to medical appointments and medical equipment
- Integrated Care for People with Chronic Conditions is a linked health management program for people with long-term conditions who are at high risk of unplanned hospital or ED presentation. The Program works with primary care and other services to identify, rapidly assess and link patients to appropriate care early to reduce long-term illness severity
- A collaboration between the Community Mental Health Service and the Oral Health Service assists eligible Clozapine clients to access dental treatment at TSH&SCHS
- Palliative Care Nurse Practitioners working in RACFs to build capacity within the staff to manage care in place (provided by CHCK)
- A public private partnership between SESLHD and Integrated Specialist Healthcare Education and Research Foundation (ISHCERF), based at Miranda. ISHCERF provides education for GPs as well as GP run clinics for the community covering skin cancers, chronic wounds, weight management and breast health- all with direct access to specialists as required. This service will expand into many other areas of need in the future.

Our vision for the future

Service Solutions

- Expand hospital and emergency avoidance strategies and community-based care, with targeted programs to address issues associated with long-term conditions, frailty and ageing, including:
  - Expand and enhance outpatient, ambulatory and community / home-based services across the age range:
    - Support the provision of additional multidisciplinary care from the acute setting to the community for services such as aged care, palliative care, paediatric ambulatory care, diabetes care, developmental disability
    - Enhance existing outreach services such as RCCP, cardiac rehabilitation, chronic heart failure program, GFS, SOS, DAS screening and referral to community
    - Provide support for care in situ where possible, e.g. nurse practitioners in palliative care working with RACFs, GFS expanded to include community dwelling residents
    - Consider new outreach services, e.g. chemotherapy, midwifery support, oral health
    - Consider the expansion of Hospital in the Home (HITH) like activity to avoid admission or allow earlier discharge e.g. infusion clinics, ambulatory care services
  - Develop guidelines and pathways to improve the management of complex patients with long-term diseases
  - Look for opportunities for advanced practice nurses, allied health and pharmacy to manage prevention and hospital avoidance activity e.g. hospital-initiated home medication review by pharmacists; back pain review clinics by physiotherapists
  - Strengthen the promotion of HealthOne integrated care services and maintain links between Integrated Care and Southcare, Aged Care and Mental Health Services
  - Consider a multidisciplinary Paediatric Eating Disorder Service (inpatient and outpatients) supported by Paediatric Medicine, Nursing, Allied Health and Mental Health Services
  - Investigate funding opportunities for case management services for people ineligible for NDIS who are under 65 but require assistance with access to services
  - Consider ongoing funding for the implementation of a District wide multi-disciplinary Metabolic Disorders and Bariatric Surgery Service, in partnership with general practice to support equity of access for publicly funded obesity management services for our residents and improve the quality of life and reduce morbidity for these patients
  - Consider new multi-disciplinary clinics, for example:
    - Geriatricians and allied health for early diagnosis and management of younger onset dementia patients, with future care planning commencing on diagnosis
    - Multidisciplinary Gastroenterology clinic
  - Facilitate integrated multidisciplinary care with improved links for new models of care, for example:
    - Obstetrics, child and family health and paediatrics
    - Orthogeriatric service particularly for patients with a fractured Neck of Femur
    - Rehabilitation inpatient and Southcare rehabilitation services
    - Dyspnoea service (with respiratory, cardiology, palliative care, aged care)
    - Pulmonary hypertension service (with respiratory, cardiology, rheumatology, aged care)
    - ILD clinic (with respiratory, rheumatology, palliative care and cardiology)
    - Metabolic clinic with Respiratory and Sleep Medicine and Endocrinology
- Improve integration with General Practice:
  - Consider joint GP/Specialist clinics held in the community in a GP surgery hub, to provide easier access for patients to specialist services. As part of an integrated model, this could be provided by private specialists
  - Explore opportunities to work with CESPHN's Patient Centred Medical Neighbourhood program to support effective and efficient delivery of patient care

- Consider funding for GPs to work within the hospital to integrate care
- Include GPs in case conferences for complicated patients
- Improve the provision of electronic discharge summaries to GPs
- Continue to streamline processes for intake and access to district health services
- Foster relationships with CESPHN to provide access to indigenous friendly GP practices and better links and collaboration with Aboriginal Health Services
- Consider including a midwife working alongside GPs for antenatal GP shared care
- Quarantine Diabetes Education service for complex patients, with routine patients managed by primary care
- Potential for new model where Endocrinologist and diabetes educator visit GP clinics to better manage patients in the community and help avoid admissions and readmissions (see model in place in Newcastle and Liverpool)
- Expand upon the public private partnership with Ramsey Health and SESLHD, with dermatology referrals from TSH and frailty and chronic care in the future
- Request information from GPs (e.g. home situation, carer status, recent investigations, etc.) to prevent unnecessary duplication of testing, services, etc.

- Provide support for people with a disability:
  - Consider partnerships with NGO's, disability support providers, carers, government agencies such as FACS and NDIA, Ability Links to develop strategies to better support and co-ordinate care for people with a disability in the community setting to prevent avoidable hospital admissions and decrease length of stay
  - Expansion of Metro-Regional Intellectual Disability Network to increase ward level interface for the early identification of people with disabilities to avoid longer lengths of stay and early discharge planning support
  - SESLHD to continue to work with the Ministry of Health and ADHC to improve services for people requiring NDIS-like services but who are currently ineligible

- Maintain and foster strong relationships with Aboriginal specific services and acute and community-based services (e.g. Drug and Alcohol, Oral Health, Women's Health, Child, Youth and Family, Integrated Care), Mental Health and DPPHE Sexual Health Services.

Technology Solutions

- Ensure convergence of e-health platforms for all services, with easy access to electronic records and appointment scheduling by all providers
- Improve hospital website information to include directory of services and access points for services with links to an electronic services directory for district health services
- Enhance effective communication across the GP to hospital interface, e.g. CESPHN digital health and HealthPathways initiatives
- Promote the implementation of the Patient Reported Measures program [105] to enable patients to provide direct, timely feedback about their health-related outcomes and experiences to drive improvement and integration of health care
- Promote the use of My Health Record for improved sharing of information
- Explore the range of technology that can support common long-term conditions, including Chronic Obstructive Pulmonary Disease (COPD), asthma and diabetes, and redress adverse lifestyle habits, for example using social media, apps, Skype and telehealth.

Workforce Solutions

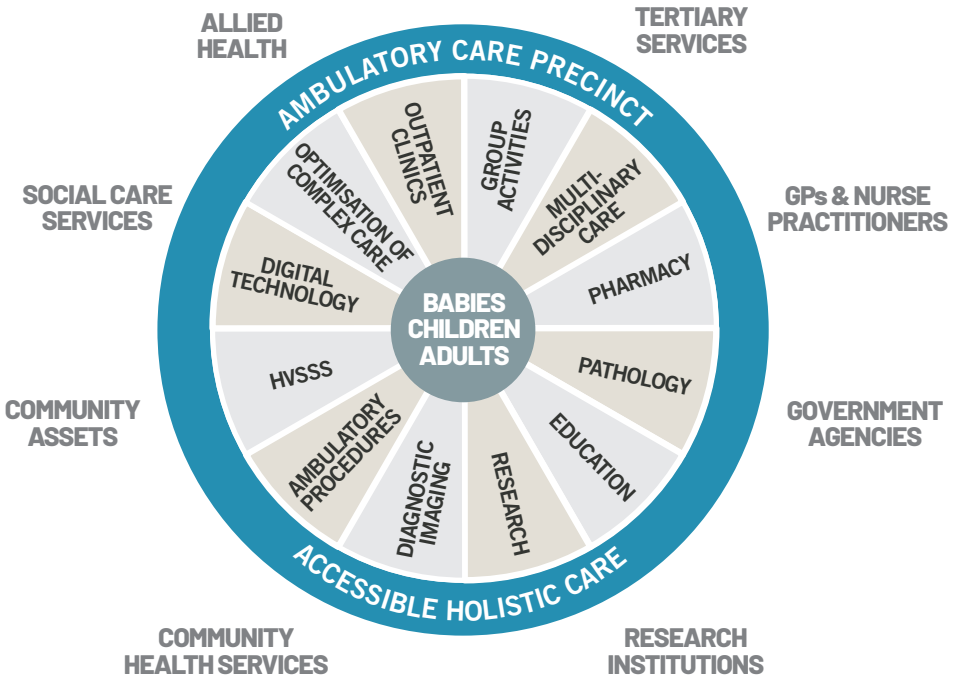
- Introduction of a care navigator role for supportive discharge framework and supported follow up to avoid readmission
- Enhance diabetes services with a Diabetic Educator based at TSH to avoid/reduce the number of hospital admissions by offering comprehensive outpatient care, and provide ongoing funding for diabetes educator home visits to co-ordinate ongoing care post discharge for selected patients and ensure GP follow up.

4.2.2 Meeting the increasing demand for Outpatient and Ambulatory Care Services

Internationally, outpatient, ambulatory and community-based care is assuming a larger role in healthcare, with the opportunity to provide a high-quality, cost-effective, convenient and comfortable experience for patients, their families and caregivers in a variety of settings.

According to the NSW ACI, the provision of an outpatient service enhances the system as a whole to better integrate services across the continuum and includes the following criteria:[106]

- The service meets a demonstrated population need, is consistent with the clinical capacity of the facility and responsive to local history and circumstances
- The service relates to a more complex pre or post-acute care admission
- Requires treatment in an acute setting due to patient complexity, need for input from other specialists and/or multi-disciplinary teams and proximity to higher level diagnostic services and drug therapies
- Provides a more appropriate care setting as an alternative to inpatient admission
- Contributes to professional training and research activities
- As part of a workforce package to attract and retain specialist staff into the public sector.



New ways of delivering outpatient services, including moving to care that is anticipatory and predictive in a non-admitted setting, will help to reduce the workload of hospital specialists. By managing routine care in the community and primary care, more time will be available for specialists to see patients with more complex needs and those patients who need to be reviewed urgently or on time; and free up resources to be re-invested in community-based services or in other under resourced parts of the healthcare system.

With improved technology and advances in anaesthetics and pain control, many less invasive procedures are now being performed on an outpatient or ambulatory basis.

For TSH&SCHS this move is also underway, however outpatient and ambulatory care service accessibility is currently hindered by limited access to clinic rooms, outpatient ambulatory care space and available staffing to expand existing services or introduce new clinics and services. For some specialties, this has also presented issues for training accreditation.

Our current actions to meet demand for Outpatient and Ambulatory Care Services

- TSH&SCHS provides a range of outpatient services for medical, surgical, aged care, obstetric, paediatric, diagnostic, Mental Health and allied health services.
  (See individual consultation reports in Appendix 3 and Technical Paper for further detail of outpatient services available)
- Currently outpatient and ambulatory care services at TSH&SCHS are in a variety of locations around the campus, including a small outpatient department on the hospital campus, in clinics adjacent to theatres, within individual wards, in NSW Health Pathology, Medical Imaging, Mental Health, allied health, and in the Caringbah Community Centre, Southcare and HealthOne buildings and other locations on campus. This limits interdisciplinary integration and opportunities for multidisciplinary care
- A small ambulatory unit is available for selected outpatient and inpatient infusions and procedures, located in the operating precinct.

Our vision for the future

Centralising all appropriate outpatient services at TSH&SCHS in an Outpatient and Ambulatory Care Precinct, with a single point of access for referral and booking appointments would allow:

- Better opportunities for collaborative care with primary care
- Improved integration of care between specialties and services
- Greater potential for multi-disciplinary clinics
- Centralised allied health services
- Centralised community based services
- Efficiencies in booking systems, administration, reduction in appointment variations and reduced health resource utilisation
- Greater opportunities for teaching and learning and translational research
- Better opportunities for patient education
- An improved patient journey and greater patient and staff satisfaction.

Service Solutions

Enhancing the availability of outpatient and ambulatory care services will allow easier and more timely access for patients to appropriate healthcare, avoid the need for emergency presentation or hospitalisation, keep people well in the community for as long as possible, and allow the introduction of new models of care. On consultation with clinicians recommendations include:

- Ambulatory Care Unit:
  - Provide an expanded Ambulatory Care Unit, with suitable nursing and admin support, for minor procedures, infusions, intravenous antibiotics, dressings, etc. as a proven admission avoidance model. For example:
    - Neurology patients to have lumbar punctures, receive IV immunoglobulin, steroids and advanced MS and immunological therapies in a co-ordinated and safe manner
    - Respiratory patients for pleural procedures such as pleural drains, pleural tap; infusions; injections of biologicals for new moderate-severe asthma treatments

- Outpatient Clinics:
  - Enhance existing Outpatient clinics and introduce new clinics identified by individual specialties to meet gaps in services. Services identified include:
  - Aged Care:
    - New multi-disciplinary model for younger onset dementia patients so that early intervention, case-co-ordination and management by allied health and future care planning can commence on diagnosis; with preference to keep people at home
    - Investigate funding opportunities for case management services, particularly for NDIS services for under 65 years
    - Investigate potential for prehabilitation model for aged care elective surgery candidates
  - Allied Health:
    - Dieticians in Gastro and Liver clinics
    - Dietician for nutrition education in Diabetes Education Service based at TSH
    - Speech Pathology and dietician follow up for paediatric feeding issues
    - Speech Pathology outpatient service for cancer patients
    - Occupational Therapy post-acute care, promoting return to previous occupational performance roles
    - Lymphoedema clinic to improve timely access to service in partnership with the SGH lymphoedema service
  - Cancer Services:
    - Enhance the outpatient haematology service
    - Drop in clinic for cancer patients to receive semi – urgent specialist outpatient care, to avoid presentation to the ED or fast track admission if required. Potentially staffed by a nurse practitioner with physician backup
    - Survivorship service and cancer care program to meet the physical and emotional needs of cancer patients and their families
    - Enhanced Psychology services
    - A melanoma multidisciplinary service with SGH for specialized care due to the high incidence of melanoma in the Sutherland LGA
    - Improved delivery and co-ordination of outpatient-based services
    - Community support groups to provide information, support and assistance to patients adjusting to illness and lifestyle factors such as diet and exercise
  - Drug and Alcohol:
    - Relocate existing D&A Outpatient and post ED presentation clinics from community health setting to an appropriate ambulatory care setting or precinct more closely identified with post hospital follow-up
  - Endocrinology:
    - Enhancement of Diabetes Education Service (currently hosted from SGH)
    - Outpatient service to target chronic and complex patients and reduce the need for presentations and admissions, co-located with Diabetes Education Services and other related clinics e.g. with Maternity for women with gestational diabetes mellitus to promote integrated care
    - A monthly pituitary disease clinic
    - A Multi-Disciplinary Team (MDT) clinic for renal failure (endocrinology/renal)
    - Potential for multidisciplinary care with ophthalmology
  - ENT:
    - Provision of an ENT outpatient service to enable pre-admission consultations, outpatient consultations and discharge follow up and provide an equitable service for Sutherland Shire residents who do not currently have access to public clinics

- Gastroenterology:
  - Enhanced Gastroenterology Clinic and combined Liver Clinic to allow the management of Irritable Bowel Disease (IBD) in outpatients and prevent the need for admission
  - Ambulatory Infusion and minor procedure clinic
  - Inflammatory Bowel Disease Service
- Infectious Diseases (ID):
  - Additional clinic sessions for general patients to provide opportunity to review patients more urgently and decrease the need for ED presentations
  - Enhance the capacity of the Outpatient Antibiotic Therapy (OPAT) service, an integrated model with Department of Infectious Diseases and Southcare nurses, to allow early discharge of suitable patients, to enable closer oversight of HITH and discharged patients and allow appropriately timed ordering of ongoing therapy
- Neurology:
  - Parkinson's Clinic, in association with integrated community-based nursing and allied health care
  - Neuro-ophthalmology clinic, a multidisciplinary clinic, currently only available at POWH with long wait. A consultant is available to do this and there is access to equipment
  - Multiple Sclerosis (MS) clinic, including Clinical Nurse Consultant (CNC) support, with access to ambulatory care space for infusions and access to outpatient rehabilitation
  - Potential for other movement disorders and neuromuscular clinics in the future, e.g. subspecialty clinics in Neuro-ophthalmology, Multiple Sclerosis
  - Vestibular clinics
- Obstetrics and Gynaecology:
  - Co-located outpatient services, including flexible consult rooms for Maternity Care, Gestational Diabetes Service, Perinatal Mental Health Service, social work, Chemical Use in Pregnancy Service
  - Dedicated procedure rooms and ultrasound facilities to provide increased outpatient colposcopies
  - New clinic to meet demand due to changes to the cervical screening guidelines
- Ophthalmology:
  - Subspecialist cover for paediatric ophthalmology and neuro-ophthalmology outpatient services in response to demand
  - Create a collaborative care service with Centre for Eye Health (CFEH) for glaucoma, similar to diabetic retinopathy collaborative care service now active; to meet significant demand and provide early intervention to prevent blindness
- Orthopaedics:
  - Relocate all outpatient services/ clinics into a dedicated and centralised ambulatory care building with access to rehabilitation gym, e.g. for OACCP
- Paediatrics:
  - Paediatric EEG (currently sent to SGH)
  - Allergy testing (requires nursing support for skin prick testing)
  - Management of babies of mothers with substance abuse
  - Sleep service (now go to SCH with one year wait list)
  - MRI service (all patients have to be transferred to SGH or SCH)
- Palliative care:
  - Establish an outpatient service at TSH
- Pharmacy:
  - Consider a satellite branch of main pharmacy for outpatients

- Renal:
  - Increased clinic sessions to accommodate new and chronic patients and reduce current waiting times
  - Consider relocation of satellite haemodialysis in a dedicated outpatients and ambulatory care building on the TSH campus
- Rehabilitation:
  - Providing a Day Hospital rehabilitation service, potentially co-located in a rehabilitation precinct
  - New clinics: Constrained Induced Movement Therapy (upper limb therapy post stroke), Parkinson's Disease groups, Stroke and stroke-like illness, Cognitive rehabilitation
  - Introduction of a Specialist Spasticity management clinic and associated infrastructure (currently held at SGH)
  - Provide further access to falls prevention programs, particularly for frail aged who are not suitable for the Stepping On program
- Respiratory:
  - Improve access to general respiratory, sleep and respiratory failure clinics
  - Create a multi-disciplinary Asthma clinic for the management of severe Asthma in adults to meet increasing local demand and prevent ED presentation and admission.
  - Consider the introduction of new multidisciplinary models of care, e.g. smoking cessation service (with D&A, psychiatry and Obstetrics and Gynaecology integrated with CESPHN and GPs), dyspnoea service (with cardiology, palliative care, aged care), pulmonary hypertension service (with cardiology, rheumatology, aged care), ILD clinic (with Rheumatology, palliative care and Cardiology), and metabolic clinic with endocrinology
- Pathology:
  - Include the collection centre in an Outpatient and Ambulatory Care Precinct to allow a more accessible point of access for outpatients and improved patient amenities
- Sexual Health:
  - Reinstatement of sexual health clinic and associated infrastructure to provide equitable access to Sutherland Shire residents
- Surgical Services:
  - Locate Admission offices in an Ambulatory Care centre
  - Expand ambulatory care clinics that support pre and post-acute care, and registrar training on campus, including new clinics for:
    - General Surgery Clinic for triaging of new referrals for candidates for surgery
    - General Surgical follow up clinics
    - Additional Gastroenterology assessment
    - Early Pregnancy Assessment Service
    - Redirecting some patients from private rooms to outpatients
    - Increased Outpatient surgical clinics
  - Undertaking early screening of patients (Optimisation) on the waiting list for pre-admission work up
  - Redirecting some patients from private rooms to outpatients
- Vascular:
  - Compression bandaging clinic for lower leg cellulitis

- Provide better connections and opportunities for integrated, multi-disciplinary care. This includes the introduction of more:
  - Multidisciplinary clinics
  - Nurse or allied health led clinics, potentially in community-based settings
  - Digital solutions instead of face to face consultation, e.g. tele-monitoring, virtual clinics
  - Public private partnership models, similar to the CESPHN, private and SESLHD partnership funded Integrated Health Service at Miranda, so that not all services need to be provided by hospital clinicians on site

- Consider the introduction of new services including:
  - Osteoporosis Refracture prevention service at TSH
  - Eating disorders service (for children and adolescents and for adults)
  - Comprehensive obesity management service (as part of a SESLHD networked service)
  - Urgent review clinic e.g. for infectious diseases
- General Practitioners also identified the need to consider:
  - New Outpatient services such as:
    - Fracture Clinic to provide a follow up service for fractures seen in the ED including orthopaedic review and casting services. Currently patients are referred to private orthopaedic surgeons in their rooms and the financial burden can be significant, and may lead to some patients not receiving follow up care
    - Allied health services for children aged 5+
    - More locally accessible services for people with a disability
  - Continued support of GP Antenatal shared care, and other specialty areas including diabetes, mental health, disability and hepatitis
- Community based services:
  - Enhance the availability of on and off-site community services to promote integrated and co-ordinated multidisciplinary care and maintain integration of on site and community-based services. These include co-located Southcare services, Child, Youth and Family Health services, Child and Adolescent Mental Health services, Drug and Alcohol services, Oral Health services, Needle and Syringe program and DPPHE Sexual Health service
- Investigate the potential for increasing the outpatient/ambulatory services with extended hours for services to meet increasing demand.

Infrastructure Solutions

- Provide a dedicated outpatient and ambulatory care precinct for outpatients and ambulatory care services, with a single point of access for referral and booking appointments, clear referral processes and criteria, and registration for appointments. This would allow:
  - Greater collaboration between clinical disciplines
  - Increased scope for MDT clinics
  - A centralised information management and technology system to promote information sharing between clinicians and GPs
  - Efficiencies in booking systems, administration, and utilisation of space
  - Better access to patient education spaces and electronic information for patients
  - An improved patient journey and greater patient and staff satisfaction.
  - Greater opportunities for education and training
- Ensure connecting links to inpatient services to allow short response times for rapid emergency consults for many specialties, ready access to sterilising and medical imaging services and allow safe inpatient transfer when required
- Provide details regarding clinics on the TSH&SCHS website that are easily accessible and allow clinic referrals to be submitted electronically, with acknowledgement sent of receipt
- Consider transport solutions/access to transport to Precinct, particularly for frail elderly and disabled, including the Transdev on call bus service
- See Section 5.1.2 for further information on infrastructure requirements for the future Outpatient and Ambulatory Care precinct for TSH&SCHS.

Workforce Solutions

- Provide an Ambulatory Care Precinct Manager/Co-ordinator to support integrated care and centralised intake/triage staff to ensure efficiencies in appointments, communication, etc.
- Establish Ambulatory Care registrar cover and multi-disciplinary support, particularly for ACU patients
- Ensure administrative support and appropriate nursing support for medical clinics
- Ensure multidisciplinary staffing (medical, nursing, allied health, pharmacy, administration, etc.) is commensurate with new activity
- Provide resources to support GP training for Shared care models e.g. antenatal care
- Provide registrar led clinics to meet College accreditation guidelines for specialty training
- Investigate opportunities for increased involvement of nursing and allied health in clinics e.g. midwifery led clinics, wound clinic, chronic asthma, to increase number of outreach clinics.

4.2.3 Ensuring safe, compassionate, quality care

Providing safe, high quality care for our community is at the heart of what we do at TSH&SCHS, and ensuring a culture of collaboration, openness, respect and empowerment (our CORE values) is at the heart of who we are.

Safety and quality are inherent parts of the work performed at TSH&SCHS and are measured against Key Performance Indicators via our agreement with NSW Health and adherence to the Australian Commission for Quality and Safety of Health Care Standards.[107]

The *SESLHD Quality Plan*[108] outlines the guiding principles for quality care, including:

- The care we provide will be safe (harm-free), high quality and reliable
- We will be accountable for our healthcare services, within a just culture
- We will be open and transparent
- The care we provide will be compassionate
- All improvement will be local
- Healthcare analytics will utilise meaningful data
- We will focus on value, not volume
- Innovation will be locally led, centrally supported and widely promoted
- We will invest in our staff through building capacity and capability in leadership and improvement.

Strategies to reduce harm and increase value to patients and the community include:

- Reducing hospital acquired infections
- Reducing variation, e.g. with standardised clinical pathways for agreed conditions
- Developing targets that focus on outcomes
- Reducing avoidable admissions
- Avoiding discharge delay
- Reducing inappropriate polypharmacy to reduce the risk of drug interactions, delirium and falls
- Reducing unnecessary interventions
- Involving patients, families and carers and communities in design of services, care and joint decision making with clinicians
- Reducing falls in hospital
- Improving health literacy
- Ensuring a safety culture within all aspects of the organisation
- Implementation and evaluation of effectiveness of business rules
- Evaluation of strategy implementation, then monitoring, data analysis and feedback.

Towards ZERO TOGETHER
Reducing harm through the SESLHD Patient Safety Program

Infection Control

The importance of infection control in hospital facilities has been recognised by the Clinical Excellence Commission (CEC), who implemented the evidence based SEPSIS KILLS program,[109] which aims to reduce preventable harm to patients through improved recognition and management of severe infection and sepsis in hospitals throughout NSW. The program focuses on:

- Recognising risk factors, signs and symptoms of sepsis
- Resuscitating with rapid intravenous fluids and antibiotics
- Referring to senior clinicians and specialty teams, including retrieval as required.

The Sutherland Hospital performed better than peers for hand hygiene: in Audit Period 2 ending June 2015 (the most recent record), the estimated rate was 81.3% based on 2,646 hand hygiene 'moments', compared to the national benchmark of 70%.[110] Continued improvement in infection control is fostered via the Essentials of Safety program, as part of SESLHD's Towards Zero Together.

For more information on the physical design of a hospital as an essential component of infection control measures, see section 5.1.12 for other capital implications.

Variation

Although some variation is expected and associated with need-related factors such as underlying differences in the health of specific populations, or personal preferences, evidence suggests that much variation is likely to be unwarranted. "Understanding this variation is critical to improving the quality, value and appropriateness of health care." [111]

Avoidable readmissions

"An avoidable hospital readmission occurs when a patient who has been discharged from hospital (index admission) is admitted again within a certain time interval, and the readmission:

- Is clinically related to the index admission, and
- Has the potential to be avoided through improved clinical management and/or appropriate discharge planning in the index admission." [112]

Targeting avoidable readmissions requires identifying areas for quality improvement, including the rate of complications and other adverse events arising during the index admission, as well as improving discharge planning, care co-ordination and the provision of health and other support services in the community.

A wide range of interventions are used in Australia and internationally to reduce avoidable hospital readmissions. These include:[113]

- Setting targets to reduce avoidable hospital readmissions
- Providing benchmark information back to hospitals and clinicians on their rate and types of avoidable hospital readmissions
- The introduction of care co-ordinators and nurse navigators who co-ordinate admission to hospital and facilitate discharge and linkages to community care for high needs patients
- The establishment of improvement networks that share case studies about successful interventions and identify new opportunities for practice change and system improvement
- Public reporting on rates of either all-causes or specific types of avoidable hospital readmissions.

Medications safety

National Standard 4[114] (NS4) aims to ensure that clinicians safely prescribe, dispense and administer appropriate medicines, and monitor medicine use. It also aims to ensure that consumers are informed about medicines, and understand their own medicine needs and risks.

Medication safety includes:

- Ensuring the procedures for gathering, recording and passing on information about a patient's medicines are robust and used effectively
- The way we prescribe, store, transport, and administer medications, particularly those that are higher risk
- Medication reconciliation, a multidisciplinary activity to make sure a patient's medication history carries over to their admission accurately, and then back again on discharge.

Falls

Falls are one of the largest causes of harm in health care and are a national safety and quality priority. The Australian Commission on Safety and Quality in Health Care has developed *Preventing Falls and Harm from Falls in Older People: Best Practice Guidelines for Australian Hospitals, Residential Aged Care Facilities and Community Care 2009*[115] to reduce the number of falls experienced by older people in care and the harm endured from them.

Our current actions to provide safe, compassionate, quality care

Several Improvement programs have been undertaken at TSH&SCHS to enhance safe, reliable care, including:

- With staff and consumers, TSH is developing a patient safety culture program to harness staff passion for patient safety and quality and put it at the heart of who we are
- Resources from the CEC and other international literature are used to support the reduction of the incidence of harm from sepsis. Several infection control Policies, Procedures and Guidelines are also available to staff [116]
- The SESLHD Patient Safety Program [117] aims to decrease the level of harm and improve the safety, quality and reliability of healthcare for all patients within our hospital settings, to ensure that all patients receive safe, effective, person centred care. Several actions – or 'Essentials of Safety' – are considered fundamental to the delivery of safe, quality care, including:
  - Hand Hygiene
  - Multidisciplinary Ward Rounds
  - Clinical Procedural Safety Checklists
  - Transfer of Care
  - Leadership Walk-Arounds
  - Aseptic Technique
  - Safety Huddles/Briefings

- As a major step towards reducing variation, SESLHD clinicians have developed consistent, safe and evidence-based clinical pathways and outcome measures, including:
    - At points of care, such as: Venous Thromboembolism prevention and management; recognition and management of sepsis; recognition and management of the deteriorating patient; falls prevention; pressure injury prevention; safer use of medicines; surgical site infection prevention; catheter-associated urinary tract infection; and prevention and management of infection-related ventilator associated complications
    - Surgical clinical pathways / procedures guidelines to ensure patient safety and reduce unwanted clinical variation
    - Development of an Opioid Stewardship Program to facilitate optimal opioid prescribing practices and minimise opioid related adverse drug events across SESLHD
- Medication safety:
    - Processes are governed mostly by NSW Health policies, with local guidelines for managing some types of medications. Medication management for TSH is overseen by the Safe Use of Medicines Committee, who also monitor medication safety incidents and are working on improving the medication reconciliation process, particularly for higher risk patients admitted through the ED
- Falls:
    - SESLHD has produced the *SESLHD Falls Injury Prevention Plan 2013-2018* [118] to ensure our health facilities provide an environment that is protective against falls, and an appropriate clinical focus on prevention both during care and after discharge
    - At TSH&SCHS, all patients are assessed for their risk of falls using a validated tool. If required, a Falls Risk Assessment Management Plan is implemented and updated regularly, with referral to community services on discharge if required
    - The implementation of visual reminders to monitor and promote patient rounding to reduce falls (VISILERT) – installed outside patient's rooms to monitor and reduce falls on Killara Rehab ward
- In response to National Standard 9: Recognising and responding to clinical deterioration in acute health care, TSH has implemented a patient, family and carer escalation process developed by the CEC for inpatients: Recognise, Engage, Act, Call, Help is on the Way (REACH)
- Implementation of the Pressure Injury Prevention Flowchart in every patient's bedside notes
- The TSH Clinical Practice Unit provides a regular Clinical Quality and Patient Safety Newsletter for staff.
- Technological Improvements:
    - The implementation of electronic medical record (eMR)2 and eMEDS to support patient care
    - Implementation of the eMR for intensive care (eRIC) and the electronic hand over of care (eHOC), which provides medical and nursing discharge summaries from the Intensive Care Unit (ICU), a list of current medications, 12 hours of valid observations and other key information.

Our vision for the future

Service Solutions

- Continue to review models of care in line with recommendations from our pillar agencies (NSW Agency for Clinical Innovation, Clinical Excellence Commission, The Health Education and Training Institute and The Bureau of Health Information) to ensure we provide the latest evidence-based care and make our health services safer, more efficient, better performing and sustainable
- Continue to implement the SESLHD Patient Safety Program 'Towards Zero Together', to ensure harm free care
- Provide ongoing support for quality improvement projects
- Continue to foster a just culture of quality, safety and learning at TSH and build upon the Patient Safety Culture Program, with patient safety excellence as its aim
- Ensure community engagement to improve the patient experience and ensure patients are partners in their care
- Use data analytics for quality improvement activities
- Continue to develop clinical pathways to ensure standardised care and reduce clinical variation, duplication and waste
- Ensure clinical business rules held by SGH remain district wide / viable for TSH to avoid variation
- Ensure discharge summaries are timely and complete, with governance from senior personnel
- Improve communication across the campus and with primary care (see Section 4.4.4 Ensuring effective communication for more detail)
- Bring pharmacists into discussions with patients about safe use of medications
- Provide a portal for effective communication with primary care to fostered improvements and quality assurance
- Advocate for patient experience.

Infrastructure Solutions

- Provide access to an expanded ambulatory care unit in an outpatient setting for co-ordinated and safe care to avoid admission
- Provide MRI and enhance medical imaging on site to avoid transfer of patients to SGH and earlier diagnosis and management
- Consider High Observation rooms for high risk falls patients on the wards
- Increase provision for Point of Care Testing (PoCT) access throughout the acute areas of the hospital and Ambulatory Care, to provide direct access to critical patient results
- Consider allocated renal and infectious diseases inpatient beds on medical ward to enable skilled health professionals to care for them
- Provide spaces/lounge area for meetings with family members on wards to promote compassionate care
- Ensure a culturally appropriate meeting place for Aboriginal people
- Review the structural integrity of the Chapel and refurbish to include:
    - A suitable washing area for Muslim users of the multi-faith area
    - Office space or refurbishment of the chapel meeting room to function as an office space
    - Air conditioning supplied for the improved comfort of those using the Chapel.

Workforce Solutions

- Investigate new models of care on ward e.g. Team nursing with ward assistants, AIN's
- Review infectious diseases (ID) services staffing (includes after-hours call and Antimicrobial Stewardship (AMS) rounds), to ensure more rapid review of TSH inpatients needing ID input and improve patient safety and follow up (see ID consultation report for more detail)
- Pharmacy:
    - Enhance AMS pharmacist Full Time Equivalent (FTE) to sustain the increase in ID/AMS demand for clinical pharmacy services
    - Provide a Medication Safety Pharmacist to enable preparation for compliance with National Standard 4 accreditation
- Pastoral care:
    - Expansion of the Chaplain Service to cover more wards and more time on each ward. Weekend support is limited by the availability of support for volunteer Chaplains. Consider recruitment of a fulltime paid Chaplain and administrative support for the service.

4.2.4 Caring for women, babies and children

Staff at TSH&SCHS have a key role in promoting the health and wellbeing of women, babies and children, including those whose families have vulnerabilities or are at risk.

The health of women is often divided into major life stages (young women, women of child bearing years, women in mid-life and older women), each with their own characteristics:

- Adolescent and young women are at greater risk of some mental health problems (than adolescent men), and may be susceptible to teenage pregnancy or sexually transmitted diseases
- Regular health checks of women of child bearing age can identify existing health risks in women and prevent future health problems for women and their children
- In mid-life women experience a higher burden of long term disease and live more years with a disability
- For older women their longer life expectancy and pre-existing health concerns intersect with their social determinants of health including caring responsibilities, financial insecurity, etc.

For newborns and children the aim is give them the best start in life, to promote health, prevent illness, embed early intervention and deliver integrated, connected care.

The NSW government's Families NSW provides prevention and early intervention strategies to help parents give their children a good start in life, by helping parents to build their parenting skills, supporting parents and carers so they can respond to problems early, building communities that support children and families and improving the way agencies work together to make sure families get the services they need. SESLHD works in partnership with the NSW MoH, NSW Department of Education, FACS and Housing NSW, NGOs and communities to implement these strategies.

Our current actions to support women and babies

- TSH&SCHS provides a Role Delineation Level 4 Maternity service, Level 4 Gynaecology service, Level 3 Neonatal service, Level 4 Paediatric Medicine and Level 3 Surgery for Children service
- Clinical networking occurs with SCH, RHW and SGH for more specialised services
- The TSH ED provides a dedicated paediatric area
- Inpatient facilities include:
  - 5 birthing beds (4 labouring beds and 1 assessment)
  - 15 maternity beds (with capacity to surge to 18)
  - 4 x Special Care Nursery beds (with space for up to 8), including for care of post-natal returns from specialist hospitals
  - 10 paediatric beds with potential to surge to 18
- The midwife support program supports early discharge and keeping well mothers and babies at home
- Paediatric/newborn care is provided with referral for follow-up in the community with nursing and allied health as required
- Outpatient clinics for women, neonates and children are provided on the TSH&SCHS campus and in the community, including:
  - For maternity patients:
    - Midwifery Group Practice (MGP) – a continuity model of care that is led by a group of 5 midwives who caseload women throughout pregnancy, labour and the postnatal period
    - Student-led MGP – as above but led by students and supervised by Registered Midwives
    - Standard care – women are seen by midwives or doctors and/or other appropriate health professionals throughout pregnancy, labour and birth. Care is provided by core staff and continuity is not an option
    - GP Shared Care – low risk women receive most of their care at the local GP surgery. The GP is accredited to provide antenatal care. The women are booked into the hospital and have hospital visits at booking, 28-30 and 36 weeks
    - Pregnancy Centering – women receive group antenatal care with 2 midwives. There is continuity in the antenatal period but standard care in labour and postnatally
  - A range of Paediatric Outpatient services provide care to neonates and to children:
    - Children's Acute Review Service (CARS) is an ambulatory service based on the paediatric ward which provides an acute review service 5 days/ week with experienced CNC and paediatric registrar / staff specialist. Allows for ED avoidance, decreased admissions, decreased length of stay, improved access for GP's and improved care for chronic and complex patients in conjunction with SCH
    - Immunology and ID consultants visit from St George Hospital to review patients in a day only clinic
    - Paediatric medical and surgical clinics
  - PICH provides a mixture of clinics and home visiting services at Caringbah Community Centre and in the community, including assessment and care by child and family nurses and paediatric allied health. Appropriate outpatient assessment and care can identify children and families that require early intervention and follow up. Services include:
    - Child, Youth and Family Health Service, which works in partnership with families to provide support, information and health advice
    - Newborn health checks, Personal Health Record (Blue Book) checks, New Parent groups and breastfeeding support
    - Parenting support, sleep and settling, feeding or adjustment to parenting assistance via Possum Cottage (based at Caringbah Community Health)

- Narrangy Booris, a free multi-disciplinary Aboriginal Child and Family Health Service
- Sustaining NSW Families, a multidisciplinary nurse led service to eligible vulnerable families
- Southern Sydney Sexual Assault Service
- Domestic Violence Service
- Child and Family Counselling Service, an early intervention and prevention counselling service for parents of children aged 0-5 years
- Children's Occupational Therapy, Speech Pathology and Physiotherapy
- Children with developmental disabilities are referred to the Kogarah Developmental Assessment Service.

• See section 4.1.2 for more information about services available for children in the community.

Our vision for the future

Service Solutions

• Obstetrics and Gynaecology:
  - An Early Pregnancy Assessment Service (EPAS) is required to accommodate local area review of threatened or complicated pregnancy issues and avoid the need for ED. Equipment and physical space already exist
  - Provide increased planned theatre time to improve access and meet demand for caesarean births, gynae-endoscopy procedures for those needing Endometriosis screening and introduction of EPAS
  - Enhance Special Care Nursery to allow the support of care to babies who are over 34 weeks and require Continuous Positive Airway Pressure (CPAP)/high flow oxygen. This will also allow repatriation of local babies and reduce pressure RHW and SGH, and increased capacity for low risk twins to be delivered at TSH
  - Improved integration between child and family health and paediatric services
  - Enhanced funding and resources for the PIMHS including a dedicated Clinical Midwife Consultant to co-ordinate the service and a social worker for engagement and follow up
  - Possible development of a clinic for outpatient colposcopies to meet predicted demand due to changes to the cervical screening guidelines
  - Improve GP Shared care rate with improved resources to upskill GPs for accreditation

• Paediatrics:
  - Future Paediatric care at TSH requires a comprehensive, integrated acute inpatient and outpatient service as well as good links to community-based services to target chronic and complex patients and reduce the need for ED presentations and admissions
  - Increase special care nursery beds (see above)
  - Create a Paediatric SSU on ward for assessment and management prior to decision to admit or discharge, with a designated pathway from ED and inclusion/exclusion criteria, which will reduce the LOS of patients in the ED. Would also include allergy testing service

- Enhanced/ new Paediatric clinic services including for:
  - Paediatric Electroencephalogram (EEG) (currently sent to SGH)
  - Allergy testing (requires nursing support for skin prick testing)
  - Management of babies of mothers with substance abuse
  - Sleep service (now go to SCH with one year wait list)
- Increased integration with community-based services e.g. management of jaundice at home by community nursing with Bili blankets, access to services for NDIS patients.

Infrastructure Solutions

- Provide increased capacity for outpatient clinic area, may be within an outpatient and ambulatory care precinct with separate services / wait areas for paediatric patients and their families. Rooms need to be large enough for MDT clinics
- Obstetric clinics require close adjacencies to ED, theatres, delivery suite and wards
- Wellness model for obstetric outpatient services requires separate clinic space and waiting area from general clinics
- Provide access to group room for education
- Increase funded capacity to 6 beds for Special Care Nursery. May need specialised equipment such as Hi-Flow
- Quarantine 4 newly funded beds on paediatric ward for the introduction of a Paediatric Short Stay Unit (SSU)
- Provide 2 funded beds for the growing cohort of paediatric eating disorder patients who have an extended length of stay (3-4 weeks) and require intensive nursing (1:1), mental health and allied health support. Currently these patients are seen as outpatients
- Provide increased capacity for CARS service (within the bed base in the ward area) and the inclusion of a multipurpose room within this space and access to procedure room
- Provision of an equipment pool and storage for consumables such as dressings, tubes, etc. and equipment for families who would otherwise need to source from SCH
- Provide space (can be shared) for education and group activity
- Provide dedicated office space
- Provide MRI and enhance medical imaging on site to avoid transfer of patients to SGH or SCH.

Workforce Solutions

- Multidisciplinary staffing and staff education/ skills would need to be enhanced in line with service enhancement
- Enhance the skills, capabilities and confidence in the workforce to prevent and respond to violence, abuse and neglect
- For women and babies:
  - Full allocation of midwifery staff as calculated by the Ministry of Health workforce tool BirthRate Plus
  - After-hours educational support for Maternity Services to allow the recruitment of increased numbers of student midwives
  - Recruitment of skilled, senior nursing staff and allied health including social work support for expansion of the PIMHS and the development of an EPAS
  - Administrative support for inpatient, Birthing Unit and outpatients
  - Staff Specialist enhancement for colposcopy, EPAS, and new models of care
  - Resources to support GP training for Shared care model of antenatal care e.g. a midwife working alongside GPs
  - Enhancement of Clinical Nurse Educator role to 1.0 FTE

- For children:
    - Recruitment of skilled, senior nursing staff and JMO support is required before expansion of the Special Care Nursery and creation of a Paediatric SSU
    - Enhancement of medical, nursing and allied health support for eating disorders service
    - Increased access to allied health support including pharmacy, physiotherapy, speech pathology and social work
    - Improved access to community-based speech pathology and occupational therapy for early intervention and treatment
    - Add subspecialist cover for paediatric ophthalmology outpatient services in response to demand
    - Provision of a dedicated Paediatric Nurse Practitioner to support ED, Paediatric ward, Paediatric outpatients and Special Care Nursery. This will also support the implementation of a Paediatric nursing rotation for junior nurses.

4.2.5 Providing access to urgent health care when needed

Providing timely access to urgent health care occurs in several settings for Sutherland Shire residents, as outlined below.

Our current actions to provide urgent health care when needed

Emergency Department

Sutherland Hospital provides a Level 5 Emergency Medicine Service for adults and children, providing vital health care for the acutely ill and injured. The purpose-built department, opened in 2017 and designed to meet the emergency health needs of the community into the future includes capacity for 44 treatment bays.

Models of care currently include:

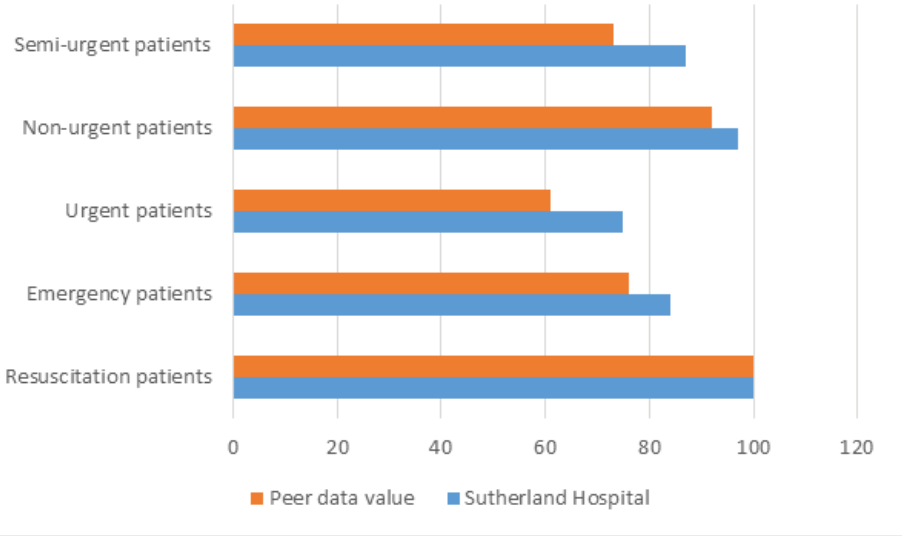
- 19 acute beds (plus an additional 6 unfunded) including 2 isolation rooms and 2 Safe Assessment Rooms
- 2 resuscitation rooms (plus an additional 1 unfunded and 1 'cold-shelled')
- 8 ED Short Stay Unit (EDSSU) beds, for the short-term treatment, observation, assessment and reassessment of patients with selected conditions, who are clinically stable and anticipated to require a period of observation or treatment less than 24 hours
- 7 Paediatric beds including 2 x single isolation rooms and 1 procedure room
- 4 funded (5 capacity) Fast Track treatment beds to treat ambulant, non-complex (single clinical system problem) patients who can be discharged in less than 2 hours
- 5 consult rooms, 1 procedure room and 1 plaster room
- Nurse practitioners and Physiotherapist in ED for early assessment and management to improve flow, decrease length of stay and reduce representation in ED.

There were 52,838 presentations in 2017/18, an increase of 3.4% per year over the previous decade. The higher acuity triage categories have increased the most over the period, with triage category 2 nearly doubling.

Sutherland Hospital ED performance was favourable to its peers for time to treatment in 2016/17, as seen in the figure below.

Figure 6

The percentage of patients arriving at ED who commenced treatment within the maximum recommended time, Sutherland Hospital and Peer Hospitals, 2016/17.



Source: AIHW. My Hospitals. Web update: Sutherland Hospital. Emergency Department waiting times.
URL https://www.myhospitals.gov.au/about-the-data/download-data. Accessed 15 Nov, 2018.

Emergency Department and admission avoidance models implemented at TSH&SCHS include EDSSU, Children's Acute Review Service (CARS), Geriatric Flying Squad, Southcare Outreach Service, Aged Care Service Emergency Team for patients aged 70 years and older admitted to the ED, and a short stay community facing general medical unit model, RADIUS.

Critical Care Medicine

The Sutherland Hospital Critical Care Medicine provides a Level 5 role delineation intensive care service providing comprehensive critical care to patients requiring ventilation and/or complex multiple system support.

Demand for intensive care services is increasing, due to increasing numbers of people with multi-morbidity, increasing presentations from ED and elective cases. The greatest source of admission is unplanned and emergency admissions, with other sources including from surgery, medical and radiology.

There are currently 13 operational critical care beds. The recent redevelopment provided purpose-built capacity for 20 critical care beds, designed to meet the high level health support needs of the community into the future.

Special Care Nursery

The Sutherland Hospital provides a Level 3 role delineation Special Care Nursery (SCN) in a Neonatal tiered network with tertiary links to Royal Hospital for Women. The SCN is a 4 bedded unit with capacity for 6 beds that cares for neonates from 34 weeks gestation needing low flow oxygen as per the neonatal capabilities framework.

Coronary Care Unit

The Sutherland Hospital provides a Level 5 role delineation Cardiology and Interventional Cardiology service. The Coronary Care Unit provides 6 beds and telemetry capability is available for ward beds. Higher acuity patients are managed in the critical care medicine unit.

Other Settings

Primary care provides the majority of urgent care, with GP, nursing or allied health management to enable rapid assessment of an individual's care and support needs, with the aim of stabilising the situation and developing a care plan that avoids clinically unnecessary presentation or admission to hospital. The availability of after-hours access to these services (such as after-hours Home Doctor services) or to crisis home support services influences a person's attendance at the ED. Accessible, single shared records such as My Health Record may improve a person's access to appropriate crisis support, particularly for out-of-hours decision-making for those with complex needs.

Ambulance services play a vital role in the transfer and initial assessment and management of patients requiring emergency care. They can also play an important role in the management of lower acuity illnesses and injuries or in implementing shared care strategies with other services, allowing people to be managed in their own home as part of a wider integrated care pathway. Advanced care paramedics can provide initial management and stabilisation for a variety of conditions. Shared care protocols with local acute providers and community services can reduce the number of ambulance journeys to hospital, particularly for older people.

Providing care in place for elderly people is essential to avoid the need for acute presentation to hospital. For example the Geriatric Flying Squad provides geriatric outreach assessment and short term case management in the residential aged care setting; Southcare Outreach Service (SOS), a multidisciplinary rapid response community team, provides short term acute and sub-acute interventions to people aged over 65 years of age who have been discharged from ED or at risk of presenting to the ED, to assist people to remain at home safely and avoid the need for hospital admission. *Refer to section 4.2.8 Supporting older people to live with more complex comorbidities, including dementia and frailty*, for more information on models of care for elderly people in crisis.

Other Crisis Support services available to Sutherland Shire residents include:

- Sexual assault service – Adult – 24 hr service
- Domestic Violence service and screening – Adult
- Triage service for assessment of mental health problems
- Child Protection Unit (networked with SCH)
- FACS Helpline
- NSW Poisons Information Centre
- Kids Helpline
- The National Sexual Assault, Domestic Family Violence Counselling Service
- Alcohol and Drug Information Service
- Lifeline
- Youth help – Eheadspace online chat
- Public Health Unit (Infectious diseases/environmental health issues).

Our vision for the future

Service Solutions

- Enhance ED avoidance models, for example:
    - Provide an Early Pregnancy Assessment Service (EPAS) at TSH to accommodate local area review of threatened or complicated pregnancy issues
    - Increase capacity of discharge-to-assess models, such as the existing SOS, to provide older people presenting to emergency with assessment and appropriate support to manage their crisis in their own home
    - Expand Geriatric Flying Squad (GFS) services to avoid deterioration or hospitalisation of residents of residential aged care facilities
    - Expand RCCP to assist patients with advanced lung disease to live optimally in their homes, prevent hospital admissions and decrease hospital lengths of stay
    - Investigate the establishment of a 'Flying Squad' type neurology service
    - Increase partnerships with ambulance e.g. for palliative care diversion to CHCK to avoid the need for acute admission; advanced paramedic models; for falls assessment and prevention
    - Build upon the ED/admission avoidance RADIUS model to prevent deterioration and crisis
- Investigate more direct admission pathways to an inpatient bed and clinical protocols for agreed conditions once an assessment and diagnosis has been made, with improved access and pathways between primary and specialist care e.g. for identified infectious diseases, those patients being managed in the community on a long-term disease pathway, and geriatrics to initiate immediate assessment and care planning
- Ensure timely and equitable access to ambulatory diagnostics including imaging and pathology to prevent delays in assessment, treatment and discharge

- Creation of a Close Observation Unit (COU) model within the existing bed base for acute respiratory failure patients requiring non-invasive ventilation, with dedicated equipment and skilled staff. This will reduce length of stay for respiratory failure patients in ED and relieve demand on critical care beds, resulting in improved access to critical care beds when required
- Consider a minor injuries clinic in ED, identified by triage, run by nurse practitioner and supported by physiotherapist
- Consider a dedicated chest pain assessment unit in Cardiology for patients referred from ED (likely same day discharge).

Infrastructure Solutions

- Diagnostic Imaging:
  - Improved medical imaging services, including an MRI and a 2nd CT to facilitate earlier diagnosis and management
  - Upgrade to SPECT-CT in Nuclear Medicine to replace outdated gamma camera
- Emergency Department:
  - Staged opening and staffing of ED treatment spaces and resus bays to meet future demand, particularly with the future commencement of a thrombolysis service at TSH
  - Provide an extra point of care high end ultrasound machine to meet demand (total 2)
  - Integrated Electrocardiograph (ECG) records in ED
  - Tap on/ tap off sign in for EMR and a bar code scanner for patient's eMeds
- Critical Care Medicine (CCM):
  - Staged opening and staffing of new critical care beds to create additional capacity to improve access for emergency and planned admissions and meet future demand. This will also improve ETP and surgery wait lists
  - Provide Bariatric beds in CCM
  - Refurbishment of the 12 'old' bed spaces to meet current health facility guidelines and allow for continued use of these spaces in the future. This would involve converting these 12 bed spaces in to isolation rooms, which includes anti rooms with additional positive/negative pressure as well as the creation of additional 'bariatric 'rooms
  - Replacement strategy for critical care equipment:
    - Ultrasound machine
    - Additional BiPAP machines
    - Replacement of current outdated ventilators and additional ventilators
    - Additional Renal dialysis machines
    - Point of Care Testing (PoCT) e.g. blood gas analyser
    - Increase use of video/teleconference in CCM, e.g. for family meetings
- Cardiology:
  - Consider expansion of CCU to meet future demand
  - Consider the development of a Cardiology Precinct, with an expanded bed base and co-located services
- Special Care Nursery:
  - Increase to 6 funded cots. This will allow the support of care to babies who are over 34 weeks and require CPAP/high flow O2. It will also reduce pressure on tertiary settings by allowing more access for RHW and SGH repatriation of local babies

- Pathology:
    - Increase provision for Point of Care testing access throughout the acute areas of the hospital such as ICU, Theatres, Maternity, including Special Care Nursery, and Ambulatory Care, to provide direct access to critical patient results
    - Remote release Blood Fridge / Smart Fridge maybe also be required to provide direct access to blood products although this will be subject to the distance from theatres to the laboratory.

Workforce Solutions

- Emergency Department:
    - Continue to seek advanced trainees for TSH ED
    - Increase availability of nurse practitioners and allied health for dedicated acute and fast track care in ED
    - Provide a permanent allocated pharmacist in the Emergency Department (currently on trial) to improve prescribing and increase uptake of medication reconciliation
- Critical Care Medicine:
    - Increased critical care staffing commensurate with bed level, including increase in Clinical Nurse Educator (CNE) FTE to assist in the transition of new staff from novice to expert critical care nurses and provide unit-based education and activities to develop the staff, nurse practitioner and allied health support (see Departmental consultation for further information on workforce requirements)
    - Implement pathways for increased Dietetics, Occupational Therapy and Speech Pathology support
- Special Care Nursery:
    - Increasing capacity of special care nursery will require enhanced nursing and educational support for Paediatric services
- Obstetrics:
    - Enhancement to provide EPAS service including nursing, medical and allied staff
- Cardiology:
    - Improve staffing skills mix and improve education opportunities for nursing staff to enable the management of higher acuity patients in the Coronary Care Unit (CCU) and reduce need for High Dependency Unit (HDU) care
    - Enhance nurse to patient ratios to align with cardiology units of similar size and activity
    - Provide equitable allocation of after-hours CCU medical cover
- Ensure sufficient administrative support.

4.2.6 Improving surgical access and pathways

A range of surgery is provided at TSH, from emergency surgery through to those who are fit and well requiring minimally invasive day surgery. This demand for surgery is likely to continue and increase from the growing and rapidly ageing local population.

Access to surgery is currently limited by operating room capability and availability. The existing operating room infrastructure is ageing, poorly configured and does not support current models of care (streaming short stay patients, separating planned and emergency surgery, hybrid theatre for minimally invasive surgery, etc.) and will not be able to meet future demand. For example:

- The age of the theatres means they will no longer be serviceable in 5 years' time
- Theatres are smaller than recommended for surgical procedures that require large and bulky equipment, including Orthopaedics
- Theatre size restricts advances in surgical techniques and the use of new equipment and technology
- Streaming for HVSSS cannot be implemented in the current configuration
- There is inadequate peri-operative and supportive services capacity (anaesthetics, recovery, storage etc.) and recommended perioperative pathways (see NSW ACI Perioperative Toolkit, Feb 2018[119]) cannot be fully implemented.

In 2017-18, 99% of patients at TSH received their urgent elective surgery within clinically recommended times, as compared to 97% in their peer group hospitals.

Conversely, waiting times for elective surgery are longer at TSH compared to peer group hospitals.

AIHW: My Hospitals Report: Sutherland Hospital. Accessed Feb 20, 2019.

The overall demand for operating and procedure rooms at Sutherland Hospital is also increasing, due to:

- Rates of projected population ageing in the Sutherland Shire resulting in:
    - Greater numbers of emergency and higher acuity surgical patients who require longer time in theatre
    - An increase in potential cancellations due to comorbid complications and the number of patients that fail day surgery
    - Increasing levels of older residents requiring surgical procedures, particularly orthopaedic and ophthalmic procedures
- TSH currently provides all publicly provided elective orthopaedic surgery for residents of the Sutherland Shire and St George area as part of a networked service
- Potential increases in procedures related to chronic disease and obesity
- Shift to less complex paediatric ENT being delivered locally rather than at SCH
- The recent expansion of Sutherland Hospital will improve access and increase the number of patients added to surgical/procedure lists.

SESLHD aims to manage patients in accordance with the Predictable Surgery Program, but full implementation of this Program at TSH is limited by infrastructure and resourcing.

Our current actions to improve surgical access and pathways

The Sutherland Hospital provides a Level 5 role delineation Operating Suite and Anaesthesia and Recovery service comprising of 6 theatres and perioperative services, servicing the specialties of:

- Endoscopy
- ENT
- General Surgery
- Obstetrics and Gynaecology
- Ophthalmology
- Orthopaedics
- Paediatrics
- Vascular
- Urology.

A Perioperative Treatment Unit (PTU) is available for:

- Outpatients requiring:
    - Intra Venous infusions, e.g. Iron Infusions, Ferinject Blood Transfusions, IV Ig infusions, Monoclonal antibodies, Zoledronic acid infusion
    - Procedures, e.g. ascitic tap, lumbar puncture
- Inpatient Procedures, e.g. pleural taps, pleural drains, ascitic tap, tunnelled pleural catheters, Botox for spasticity, lumbar punctures.

Current actions in Surgical Services include:

- Streaming of planned joint replacement surgery and non-complex trauma and emergency cases for St George residents to TSH. Orthopaedics at TSH is a level 5 role delineation service networked with SGH
- Networked waitlist model where patients across SESLHD have inter-hospital transfers to reduce their length of time on the waitlist
- Use of the Surgical Dashboard, which enhances strategic and operational decision-making
- Ongoing development of SESLHD clinical pathways / procedures guidelines
- Development of SESLHD Level 1, 2 and 3 clinical safety checklists, and reports on compliance to policy
- Implementation of Operational Performance Enterprise Reporting Application (OPERA), the State's reporting tool for waitlist data, across SESLHD
- Collaborative provision of care for older people by orthopaedic services and aged care or rehabilitation services
- Implementation of Osteoarthritis Chronic Care Program (OACCP), a Leading Better Value Care initiative to provide a multidisciplinary approach utilising conservative care options such as weight reduction, exercise programs, education and pharmacological pain management
- Establishment of an Eye Outpatient service at TSH.

Our vision for the future

In order to meet demand into the future and implement contemporary models of care, it is recommended to construct 10 new purpose-built operating rooms (including dedicated high volume short stay surgery (HVSSS) operating rooms), with appropriate operating equipment and diagnostic imaging, and expanded perioperative and associated supportive services. This will provide increased theatre time to manage demand and improve equity of access to services available locally.

Separating planned and unplanned surgery through the use of dedicated beds, operating rooms and staff will allow more predictable and timely access to appropriate surgical services, and improve the quality of care delivered to patients.

The *SESLHD Surgical, Anaesthetic and Perioperative Services Clinical Services Plan 2018-2021*[120] identified the need for ongoing change for surgical services across SESLHD, with new surgical techniques, technological changes, and innovative models of care. Surgical services at TSH will be guided by the strategic directions of this Plan.

Service Solutions

- Increasing operating room capacity and services, including the implementation of a hybrid operating room, to enable enhanced services and equity of access to the local community, expedite management of patients, shorten their length of stay, improve clinical outcomes and avoid transfer to SGH for some services. Examples include:
    - A Hybrid theatre would assist in procedures such as embolization and guided biopsies and support improved imaging opportunities for vascular and other surgery
    - Providing access to theatres for new case lists, e.g. for endogynaecology, emergency caesareans, vascular, urology, ophthalmology, maxillofacial, colorectal and paediatric procedures that are not currently performed at TSH to meet local demand
    - Increasing access for endoscopy to reduce extended waiting lists and inequity of access
- The NSW Surgical Services Taskforce has mapped a path that better utilises the surgical infrastructure and workforce to improve services for patients, attract and retain surgeons, anaesthetists and operating room staff, optimise available funding and enhance clinical training.[121] Some models relevant to TSH include:
    - Separating HVSSS to concentrate suitable planned surgical cases in dedicated HVSS surgical units [122]
    - Extending the range of procedures that are suitable for the short stay environment as models of care and medical technologies make early mobilisation and early discharge not only possible but preferable
    - Streaming planned and emergency surgery to allow planning for the predictable surgical workload for all specialities, to allocate the necessary operating room time and to plan for immediate access to operating rooms for the most urgent emergency surgery patients [123]
    - Reducing unwarranted clinical variation, with clinicians actively involved in identifying, analysing and developing solutions
- Review theatre utilisation with the ACI's Operating Theatre Efficiency Guidelines[124] to enhance operating theatre efficiency while maintaining a high standard of care
- Expand perioperative service in line with guidelines currently being developed by the ACI, [125] for example:
    - A mapped journey from pre-admission to discharge with multi-disciplinary pre-op assessment, an enhanced recovery after surgery (ERAS) pathway,[xx] and discharge checklist in operating rooms, so that patients may have a shorter length of stay and improved outcomes[126]
    - Continue developing clinical pathways that support the patient journey through pre-admission, admission, preparation, treatment, recovery and discharge

xx This aims to optimise the patient's condition for surgery to optimise recovery, eliminate unnecessary fasting and minimise complications following surgery with early mobilisation. The aim is to achieve an earlier discharge from hospital for the patient and a more rapid resumption of normal activities after surgery, without an increase in complications or readmissions.

- Consider/enhance shared care models with geriatrics as deemed clinically appropriate e.g. prehabilitation, pre-operative assessment for frailty; orthopaedics, general surgery, urology, vascular, cardiac respiratory and General Practice, to promote earlier discharge or ward transfer and patient centred care
- Expand ambulatory care clinics that support pre and post-acute care, for example:
    - Consider the potential to expand HITH to refer patients to post-acute care services in the community e.g. patients discharged with drains in-situ, intravenous antibiotics, etc.
    - Ensure availability of a rapid access clinic for post-operative patients managed by HITH
    - Expand Nurse Practitioner led pre and post-acute care clinics
    - General Surgery Clinic for triaging of new referrals for candidates for surgery
    - Early Pregnancy Assessment Service (EPAS)
    - Additional Gastroenterology assessment
    - Multidisciplinary optimisation clinic with support from primary care where patients on the elective surgical waiting list have an early screening and pre-admission work up and care plan undertaken to ensure they are in optimal condition prior to surgery. Target groups include the frail, aged and those with long-term diseases and multiple comorbidities
    - Redirecting some patients from private rooms to outpatients to provide equity of access
- Implementation of the District wide multi-disciplinary Metabolic Disorders and Bariatric Surgery Service, in partnership with general practice, initially to be based at SGH. The model will provide a team of excellence that will support equity of access for publicly funded obesity management services to improve quality of life and reduce morbidity for these patients
- Consider the implementation of the Leading Better Value Care Direct Access Colonoscopy initiative to improve the management of colonoscopy wait lists and prioritise and streamline access for patients with a positive Faecal Occult Blood Test from the national screening program, who require colonoscopy in a timely manner
- Improve integration of services with:
    - Primary health care e.g. implement HealthPathways to reduce inappropriate referrals and improve referral processes for GPs
    - Other health care providers e.g. CHCK for optimisation of patients; local private hospitals
- Obstetrics:
    - Provide access to increased planned theatre time to improve access for caesarean births, meet increased demand for gynae-endoscopy procedures for those needing Endometriosis screening, and meet current and future demand for EPAS
- Orthopaedics:
    - Establish an Orthogeriatric service particularly for patients with a fractured neck of femur, including Geriatric registrar for Orthogeriatric patients
    - Consideration of reinstatement of simple emergency hand surgery at TSH following review in ED. Decision can be made as to the complexity of the injury/ surgery required and whether to operate at TSH or send to Sydney Hospital
    - Enhance the Osteoarthritis Chronic Care Program for people with osteoarthritis to reduce waiting list and enhance outcomes post operatively
    - Consider the introduction of the Advanced Recovery Orthopaedic Program (AROP), to provide best practice management and earlier discharge for patients who meet specified criteria undergoing elective Hip and Knee Replacement surgery

- Respiratory:
    - Increased access to operating room sessions to allow greater equity of access to Sutherland Shire residents and reverse some flows to private hospitals
    - Increased access to theatre time for Interventional Bronchology.

Technology Solutions

- Consideration of an efficient inventory management system that can replace all of the manual processes
- Improve support for data collection (including clinical outcomes)
- Expansion of the surgical dashboard
- Improved District wide referral and wait list processes.

Infrastructure Solutions

- Increase theatre capacity to 10 new purpose-built operating rooms (see section 5.1.1 for further information on infrastructure requirements), with the inclusion of a hybrid operating room equipped with advanced medical imaging devices to enable minimally-invasive surgery
- Establish a HVSSS Unit, including dedicated HVSSS operating rooms and associated infrastructure to enable appropriate streaming of short stay surgical and procedural patients away from more complex and/or unplanned activity
- Ensure requirement for Negative Pressure theatre/s for specific air-borne infection risk is addressed
- Plan for Robotic theatre/s as use of this equipment becomes more common place
- Ensure sufficient peri-operative beds/chairs for the short stay environment
- Increase Outpatient surgical clinics, with the consideration of Preadmission clinics co-located with/adjacent to the operating rooms to allow specialist supervision of registrar clinics
- Provide MRI and enhance medical imaging on site to avoid transfer of patients to SGH.

Workforce Solutions

- Provide appropriate staffing resources (medical, nursing, technical, educational, allied health and clerical) commensurate with increased capacity to ensure continuation of existing high quality service delivery, including addition of rostered Night Nursing staff within fatigue management guidelines
- Consider the implementation of a Director of Surgery role
- Ensure administrative support for clinics.

4.2.7 Ensuring good acute medical care and supported discharge

Chronic non-communicable disease is a major driver for the need for acute medical care. These diseases may occur across the life course. While the incidence of many chronic conditions is not actually increasing, there are many more people living with these conditions, given that our population is growing and ageing, and people are living longer with these conditions.

Providing management in the community to avoid hospitalisation where possible and acute specialist inpatient care when needed is crucial to their effective management. When acute inpatient care is required, improving access means ensuring that "the right person is in the right bed at the right time," and the needed specialty service, consult, or procedure is provided efficiently.

Reducing hospitalisations for these chronic conditions includes early diagnosis and treatment, and good ongoing management of risk factors and conditions in community settings to avoid potentially preventable admissions.

Better Pathways

Developing care pathways that support patients early on to prevent them reaching crisis point, with smart triaging to the right clinician at the right time to ease access to services; and supportive networks in the community to help people keep well after discharge from secondary care.

Wilson S and Langford, K. 10 Ideas for 21st century healthcare. Innovation Unit

Preventing unnecessary hospital admissions is a specific objective of healthcare reform in Australia. To do this well, the following is recommended:

- Access to 7-day services and after-hours access to senior medical assessment, multidisciplinary team members, pharmacy, diagnostic and support staff
- Streaming to appropriate resources such as short stay units or rapid assessment units to avoid admission
- Accessible outpatient care to help prevent or control an acute episode, manage a long-term disease or condition, or provide appropriate follow up care post admission
- Providing care pathways with standardised clinical processes to minimise harm and variation in care and improve patient outcomes and experience
- Expanding the role of primary care providers to manage complex patients
- Enhancing communication and co-ordination e.g. with linked and shared medical records and care co-ordination roles enhanced.[127]

Discharge planning should start at first contact. Early discharge planning, with clear clinical criteria for discharge, can deliver significant reductions in length of stay and reduce delays to transfer of care. Timely discharge, including on weekends, is assisted by 7 day working of all services, including multidisciplinary community-based services to allow earlier supported discharge, and by complex case discharge co-ordination and management roles and systems.

Canterbury, New Zealand invested in:

> **New models of integrated care, working across organisational and service boundaries**

> **New forms of contracting to support this integrating care**

> **Increasing community-based services**

> **Strengthening primary care.**

The health system is now supporting more people in their homes and communities and as a result has slowed the growth in demand for acute hospital services, particularly for older people.

Charles, A. The Kings Fund 2017. Developing accountable care systems. Lessons from Canterbury, New Zealand.

Recognising the patient's goals and preferences during their treatment and discharge planning process is also important, in order to better prepare patients and their caregivers to be active partners for their anticipated health and community support needs.

Infrastructure to support good acute care requires close functional relationships with related specialties. This may include co-locating specialties that manage chronic conditions to promote integrated care.

Our current actions to provide timely access to acute medical care and supported discharge

The Sutherland Hospital and Sutherland Community Health Services provide a broad range of specialist medical services to support the avoidance of admission where possible and provide acute inpatient care when required. Acute medical services provided on campus include Aged Care, Cardiology, Endocrinology and Diabetes Education, Gastroenterology, Cancer and Haematology, Infectious diseases, Neurology, Paediatrics, Renal Medicine and Respiratory Medicine. More specialised care is networked across SESLHD.

Recent capital development will improve access and allow the introduction of new and efficient models of care for acute services, with the staged opening of:

- 60 new acute inpatient beds, including an emergency short stay unit, general medical unit (RADIUS) and expanded ICU
- 44 Emergency spaces (including 3 resuscitation bays).

Diagnostic Services

Diagnostic services provided on site include medical imaging, nuclear medicine, pathology, EEG, EMG, cardiology diagnostics including ECG, Echocardiograms and Exercise Stress Testing, ophthalmology diagnostics, Lung Function Laboratory, Sleep Laboratory services, colposcopy and endoscopy. [xxi]

Diagnostic Imaging

The Sutherland Hospital provides a role delineation Level 5 Radiology and Interventional Radiology service and a Level 5 Nuclear Medicine service.

Demand for diagnostic imaging services is increasing as it plays a critical role in disease prevention, early detection and treatment of patients. Diagnostic imaging has transformed healthcare by reducing the need for exploratory surgery, reduction in unnecessary procedures, shorter lengths of hospital stays by providing faster and more precise diagnosis. In the ED, advanced imaging can improve efficiency by facilitating the triaging of patients.

Medical imaging technologies currently provided at TSH include:

- X-ray x 3
- Ultrasound x 4
- CT x1
- Digital Subtraction Angiography (DSA) suite and screening room (shared) x 1
- OPG
- Mobile Radiography x2
- Mobile II x2 (Fluoroscopy / Intervention).

There is currently no MRI facility at TSH and patients requiring MRI are transferred to St George or private facilities. TSH currently sends 3 patients per day to SGH for MRI scans at a cost (nursing and ambulance) of $520,000 per annum and another estimated cost of $100,000 for private MRI providers. Paediatric patients may also be transferred to SCH. This process delays treatment, contributes to increased length of stay and has higher patient safety risks. There are long waiting lists for publicly funded MRI for outpatients at centres with licenses for outpatient MRI.

xxi It is noted that the on-site Nuclear Medicine and Sleep Laboratory services are currently privately contracted services.

The existing infrastructure (space, equipment and technology) is inadequate to cater for the current and projected growth in demand for medical imaging. The existing equipment and technology is ageing. New equipment and technology is required to meet the increasing demand and support the introduction and expansion of established models of care services such as musculoskeletal imaging, expanded obstetric services, advanced cardiac CT and interventional procedures. The limited angiographic and interventional services results in patients being transferred to the operating theatres or transfer to SGH which requires greater intervention and cost.

The provision of a new SPECT-CT to replace the existing outdated gamma camera in a refurbished space is expected to occur in 2019.

Other Services

Other services provided by TSH&SCHS for timely access to acute care and supported discharge include:

- Level 6 Pathology service, including point of care testing, collection and laboratory service
- Level 5 Pharmacy service, including pharmaceutical review, drug information, medication history, patient education, identification of drug interactions, adverse drug reaction reporting, medication reconciliation, pharmacist interventions and any appropriate alternative recommendations
- Allied health services provide specialist clinics or work as part of a multidisciplinary team
- The Rapid Assessment, Diagnosis and Intervention Unit Sutherland (RADIUS): an 8 chair/bed day only, community-facing unit within The Sutherland Hospital for undifferentiated, complex medical patients, who are not critically unwell, to receive rapid assessment and intervention prior to supported discharge back into the community or admission for further treatment if required. Patients are referred from the Emergency Department, TSH community services and GPs. The Unit currently operates from 0930 to 1800, Monday to Friday to provide care integration with the community and achieve a patient-centred care approach with improved patient care pathways and better co-ordination in order to discharge people home
- Specialist Outpatient clinics are provided to support equitable access to specialist assessment and follow up
- The Sutherland Heart Clinic, a collaborative care service located on campus, provides all Interventional Cardiac services in the Sutherland Shire, and includes 2 Cardiac Catheter Labs and a Pre-hospital Assessment for Primary Angioplasty (PAPA) program, and a 24 hours per day, 7 days per week Emergency Angioplasty Service
- Southcare Outreach Service (SOS) provides a 7 day/week acute and sub-acute clinical service for a maximum of six weeks to avoid representation to ED and integrated care with GP and other care providers to ensure clients can remain safe at home
- Supported discharge is provided with the use of ComPacks and Transitional Aged Care packages and other community services e.g. child and family nursing services
- Southcare community nurses manage very complex clients in the community to avoid the need to stay in hospital or be admitted e.g. patients with cellulitis, pneumonia and complex wounds, including an ambulatory care clinic in conjunction with Infectious Diseases to see clients who require intravenous antibiotics
- The Respiratory Co-ordinated Care program (RCCP) provides home visits to patients with advanced lung disease to assist them to live optimally in their homes, prevent hospital admissions and decrease hospital lengths of stay.

Our vision for the future

Service Solutions

- Outpatients and Ambulatory care:
    - Construct an Outpatient and Ambulatory Care Precinct to provide an enhanced, fit for purpose ambulatory care unit and enhanced outpatient services to reduce the need for admission, provide better assessment and follow up care and better integration of care
- Community Services:
    - Enhance capacity to support discharge and prevent deterioration and readmission
- Hospital avoidance:
    - Continue funding and expand upon the RADIUS model (extended hours and 7-day service) to improve access to urgent review and avoid overnight admission
    - Enhance existing models e.g. SOS, GFS, RCCP
    - Continue support of GP Antenatal shared care, and other specialty areas including diabetes, mental health, disability and hepatitis
    - Strengthen preventative programs with resources, such as smoking cessation
- Whole of hospital flow:
    - Increase capacity and access to aged care and subacute beds to reduce outliers on other acute wards (currently 40+ at any time) to improve availability of existing acute bed base
    - Consider establishment of a general medicine inpatient model for management of people with complex comorbidities
    - Consider more HITH [128] type services to provide treatment at home for people who would otherwise be admitted to an acute hospital ward or to reduce their length of stay in hospital, e.g. for suitable patients with cellulitis, pneumonia, deep vein thrombosis, COPD and urinary tract infections
- Discharge planning:
    - Ensure a co-ordinated approach to discharge, with discharge planning from admission
    - Continue to streamline processes for intake and access to local and district health services on discharge
    - Ensure information is communicated to patients and their families and carers on discharge re: follow up care
- Diagnostic Imaging:
    - Enhanced services will deliver direct benefits to multiple specialties, including ED, CCM, Neurology, Orthopaedics, Cardiology, Gastroenterology, Respiratory Medicine, Surgical services, Paediatrics and Mental Health for earlier diagnosis and treatment and avoid difficult patient transfers. This includes the provision of:
    - MRI on site to allow urgent investigations to expedite diagnosis, improve patient safety, allow shorter length of stay, avoid some admissions and avoid transfers of patients to other facilities
    - A second CT to meet current and future demand, allow the introduction of a thrombolysis service at TSH and allow downtime for maintenance
    - SPECT-CT on site to replace existing aged and outdated Gamma Camera
- Networked services:
    - Ensure referral pathways are in place to provide ease of access for our residents to networked medical services at SGH (Immunology and Allergy, Rheumatology, etc.)

- Pathology:
    - Enhance point of care testing to provide direct access to critical patient results
- Pharmacy:
    - Provide capacity for a weekend service to facilitate weekend discharges and urgent medicines lines
    - Promote discharge planning of Pharmacy requirements, with potential promotion of P.B.S scripts for discharge for some patients (e.g. for after-hours discharge)
- Acute inpatients:
    - Progressively open and staff existing inpatient beds to meet future demand
- Aged Care and Southcare services:
    - Increase capacity of discharge-to-assess models, such as the existing SOS, to provide older people presenting to emergency with assessment and appropriate support to manage their crisis in their own home
    - Increase capacity of community-based follow up care (rehabilitation, case management support, etc.) to promote earlier supported discharge and avoid readmission
    - Increase capacity of aged care wards, including a larger dementia assessment unit with a discrete unit for younger onset dementia patients, to reduce outliers and create a Centre of Excellence for aged care at TSH
- Allied Health:
    - Potential for new clinics/ services to support earlier supported discharge and improved recovery for Stroke, Advanced Recovery Orthopaedics Program (AROP) model, and Occupational Therapy post-acute care to promote return to previous occupational performance roles
- Cancer:
    - Cancer Services has been the subject of an independent governance review that identified a need to consolidate medical oncology services and establish a viable haematology service to provide local area care and treatment for patients
    - Medical oncology aims to improve continuity of care for inpatients and outpatients along with better supervision of JMO and greater access for nursing staff
    - Haematology aims to provide a service which will enable access for the local community to non-malignant and malignant inpatient and outpatient-based haematology services and improve clinical care
    - Establishment of a Melanoma MDT between STG and TSH to discuss patients and cope with the current advances in immune therapy
    - Establish the use of ARIA for chemotherapy in the inpatient ward areas
    - Investigate potential for Chemotherapy at home service
- Cardiology:
    - Establish governance over monitored beds within the cardiology ward to enable full utilisation by cardiology patients and / or patients from other specialties who are approved by cardiology
- Dermatology:
    - Continue to work with SESLHD medicine stream to provide new service at TSH&SCHS
- Drug and Alcohol services:
    - Allocate hospital-based activity funding to drug and alcohol services to support growth in demand for inpatient care, for improved discharge planning and referral for follow up to avoid readmission and reduce length of stay. Since 2015/16 hospital referrals to the Drug and Alcohol Consultation and Liaison CNC have increased by 41%
- Emergency Department:
    - Staged opening of treatment spaces and resus bays to meet expected increased demand, particularly with commencement of thrombolysis service at TSH

- Endocrinology:
    - Improved triaging of outpatient referrals so that acute review patients can be seen more quickly from ED, GP referrals and recent discharges requiring follow up to prevent admission and/or reduce length of stay
    - Early referral to Diabetes educator prior to discharge to support early discharge
- General Medicine:
    - Consider an enhanced general medicine inpatient model to improve access, care and supported discharge for patients who have difficult presentations
    - Explore opportunities for a care co-ordinator/discharge planning role to support general medicine at TSH to meet the increasing demand from patients with multiple complex and chronic conditions, with referral pathways to networked District services as required
    - Enhance the RADIUS general medicine model (days and hours of operation) to improve access to care and admission avoidance
- Neurology:
    - Provision of a 24/7 acute stroke thrombolysis service at TSH, to provide local treatment and avoid the need for transfer to St George Hospital
    - The implementation of a rapid access clinic for TIA and headache for rapid investigations to prevent ED presentation and admission. Could be part of general clinics or separate registrar clinic list with triaged referral from GP, other clinics or ED and decision to admit made by clinic
    - Access to an Ambulatory Care Unit to prevent admission for day only procedures, etc.
- Nursing and Midwifery:
    - Opportunities for increased involvement in clinics to prevent crisis and admission e.g. midwifery led clinics, wound clinic, chronic asthma, increase number of outreach clinics
- Obstetrics and Gynaecology:
    - The development of an outpatient early pregnancy/acute gynaecological service will remove all but the most unwell women from ED and ensure timely access to outpatient obstetrics and gynaecological services
- Ophthalmology:
    - Create a collaborative care service with Centre for Eye Health (CFEH) for glaucoma, similar to diabetic retinopathy collaborative care service now active; to meet significant demand and provide early intervention to prevent blindness
- Paediatrics:
    - Quarantining 4 newly funded beds on paediatric ward for the introduction of a Paediatric SSU (including medical and nursing support) for assessment and management prior to decision to admit or discharge, with a designated pathway from ED and inclusion/exclusion criteria, which will reduce the length of stay of patients in the ED
- Rehabilitation:
    - Consider the multi-disciplinary in reach rehabilitation model ART, to provide earlier rehabilitation to prevent deconditioning and promote earlier discharge home or to the rehabilitation ward
    - Implementation of a multi-disciplinary Day Only service to support earlier discharge and to avoid re-admission for ongoing management of stroke, other neurological conditions, orthopaedics, frailty, etc.

- Respiratory:
    - Explore options for a publicly funded outpatient sleep medicine clinic and laboratory for respiratory failure and other complex patients, in collaboration with paediatrics, to:
    - Help improve management of complex patients and reduce admissions for patients with acute/chronic respiratory failure
    - Improve access for Sutherland Shire residents and avoid lengthy wait lists at SGH
    - Provide teaching and training opportunities for advanced trainee accreditation
    - Access to an Ambulatory Care Centre for day-only procedures e.g. pleural procedures such as pleural drains, pleural tap; infusions; injections of biologicals for new moderate-severe asthma treatments
    - Future consideration of expansion of the Interventional Bronchology Service at TSH
- Surgical services:
    - Increase operating room capacity to enhance access to surgical services, allow streaming of planned and unplanned surgery and reduce delays to treatment
    - Provide increased access to outpatient clinics for assessment and follow up and support registrar led clinics for training requirements.

Infrastructure Solutions

- Establish an Outpatient and Ambulatory Care precinct to enhance access and provide efficiencies in acute and multi-disciplinary management and follow up care, including a base for community services to ensure integrated care and avoid fragmentation of services
- Establish an aged care precinct considering the needs of older people and those with dementia and delirium, with enhanced aged care bed capacity to reduce the number of outliers on other specialist acute wards and improve whole of hospital flow
- Provide a Cardiology precinct with increased floor space to allow greater capacity for integrated and co-ordinated care
- Reconfiguration of existing wards (see Section 5.1.6 for more information) to include:
    - A standalone Neurology ward including 8 bedded acute stroke unit with monitoring, 24/7 acute stroke services, fully equipped neurophysiology department and laboratory, subspecialty interests and dedicated nursing and allied health staff
    - Increase access to inpatient beds for cancer, which include the addition of haematology and palliative care. This will enable the facility to service more cancer inpatients with skilled staff and reduce the potential for outliers
    - Enhancing respiratory beds, including a Close Observation Unit
    - Consideration of dedicated beds for renal, infectious diseases to improve staffing skills and patient care
- Medical Imaging:
    - Provide MRI on site at TSH to reduce delays in diagnosis, treatment and discharge, reduce length of stay, reduce the need to transport patients, enhance patient safety and satisfaction and provide care locally
    - A second CT scanner to manage current and future demand, downtime of existing machine, allow the introduction of the thrombolysis service and to perform cardiac CTs, with dedicated CT scanner time for cardiology
    - Provide Improved Angiography / interventional services to avoid interventions in operating theatre or the risks of transferring unstable patients to SGH
    - Replacement of existing Mobile X-ray machine with a wireless DR System to increase timeliness of films to ED and critical care areas which impact on the ETP targets

- Pathology:
    - Increasing provision for Point of Care Testing access throughout the acute areas of the hospital to provide direct access to critical patient results
    - Remote release Blood Fridge / Smart Fridge maybe also be required to provide direct access to blood products, subject to the distance from theatres to the laboratory
    - Position the laboratory in the acute areas of the hospital to provide direct access, including for massive transfusion and Point of Care Testing support
- Provide space for consultation liaison staff within hospital footprint
- Development of a clinical research unit to support evidence based care.

Workforce Solutions

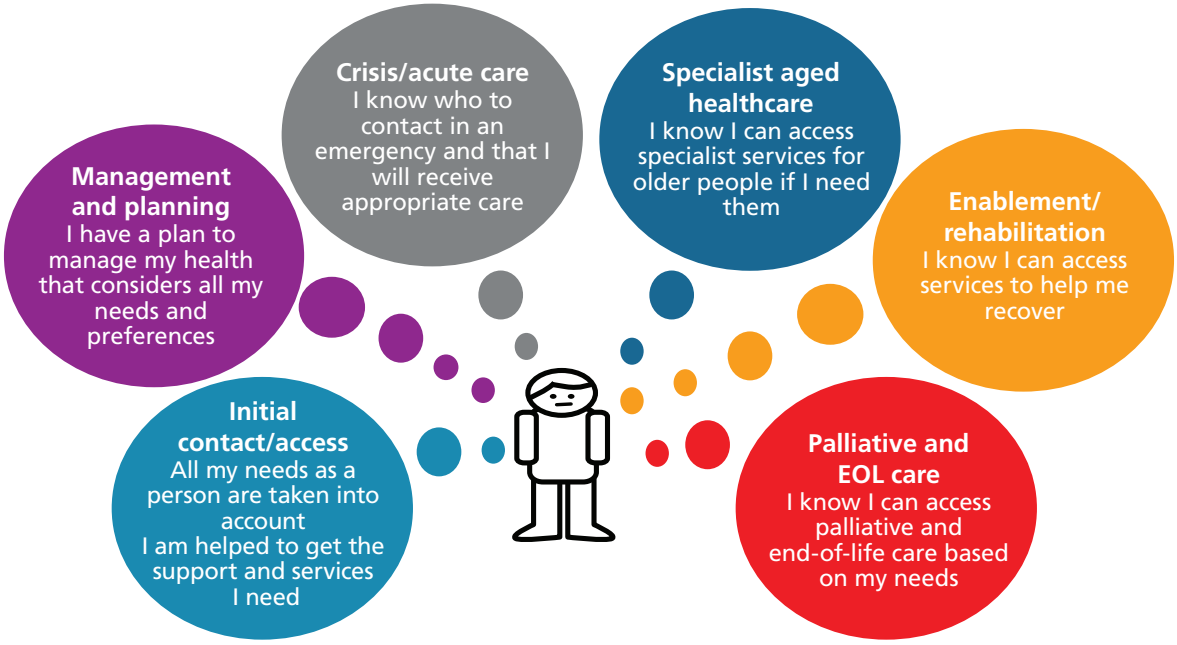
- Additional allied health support to support patient care, discharge planning and length of stay:
    - On inpatient wards, including weekend and after-hours to support earlier discharge
    - For RADIUS model, enhanced allied health support, particularly Physiotherapist
    - Enhanced social work FTE to support both an inpatient and outpatient Cancer Service
    - Dedicated support for Neurology service
    - Enhanced support for Respiratory Service, including RCCP
    - Enhancement of staff aligned with cardiology to improve patient care and discharge planning, e.g. Pharmacy, Physiotherapy, OT for Discharge planning/ ACAT assessment
    - Increase access to and role of allied health assistants, particularly to get patients more active
    - A Consultation Liaison Clinical Psychologist to cover all wards for assessments, brief psychological interventions, psychoeducation, crisis management, promotion of wellbeing and assistance with behaviour change to reduce risk factors, and assist with discharge planning and links to longer term psychological treatment post discharge
    - Podiatry service to inpatients to improve patient outcomes, e.g. for diabetic foot ulcers
- Additional care co-ordination and cancer outreach enhancement focusing on Sutherland residents and enhanced CNC FTE for adequate coverage of different tumour streams
- Pharmacy staff enhancement for a weekend service to facilitate weekend discharges and urgent medicines lines; a permanent pharmacist in the ED to improve prescribing and increase uptake of medication reconciliation; enhanced AMS pharmacy to sustain the increase in ID/AMS demand for clinical pharmacy services; and a Medication Safety Pharmacist to enable preparation for compliance with National Standard 4 accreditation
- Sleep Lab staff specialist and technicians will be required if a public service is developed
- Increase Ophthalmology outpatient clinic staffing (medical, nursing, orthoptist) to allow implementation of all routine services and reduce delays to assessment and treatment including fluorescein angiography, retinal laser procedures, macular degeneration and glaucoma treatment.

4.2.8 Supporting older people with more complex comorbidities, including dementia and frailty

A significant and growing number of older people in the Sutherland Shire are living longer with complex health needs, including dementia, frailty and mental health issues. The complexity of multi-morbidity can result in increased emergency presentations and hospital admissions, creating an unsustainable strain on healthcare services, workforce and budgets, and challenges health systems traditionally geared to the management of acute episodes and single-disease long-term conditions.

For our aged care and rehabilitation services at TSH&SCHS, the average age of patients is increasing, and increasing numbers of frail, older people, often also living with mental health issues or dementia are presenting for care and behaviour management. This cohort of patients require more complex and integrated management and planning, have longer lengths of stay and require co-ordinated community support on discharge.

Components of the older person's health journey



Source: NSW ACI Building Partnerships: A Framework for Integrating Care for Older People with Complex Health Needs [129]

Frailty, Dementia and Delirium

Age related degenerative diseases often manifest in frailty, which can result in serious functional limitations and susceptibility to adverse outcomes. Frailty may present with nonspecific symptoms, such as fatigue, unexplained weight loss and frequent infections; with falls as a result of balance and gait impairment, fear and visual disturbance; delirium (approximately 30% of elderly people admitted to hospital will develop delirium); and fluctuating disability.[130]

Frail elderly patients and those with dementia are more prone to adverse events as inpatients in hospital, and wherever possible, should have their health issues 'managed in place'. Frail people are also more likely to have a longer length of stay. Where dementia occurs, it usually corresponds to the degree of frailty. For older people admitted to hospital, early identification of frailty and intervention to promote enablement and prevent functional decline is thus essential.

Different degrees of frailty require different supportive services and interventions. Proactively identifying and assessing frailty will improve patient risk assessment and allow specifically designed pathways to ensure safe and effective care. Using frailty indexes and outcome measures are important tools for prevention of deterioration of functional capacity.

Delirium, an acute disturbance of attention and cognition, is most common in people with dementia although it can affect any older person in hospital. Delirium can be predictive of physical, functional and cognitive decline, leading to a decline in independence and a need for a higher level of care. It can also result in longer length of stay for the patient. Managing delirium in an acute care setting requires prompt identification and treatment of precipitating factors to prevent deterioration.

To deliver improved outcomes for older people living with complex comorbidities, the whole pathway of care needs to be considered and requires integration and strong partnerships with health and social care agencies. Identifying who is at risk of complexity is a crucial first step.

To provide integrated care for older people with complex health needs, the Kings Fund[131] recommends:

- Health and social care professionals work together in multidisciplinary teams
- Service-level design elements of care for frail older people include holistic care assessments and care planning
- A single point of entry and care co-ordination and/or case management
- Clinicians work with individuals and their carers and family to support understanding and self-management where possible
- Personal contact with a named care co-ordinator and/or case manager is more effective than remote monitoring or telephone-based support.

It should also be noted that a growing cohort of younger onset dementia patients with complex health needs are also accessing our services and have specific needs and management requirements.

Improving health outcomes and reducing healthcare costs for older people living with complex comorbidities requires a collaborative approach including:

> **Care that is anticipatory and predictive in non-admitted settings**

> **Early identification and risk stratification**

> **Coordinated care with primary care and community and social care services**

> **Targeted interventions**

> **Self-management supported by general practice, with urgent access to specialty services should a patient's condition change.**

Our current actions to to help older people to live with more complex comorbidities

The Sutherland Hospital and Sutherland Community Health Services provide a Level 6 role delineation Geriatric Medicine Service, Level 4 Older Person's Mental Health Service and Level 4 Community Health Service. Aged care, acute, community and rehabilitation services are interconnected to provide streamlined care for older people.

The *SESLHD Aged Care Services Plan 2015-2018*[xxii] advocates for a continued shift in the balance of care to community and home settings, with an increase in services that reduce hospital length of stay and keep people well and out of hospital. At TSH this is reflected in reduced lengths of stay and bed days for older people over recent years.

Outpatient and Community Services

Southcare

Southcare is an integrated health care Centre of Excellence offering a range of services predominantly for frail older people and those with disabilities and chronic disease living in the Sutherland Shire. Services are designed to provide care in the community where possible, to decrease ED presentations and hospital admissions, decrease length of stay for acute inpatients through early assessment, supported early discharge and ensure fewer premature admissions to Residential Aged Care Facilities (RACFs).

To support and allow advancement in the integration of hospital and community services, a range of services are co-located in the Southcare building situated on the grounds of TSH&SCHS campus. See Section 1.5.3 for a list of these services.

At TSH&SCHS, the Southcare model is critical to an optimally functional aged care service, with community services driving the model for aged care. This does not underestimate the importance of hospital services however optimal aged care requires improved linkages between different parts of the aged care and other relevant sectors.

Models of care for older people provided from Southcare include:

- Southcare Outreach Service (SOS), a community-based rapid response multidisciplinary nursing, physiotherapy, occupational therapy and social work team for acute and sub-acute interventions for up to six weeks in order to prevent aged care clients from presenting or re-presenting to ED and to integrate client's care through comprehensive care planning and appropriate clinical interventions in the community
- Geriatric Flying Squad (GFS) to Residential Aged Care Facilities to provide geriatric assessment and short-term case management in the community setting
- Aged Care Services Emergency Team (ASET) ensures the most appropriate model of care and care co-ordination is provided for patients over 70 years admitted to the ED
- Sutherland Transitional Aged Care Service (STACS) for short term multi-disciplinary restorative care for older people on discharge from the acute setting
- Heart and Lung team providing home based care for people living with chronic heart failure and pulmonary disease
- The Respiratory Co-ordinated Care program (RCCP) provides home visits to patients with advanced lung disease to assist them to live optimally in their homes, prevent hospital admissions and decrease hospital lengths of stay.

The current Southcare building is ageing, does not meet minimum standards for disabled access, security, communications and fire safety and has insufficient capacity to meet current and future demands from new and expanded models of community-based care, and is no longer fit for purpose.

xxii Note that the SESLHD Aged Care Services Plan is currently being reviewed and an updated Plan will be released in 2019.

Primary and Community Health

The Directorate of Primary, Integrated and Community Health is responsible for the provision of Commonwealth funded community services to adults in the Sutherland Shire. These services include:

- Aged Care Assessment (ACAT), located in Southcare to support integration of services
- Community Packages (ComPacks)
- Sutherland Transitional Aged Care Service (STACS)
- Commonwealth Home Support Program (CHSP) and the Community Care Supports Program (CCSP)
- Dental services, including a Mobile Dental Clinic now providing targeted early interventions to RACF clients in SESLHD.

Aged Care Inpatient Services

- Specialist Aged Care inpatient services at TSH are provided on:
    - Barkala ward
    - 23 acute aged care beds
    - 9 bed Aged Care Assessment Unit (ACAU) for up to 48 hours length of stay, to provide rapid comprehensive assessment and early intervention to facilitate early discharge or reduce inpatient length of stay. Patients who meet admission criteria are accepted directly from the community, thus avoiding ED. Currently approximately 53% of patients are discharged home from ACAU
    - Killara ward
    - 33 acute aged care beds, including Killara Extension, a purpose-built 6 bed Behavioural Management Unit for the management of patients who exhibit behaviours of concern, usually associated with Behavioural and Psychological Symptoms of Dementia (BPSD)
- Older people with neurological problems are managed by the TSH Neurology and Rehabilitation services
- Aged care rehabilitation is provided on the Rehabilitation ward
- Older Adult Mental Health clients are transferred to the SGH specialty unit
- Patients with complex comorbidities requiring dialysis are transferred to SGH as part of a networked service
- Patients are also managed in shared care arrangements e.g. with orthopaedics, with transfer to the Aged Care ward for ongoing management when required
- Other models of care include:
    - Confused Hospitalised Older Person Program (CHOPS) in collaboration with the Clinical Excellence Commission and General Practice NSW, used to improve care and reduce harm for hospitalised older people with dementia and/or delirium
    - Sutherland Hospital Welfare Collaborative Model provides a welfare officer role to assist the residential placement process from hospital through to community setting, to improve patient/family experience of placement, improve partnerships with Residential Aged Care Facilities, and improve efficiencies with residential placement from hospital.

Garrawarra Centre

The Garrawarra Centre is a NSW State funded dementia specific residential aged care facility providing 104 publicly funded residential aged care places for older people with dementia and behavioural issues who require the highest level of care.

Services at the Garrawarra Centre include:

- Multidisciplinary support to maintain activities of daily living
- Diversional therapy programs
- A mobile dental service on site, to avoid the need for transfer for oral health care
- Multisensory Environments in Dementia Care.

Our vision for the future

To meet the increasing demands from a growing and ageing population, a shift in the balance of care from inpatient to community facing activity is required in order to organise care delivery around the patient need, to keep older people out of the ED and care for them in the safety and comfort of their home and community where possible. Allowing for this shift, projected activity also indicates the need for a significant increase in aged care beds at TSH to meet future demand.

Service Solutions

Provide a Centre of Excellence for Aged Care. This will require an increase in services that are integrated across the care continuum, including:

- Enhancement of Southcare services to increase the availability and capacity of alternatives to hospital care in order to reduce potentially preventable hospitalisations, provide better care for people at home and avoid ED presentation and admission. This may include:
    - Expanded responsive outreach services to older people in the community and RACFs for more appropriate pre-emptive management and to avoid hospitalisation, e.g. GFS, ASET and SOS
    - Expansion of community nursing and allied health services including new models of care and integration with existing programs, e.g. GFS, RCCP
    - Expansion of GFS to include community-based clients who require rapid support at home
    - Consider in-home and increase community-based strength and balance programmes for falls prevention and maintained strength, mobility and function
    - Investigate potential for prehabilitation model for aged care elective surgery candidates
    - Provide a case management and Allied Health functional assessment service, primarily to assist people under 65 to successfully apply for the NDIS. Those with cognitive impairment are most vulnerable and need assistance to navigate the system
    - With increasing referrals for drug and alcohol services for the aged, consider clinical pathways to Southcare (would require funding)
- Continue and expand the capabilities of the ambulatory care unit as a proven admission avoidance model, with a multidisciplinary approach
- Advocate for increased provision of Commonwealth funded ACAT, STACS, CHSP and ComPacks to avoid long waiting lists for high care packages
- In hospital, continue and increase capacity for services that improve care for older people:
    - Expand specialist aged care inpatient capacity to meet future demand, including for acute assessment, dementia behaviour management for older people and for younger onset dementia patients
    - Ensure continued screening and management of delirium, appropriately resourced, to prevent or reduce delirium and its complications and reduce length of stay
    - Introduce standardised frailty screening and assessment tools and pathways across all healthcare settings for: early identification of frailty risk; to facilitate timely referrals; guide intervention strategies and care plans; and provide measurement of patient related outcomes; in order to decrease frailty-related admissions, reduce length of stay, and improve function and independence
    - Expand geriatric surgical liaison services to incorporate a broader range of surgical specialties, i.e. increased shared care arrangements with other services such as general surgery, urology, vascular, cardiac and respiratory, to promote earlier discharge or ward transfer and patient centred care

- Consider developing a model for acute management in ED for preventable hospitalisation of the elderly post some fractures e.g. humerus or pubic rami, who could be discharged with rapidly accessed allied health home support, e.g. via RADIUS and SOS
- Ensure appropriate end of life care planning and support and adherence to advanced care plans, and the implementation of advance care planning for appropriate inpatients prior to discharge from hospital
- Develop pathways for long-term and complex health conditions in collaboration with primary care with the HealthPathways model, to provide condition specific information on assessment, management and local referral options for primary health clinicians
- Ensure good communication between hospitals and primary care to avoid re-admission and emergency presentations

- Potential new clinics/ services:
  - Consider expansion of nurse and allied health led clinics and of multi-disciplinary clinics, e.g. nurse led chronic kidney disease/hypertension clinic
  - Implementation of a multi-disciplinary Day Only Rehabilitation service post discharge to support earlier discharge and to avoid re-admission for ongoing management of stroke, other neurological conditions, orthopaedics, frailty, etc.
  - Increased access to medical clinics to reduce waiting list and prevent deterioration
- There is potential for Garrawarra to become a centre of excellence in dementia care. Potential new services include:
  - Palliative care and bereavement and counselling services for Garrawarra residents and their family members
  - General Practitioner on Staff (as per some larger private RACFs) to prevent delays in medical review and unnecessary transfers to acute settings
  - Access to local medical imaging
- Established links with and referrals to local private hospitals will continue where appropriate for acute and subacute aged care services.

Infrastructure Solutions

- Provide a purpose-built Southcare facility within a new Outpatient and Ambulatory Care Precinct that meets the growing needs of the aged community, to enable the delivery of care in the 'right place, at the right time'. It is noted that Southcare services should remain co-located to avoid fragmentation and loss of integration. This would include co-located clinic and treatment area (nursing and allied health) space, offices and a base for community services, with ease of access and sufficient space for community service vehicles (cars and buses)
- Provide a purpose-built aged care inpatient precinct considering the needs of older people and those with dementia and delirium, with:
  - An expanded bed base to ensure aged care patients are managed in the appropriate ward and to improve whole of hospital flow
  - A larger acute behavioural unit to cater for younger onset dementia patients and meet increasing demand, potentially in two separate units within the aged care precinct
  - Consider the relocation of ACAU to be adjacent to ED to ensure the right patient is in the right place and for improved flows

- Provide a purpose-built outpatient rehabilitation precinct to manage patients locally and potentially reduce length of stay and readmissions
- Provide MRI and enhance medical imaging on site to avoid transfer of patients to SGH
- Consider refurbishment/redesign of the Garrawarra Centre to create:
    - A purpose-built facility to provide appropriate accommodation for existing resident numbers and capacity to meet future demand, to potentially create a dementia "village" with recognisable community spaces and enhanced sensory gardens (see Consultation Report for more detail)
    - Investigate the provision of a purpose-built facility to allow capacity for younger onset dementia and forensic patients who currently have limited options for care
- Infrastructure solutions for consideration are further documented in Section 5.

Workforce Solutions

- Review of medical, nursing and allied health staffing to increase capacity for community-based services and outpatient clinics (including multi-disciplinary clinic staff) to prevent deterioration, emergency presentation or hospital admission
- Consider the provision of a Clinical Psychologist in Southcare to provide assessments and interventions for older adults in the community in order to improve quality of life and reduce health burden on other services
- Enhancement of Garrawarra Centre staff commensurate with increased resident numbers, with the addition of allied health therapists in the fields of dietetics, speech pathology and podiatry; and enhanced security staff
- Enhancement of specialised staff education and rotation of staff between TSH and Garrawarra Centre.

4.2.9 Promoting rehabilitation and reablement

Prehabilitation, rehabilitation and reablement are restorative services on a continuum of care that promote and/or restore an individual's functional ability. Individual goals may include mobility, self-care and activities of daily living.

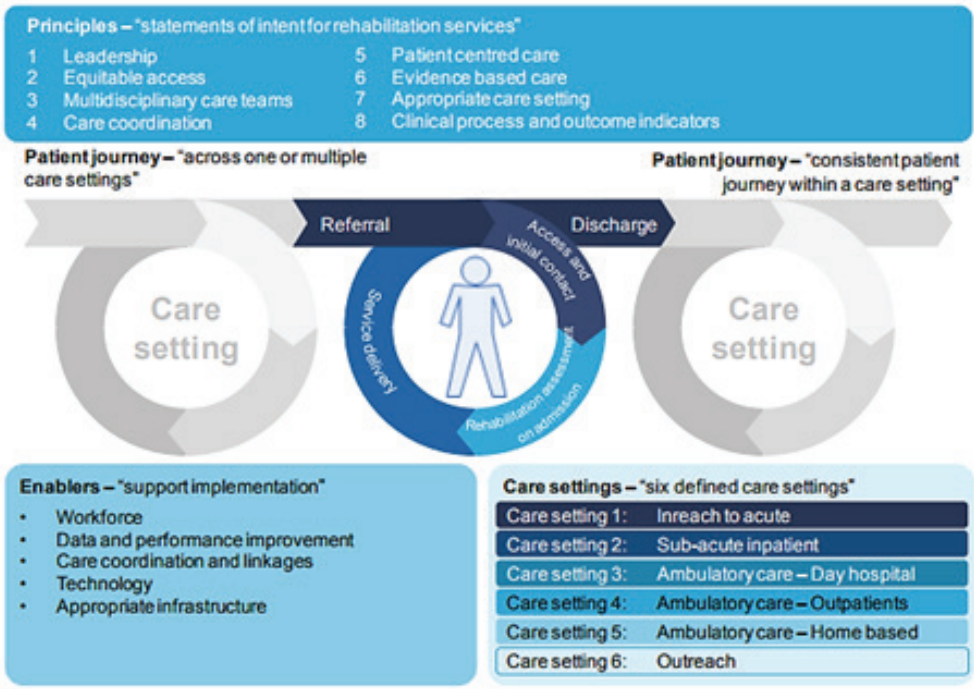
Building on people's strengths, capacity and goals, with the active involvement of carers and families, are important factors in any reablement approach to help people to remain independent in their daily living tasks, to live safely at home and to continue to participate and remain engaged in their local communities. Restorative approaches and programmes are used to:

- Halt any decline in function, with:
    - Prehabilitation models to prevent physical functional decline in those at risk, for example for those identified at risk of falling, or pre-operatively to those identified at risk of post- operative decline, particularly older people living with complex long-term health conditions
    - In reach models to prevent deconditioning and reduce length of stay
- Regain and/or maintain their physical and cognitive function and independence after an illness, disability or crisis, to reduce delays to discharge and to reduce their reliance on support services and higher care needs
- Continue support as an outpatient or in the community to continue to help people improve their function, independence and quality of life.

Older people are the largest users of rehabilitation services, particularly for restoration of function after an acute hospitalisation. This patient population tends to take longer to recover and often requires continuity of care and follow-up in the community to avoid further decline. Programs such as STACS currently support this pathway, however there is currently no outpatient rehabilitation service available at TSH for ongoing care or prehabilitation capacity; nor is an in-reach service available.

There is a growing body of evidence on the effectiveness of these approaches in assisting older people to improve their ability to function and reduce their need for ongoing services and prevent readmission, with associated cost savings.

The *NSW Rehabilitation Model of Care*[132] and the *ACI Rehabilitation Implementation Toolkit*[133] describes six ideal care settings in which rehabilitation services are delivered: in-reach to acute care, inpatient subacute, day hospital, outpatients, home based and outreach rehabilitation. An overview of the NSW Rehabilitation model of care from the Toolkit is provided below.



AT TSH&SCHS, the average age of rehabilitation patients is 84 years, with most having an impairment of functional ability due to illness or injury, including fracture, stroke and other neurological conditions, amputation, frailty, deconditioning and general debility following prolonged illness or associated with comorbid conditions such as degenerative neurological or musculoskeletal disease, vascular disease, diabetes, renal failure, etc.

The clinical acuity and complexity of patients has also increased, due to people living longer with multiple comorbidities and long-term disabilities that require ongoing management, and people delaying residential aged care placement and being cared for longer at home, with more frequent admissions and longer lengths of stay required to prepare them for and maintain them at home.

Demand for rehabilitation services in the future will also be driven by:

- The introduction of a Thrombolysis service at TSH, which will change the ambulance matrix to bring potential stroke patients from the Sutherland Shire to TSH ED rather than St George ED. This will have an impact on ED, Stroke Unit and rehabilitation services and create an increased demand for day hospital and outpatient services
- Declining rates of private insurance, which means some activity will return to the public system, particularly for orthopaedic rehabilitation
- Sutherland Transitional Aged Care Service (STACS) are no longer able to accept people aged under 65 for home based rehabilitation, due to Commonwealth funding guidelines
- There is also increasing demand for longer term support options to maintain frail patients at home to avoid readmission. The current transitional care services are not suitable or available for all patients.

Our current actions for rehabilitation and reablement

The Sutherland Hospital provides a role delineation Level 4 rehabilitation service. Rehabilitation at TSH is a 7 day per week ward based and consultative service that provides multidisciplinary rehabilitation support to people aged 16 years and older assessed as suitable for rehabilitation. The primary treatment goal is to improve the functional status of patients who have suffered significant illness or injury and who have the capacity to make decisions about things that affect their daily life.

Rehabilitation services include:

- 21 bed inpatient ward, Killara, with an adjacent rehabilitation gymnasium shared with Cardiac and Pulmonary rehabilitation groups
- Outpatient clinics:
    - Medical specialist clinic, held in outpatients
    - Allied health – OT and Speech Pathology clinics, held in Allied health treatment rooms
    - Amputee Clinic, held in Southcare building
- Southcare (not managed by Rehabilitation Services) provides:
    - Short term community rehabilitation services for people aged 65 and over who are housebound or frail aged, with goals that can be addressed within 4-6 visits; for falls assessment; and post joint replacement (excludes neurology patients and people requiring x 2 assistance)
    - STACS for people 65 and over discharged from hospital for ongoing multidisciplinary slow stream therapy up to 3 months, including post stroke management
    - Staff includes a multidisciplinary team of rehabilitation Specialists and registrars, specialist rehabilitation nursing and access to allied health staff including physiotherapists, occupational therapists, speech pathologists, allied health assistants, social workers, and psychologists.

Clinical networking occurs with:

- SGH for acute management of all potential stroke patients taken by ambulance from the Sutherland Shire, with inpatient and day hospital follow up at Rose Cottage if required for ongoing rehabilitation. Rose Cottage also accepts referrals for patients discharged from TSH
- Inpatient rehabilitation at Calvary Health Care Kogarah for medically stable privately insured residents and Motor Neurone Disease and Parkinson's Disease clinics
- Patients with private insurance may also be transferred to other private hospitals.

Currently at TSH&SCHS:

- Inpatient beds are at capacity, with 3-4 people waiting for a rehabilitation bed at any time, despite changing models of care for joint replacement rehabilitation and significant reductions in length of stay
- There is no rehabilitation in-reach service
- There is no dedicated multidisciplinary outpatient or Day Hospital rehabilitation service
- The gymnasium space, which is currently shared with cardiac and respiratory rehabilitation, has no space for multidisciplinary outpatients, and is too small to meet future demand
- Access to community services for rehabilitation is limited to patients who are housebound and frail aged, with goals that can be addressed within 4-6 visits or to short term transitional aged care services from STACS post discharge
- Limited Outpatients services are provided at a variety of locations (Outpatients, Allied Health, Southcare), with many gaps in available services and limited ability for multidisciplinary clinics, and lengthy waitlists for medical appointments
- The Southcare building does not meet building requirements for disabled access, and is therefore not suitable for future provision of clinics, aged care and/or rehabilitation services.

Our vision for the future

Service Solutions

- Implementation of the ACI recommended in-reach acute rehabilitation team (ART), to target cardiac and respiratory and oncology patients to prevent deconditioning and avoid the need for transfer to the Rehabilitation ward and/or reduce length of stay
- Implementation of a multi-disciplinary Day Only Rehabilitation service to support ongoing management of stroke, other neurological conditions, orthopaedics, frailty, etc. This is a well-established model, recommended by the ACI to meet increasing demand, reduce waiting lists and reduce costs for expensive inpatient rehabilitation by:
    - Reducing length of stay for suitable inpatients by allowing an earlier discharge and improve throughput on ward
    - Reducing wait for rehab beds to improve whole of hospital flow
    - Providing enhanced services to meet the current gap in follow up care for rehabilitation patients who are not suitable for community-based services, for example stroke patients who have no access to publicly funded outpatient care in the Sutherland Shire
    - Reducing the inequity of access for Sutherland Shire residents to local outpatient rehabilitation services, particularly for those who cannot access services at SGH
    - Bringing together rehabilitation clinics currently located in allied health and Southcare to support multidisciplinary interventions and integrated, patient centred care
    - Providing local access to rehabilitation for those people under 65 who are not eligible to be seen by STACS and who otherwise will need to be referred to SGH's Rose Cottage
    - Improving links with Southcare rehabilitation services to provide integrated community-based rehabilitation services
    - Providing access to prehabilitation to prevent frailty or post-op deconditioning
    - Reducing the waiting list for St George Outpatient rehabilitation services
- Allowing the introduction of new clinics:
    - To meet gaps in services e.g. Constrained Induced Movement Therapy (upper limb therapy post stroke), Parkinson's Disease groups, Stroke and stroke-like illness, Cognitive rehabilitation
    - Introduction of a Specialist Spasticity management clinic (currently held at SGH), including admin, procedure area for sedation, occupational therapy support, and co-ordination of ordering and managing toxin stock and refrigerator
    - Providing further access to falls prevention programs, particularly for frail aged who are not suitable for Stepping On program
- Developing community carer support and education programs to assist families in maintaining patients at home.

Infrastructure Solutions

- Development of a Rehabilitation Precinct with co-located inpatient and multi-disciplinary Day Only services to provide a one stop shop for rehabilitation services (see section 5.1.3).
- Increase the inpatient rehabilitation bed base to meet future demand from the growing aging population with complex health issues, improve post-operative patient outcomes, decrease length of stay on acute wards and improve whole of hospital flow
- Consider access to a hydrotherapy pool for patients receiving rehabilitation
- Consider the co-location of cardiac rehabilitation in an expanded Cardiac precinct.

Workforce Solutions

- ART: Allied health staffing– 7 day a week cover, including physiotherapy, occupational therapy and social work each day
- Day Only Rehabilitation and rehabilitation community service – 5 day a week cover, including physiotherapy, occupational therapy, speech pathology, therapy aides, social work, psychology and admin support officer
- Inpatient medical, nursing and allied health staffing commensurate with increased bed base.

4.2.10 Planning for palliative care and end of life support

End-of-life care planning, including advanced care planning and palliative care are critical aspects of care to be considered for most medical specialties at TSH&SCHS. Greater choice is now expected in how a patient is cared for at end of life, including to die in places of preference. Early involvement in end-of-life care planning can increase the likelihood of someone being able to die at home.[134]

Advanced care planning includes case identification, needs assessment, discussion and documenting the parameters of end of life care in terms of what is possible or recommended from a clinical point of view, along with what is explicitly desired or unacceptable from an individual. An Advanced Care Plan (ACP) can be particularly helpful for people who:

- Have multiple or complex medical problems
- Are regularly admitted to hospital
- Suffer from a long-term disease affecting major organs such as kidneys, lungs or heart
- Suffer from a serious or life-limiting illness such as cancer
- Have had a not-for-resuscitation or other limitation of treatment order made in hospital
- Have previously suffered a critical event requiring resuscitation
- Are elderly or frail and receiving supportive care services
- Have a diagnosis of early memory problems or dementia
- Are relatively healthy but keen to plan for future healthcare.

The objective of palliative care is to improve the quality of life of patients and families who face life threatening illness, including long-term conditions, through the prevention and relief of suffering of pain and other physical, psychosocial and spiritual problems. NSW Health[135] also recommends that Palliative care:

- Affirms life and regards dying as a normal process
- Intends neither to hasten or postpone death
- Integrates the psychological and spiritual aspects of patient care
- Offers a support system to help patients live as actively as possible until death
- Offers a support system to help the family cope during the patient's illness and in their own bereavement
- Uses a team approach to address the needs of patients and their families, including bereavement counselling, if indicated
- Will enhance the quality of life, and may also positively influence the course of illness
- Is applicable early in the course of illness, in conjunction with other therapies that are intended to prolong life, such as chemotherapy or radiation therapy, and includes those investigations needed to better understand and manage distressing clinical complications.

Integration of specialist palliative care with primary and multidisciplinary community care services is essential to enable a supported pathway for patients and families, with transitions across settings, including residential aged care settings. This requires good communication between primary and secondary care and with the voluntary sector.

It is recognised that there are some groups in the community who have special needs in relation to palliative and end of life care. These include people with dementia, children and adolescents, Aboriginal people and those from different cultural and linguistic backgrounds.

The NSW Agency for Clinical Innovation *Framework for the Statewide Model for Palliative and End of Life Care Service Provision* [136] aims to ensure that all NSW residents have access to quality care based on assessed need as they approach and reach their end of life, in a range of clinical, community and home settings. In its *Blueprint for Improvement* [137] it highlights the essential components that should be present in any service committed to the delivery of high quality, patient and family focused care for those who are approaching the end of life, as outlined below.

Although most people say they would like to stay at home, the desire for home death is complex and often changes over time, particularly related to caregiver stress and exhaustion. Improved care co-ordination and access to primary and community-based services and support can help more people achieve their goal, or reduce their length of stay in hospital.

NSW Health acknowledges that of all the people in NSW who die of conditions where death is predictable, only about 10% receive specialist palliative care services in their last year of life. There is thus a great imperative to address this gap in the healthcare journey. This includes more home care packages available from NSW Health to support people in their last days at home and avoid the need for admission, and funding of different models to support the delivery of palliative care in the community that would allow more timely access and increased hours of service.

Our current actions to provide end of life care and support

The *SESLHD Plan for Comprehensive Care at End of Life*,[138] which aligns with the priorities of the *National Safety and Quality Health Service Standards for End of Life Care,*[139] aims to enable SESLHD facilities to provide and demonstrate high quality end of life care to patients through ensuring:

- Early recognition that a person may be approaching or reaching the end of life
- Care provided is based on the carefully assessed needs of the patient, carer and family
- Seamless transitions occur across all care settings
- Appropriate access to specialist palliative care is provided when the patient/family and carer needs are complex
- Quality care is provided during the last days of life
- Support is given to people through loss and grief.

The development of a Terminal Care Plan (TCP) alerts clinical staff not only to physical problems, but also to the emotional, social and spiritual needs of dying patients and those close to them. It also aims to ensure that unnecessary and possibly harmful tests and treatments are at least reconsidered, if not stopped.

Palliative care is a resource required by many departments at TSH to improve the quality of end-of-life care and enable transfers to other settings of care (RACF, home or CHCK). Not all patients type changed to Palliative Care at TSH are managed by the Palliative Care service, and there is a significant cohort of patients whose uncomplicated end of life care is managed by their treating specialist. Currently many of these patients are being managed on acute wards, which does not provide an ideal environment for end of life care and hampers whole of hospital flow.

There are no designated palliative care beds or step-down beds available at TSH.

The Sutherland Hospital Palliative Care Services

Calvary Health Care Kogarah (CHCK) provides a networked Level 6 Palliative Care Service to TSH and SGH for patients with a life threatening illness from both cancer and non-cancer diagnoses, when relief from symptoms or pain management may be required. The aim of the service is to help patients to achieve their goals and improve their quality of life. Palliative care support at home is provided by the Calvary Community Palliative Care team (CPCT).

The palliative care service at TSH provided by CHCK includes:

- Consultative medical and nursing inpatient services
- Referral to dedicated inpatient specialist palliative care beds at CHCK when required
- Referral to the CPCT for home based palliative care
- Nurse practitioners (provided from CHCK) to support end of life management in RACFs
- "End of life Care packages", funded by NSW Health until 2020, providing short term care for patients wishing to die at home, provided by personal assistants (who cannot administer medications)
- Home care support is provided in collaboration with Hammond Care and St Vincent's Health Service

Recent funding has been received from the NSW Ministry of Health for LHD wide positions until July 2021 to provide support for patients and their families with: a social worker or Psychologist position (1.0 FTE) to provide bereavement support, psychosocial and connected care in the end of life and palliative care period; and an Aboriginal Health Worker position (0.5 FTE) to improve access to palliative care services for Aboriginal communities in SESLHD.

Models of care to reduce the need for an acute admission or ED presentation to TSH include:

- Ambulance Palliative Care plans, made prior to inpatient discharge, where RACF or community dwelling patients under palliative care are transferred directly to CHCK, bypassing ED; or contact with CPCT is made to manage the patient at home to prevent admission
- End of Life Plans to prevent acute activity
- Direct admission to CHCK by the CPCT to avoid acute TSH admission
- In reach to RACFs in southern SESLHD to support RACF staff capacity building in palliative care, to provide care in place and avoid transfer, with specialist palliative care support when required, integrated with the Geriatric Flying Squad model.

Services provided at CHCK available to Sutherland Shire residents include:

- 32 inpatient beds (which can be flexed up to meet demand)
- Motor Neurone Disease Service with care provided from Palliative Care and Rehabilitation, with own social worker and CNC, and medical support
- Ambulatory care allied health services
- Multi-disciplinary CPCT, including in reach to RACFs
- Ambulatory palliative care services are provided 5 days per week on site in the Palliative Care gymnasium, including for patients with Motor Neurone Disease, to maintain functional capacity and improve quality of life for those receiving palliative care, with daily group exercise sessions in the gym and hydrotherapy pool.

Referrals are triaged according to need. The majority of patients seen by the service are oncology patients, patients with chronic diseases including respiratory, cardiac, renal, diabetes, dementia, and those with neurodegenerative disorders. Complex non-malignant patients reaching end of life are assessed by the Palliative Care service, and referred at discharge to the Community Palliative Care team for ongoing support to help keep people at home for as long as possible and avoid acute and subacute admission; otherwise, to the care of the treating specialist team e.g. Respiratory or Heart Failure services, and/or GP, often in RACFs – where follow up and referral at the appropriate time is difficult to achieve.

Community-based palliative care activity is increasing with current services at capacity. In the previous 6 years the number of referrals from TSH have ranged from 120-166 referrals per year or on average 12 referrals per month. SGH (34%) have the highest proportion of referrals followed by TSH (14%), with other referrals coming from GPs, other hospitals, other specialists, etc.

Our vision for the future

Enhancing palliative care services for residents of the Sutherland Shire has been identified as a service priority for TSH&SCHS. This includes continuing the networked relationship with CHCK for the delivery of community palliative care services via the CPCT, for inpatient consultation liaison services and for referral to CHCK for specialist palliative care.

Service Solutions

- In the community:
    - Enhanced Nurse Practitioner led palliative care in reach service to the community and RACFs with a review of the model of care to identify the most appropriate makeup of the team, to avoid ED presentations and better manage residents in situ, and meet the rising demand from patients wishing to be cared for at home for as long as possible. This needs to be a 24 hour a day, 7 day a week service
    - Upskilling of RACF staff via in-reach CPCT
    - Continue capacity building of Southcare staff in GFS, etc.
    - Foster the capacity building of interested local GPs and practice nurses, e.g. as part of health care homes model or model used in Northern Sydney
    - Investigate opportunities to partner with the CESPHN
- In outpatients:
    - Re-establish a palliative care outpatient service at TSH
    - Investigate potential for shared care clinics at TSH with palliative care and other specialties, e.g. respiratory, cardiology, renal
    - Investigate opportunities for community-based clinics, such as satellite services run by nurse practitioners, potentially in existing community health centres in the Sutherland Shire at Engadine and Menai
    - Enhance palliative care rehabilitation ambulatory services based at CHCK to improve quality of life and maintain functional independence for as long as possible
- For inpatients:
    - Enhance pathways for direct admission to CHCK to avoid ED presentations and unnecessary acute admissions with:
    - Pathways for known patients from ED
    - Increased use of Ambulance Palliative Care Plans
    - Increased implementation of advanced care planning
    - GP referral for lower acuity patients
    - Engagement with medical specialty teams (e.g. aged care, renal, respiratory, cardiology) to develop subacute pathways to admission to CHCK and earlier identification of palliative care needs
- Build capacity of TSH staff to:
    - Plan with patients and families where the prognosis is likely death within 12 months
    - Transition to end of life care and referral to palliative care services for specialist care.

Infrastructure Solutions

- Provide access to dedicated palliative care or step-down beds at TSH for patients at end of life not requiring transfer to CHCK for specialist care or too unwell for transfer (See section 5.1.5 for further information on infrastructure requirements)
- Investigate opportunities to expand subacute bed base at CHCK
- Provide a place for grieving that is private and accessible from the main atrium.

Workforce Solutions

- Increased staffing for community and ambulatory models (nursing, allied health, counselling and social work) to reduce length of stay, prevent/delay readmission and improve quality of life
- Provision of enhanced senior medical officer and nursing in palliative care including Career Medical Officer to support TSH inpatients, clinics and community-based services in the Sutherland Shire
- Investigate opportunities for rotations from oncology or GP registrars to palliative care
- Increased access/links to Liaison Psychology and Psychiatry support at TSH
- Investigate potential outsourcing of home care services for overnight nursing care.

4.3 Workforce wellbeing and enablement

GOAL

We will create an environment where our people will be accountable and can be happy, well and supported to reach their potential.

SESLHD objectives for workforce wellbeing include:

- **Staff will be engaged with our vision "Exceptional care, healthier lives"**
- **We will improve the physical and mental health of our workforce**
- **SESLHD will be a learning organisation, with a continuing cycle of improvement**
- **Staff will have the capacity and capability they need to do their job well**
- **Grow adaptive and accountable leaders**
- **Foster strong clinical engagement.**

To make hospitals a better workplace and improve patient care, safe work and working conditions for staff is an imperative to ensure that overwork, a stressful work environment and the threat of workplace violence or poor safety conditions do not result in poor worker health and wellbeing.

The Australian Government Department of Health's *Healthy Worker Initiative* [140] outlines the benefits of a healthy workplace, including:

- For employers:
  - Improved work performance and productivity
  - Reduced absenteeism and sick leave
  - Decreased incidence of attending work when sick
  - Decreased frequency and cost of workers' compensation
  - Improved staff morale, satisfaction and motivation
  - Improved corporate image and attraction/retention of employees
  - Increased return on training and development investment
  - Improved employee engagement and employee relationships
- For employees:
  - Increase in health awareness and knowledge
  - Increase in physical health and mental wellbeing
  - Improved morale, job satisfaction and motivation
  - Improved opportunities for a healthier lifestyle
  - Greater capacity to enjoy life both in and outside the workplace.

4.3.1 Focusing on workforce wellbeing

Supporting our workforce – the people attracted to working in health out of a desire to help others and a passion for caring, will help to improve quality, safety and effectiveness of care. Cultivating 'joy at work' will enable our people to truly thrive, not just persevere.[xxiii]

According to the Black Dog Institute,[141] practical strategies to increase workplace wellbeing, particularly for mental health, one of the major causes of workforce absenteeism, include:

- Increasing employee control through implementation of multi-level working committees and greater employee input into work hours and location
- Consider workplace health promotion strategies that include both physical activity incentives and mental health awareness and education. Programs that involve cognitive behavior therapy and relaxation training have also been shown to be effective
- Implement resilience training for high risk occupations such as those exposed to significant levels of trauma or stress
- In-house workplace counselling
- Provision of formal return to work programs
- Provision of peer support schemes or other ways to ensure staff can seek help early if needed.

Our current actions to focus on workforce wellbeing

- TSH&SCHS is currently promoting a positive workforce culture (underpinned by the Code of Conduct) focusing on high performance and safety
- Rewarding and investing in high performing staff to encourage people to continue to innovate and improve morale (Bright Spots program, Inspiring Ideas Challenge)
- Introduction of the 'The Heart of Caring', a framework to support the wellbeing of our nurses so that they can deliver compassionate, high quality care
- Regular Staff Forums to keep staff engaged and aware
- People Matter Employees Survey, which provides an opportunity for staff to have their say about work practices, experiences and workplace culture. The results of the survey directly lead to local initiatives and improvements to better support our staff
- Health, Safety and Wellbeing unit includes preventing workplace injuries, compliance and continuous improvement for work, health and safety (WHS), ensuring the safe return to work of injured workers, and supporting and enhancing the wellbeing of staff
- Staff vaccination programs
- Performance reviews
- Weekly mindfulness meditation sessions
- Development of a Safe Walking track on TSH&SCHS campus.

xxiii Cultivating joy at work is a category in the SESLHD Inspiring Ideas Challenge (TIIC) program and is recognised as an important step to workforce wellbeing by SESLHD. See URL: http://seslhnweb/Journey_to_Excellence/TIIC/

Our vision for the future

Service Solutions

- Support a wellbeing culture for staff, e.g. allow attendance at wellbeing sessions, walking groups, etc.
- Promote Employee Assistance programs, converge classes for health and wellbeing, retirement issues, change management, etc.
- Increase access to health checks for staff, e.g. get Healthy at Work; screening services e.g. for melanoma
- Making heathy food on site more available for staff e.g. fruit boxes for staff on wards
- Look at future funding opportunities for staff wellbeing programs, e.g. from State Super.

Infrastructure Solutions

- Provide a meeting space for private/confidential meetings for staff
- Ensure a welcoming environment for all staff
- Provision of a 'quiet room" for privacy in the support of distressed staff, counselling, privacy, debriefing, etc. away from wards
- Consider space in any new build for storage of technology e.g. of Workstations on Wheels, to avoid WHS concerns
- Increase capacity/ refurbish Junior Medical Officer (JMO) quarters in alignment with guidelines to improve staff amenities, comfort and wellbeing and provide an increased number of rooms to cater for locums / on call staff
- Consider the development of a community garden for staff wellbeing
- Provide more bike racks and easily accessible showers for staff.

4.3.2 Enabling a skilled and adaptable workforce

A skilled and adaptable health workforce is crucial to delivering high quality healthcare and meeting the challenges for health and social care and workforce health and wellbeing into the future.

To address population health needs and a sustainable health economy, future work practice and models of health care will need to have greater emphasis on primary and preventative health care and addressing the inequities of health outcomes. [142]

New workforce roles may emerge, and interventions to improve care for complex patients may require a realignment of clinical and professional roles.

Specialised staff will still be essential to provide high quality, high technology care when such specialised intervention is required, however patients with multiple conditions may need clinicians with broader based skills who can provide more generalist care.

Key health staff in the future will include nurse practitioners and advanced scope of practice allied health practitioners and community health/home-based providers, particularly for lower-risk patients. A shortage of these key staff may limit the implementation of new models of care to meet demand.

Workforce redesign will help ensure the most efficient distribution of services, removal of duplication of services and better value. Engaging staff and consumers in change management will empower staff to ensure that patients receive the right care, in the right place, at the right time. This may include more flexible use of current staff, greater use of non-medical staff and new digital technologies.[143] New structures and career pathways will be required to retain and develop the future health workforce.

High-performing health care organizations know that world-class patient care, innovation, and general success rely on a foundation of highly engaged staff. Boosting engagement and leadership accountability can transform workplace culture.

Institute of Healthcare Improvement: A Multi-Strategy Approach to Rebuilding Workforce Engagement. May 2018

This may result in:

- A change of setting for the delivery of health services from the traditional hospital-based model
- Making use of our workforce in a way that makes best uses of their skills, allows further changes in roles, and provides sustainable services
- Working in multidisciplinary and multi-organisational settings to deliver person centred care
- Growing an effective, skilled workforce with both generalist and specialist skills to allow transformation of care into the future
- Partnering with staff from non-medical backgrounds to meet people's social needs.

It is also necessary to consider the complementary non-clinical workforce and the enabling infrastructure and systems necessary to support the clinical workforce of the future. This includes managers, administrative staff, human relations, project support, business intelligence, finance, analytics, food services, cleaning, engineering, porters etc. that support the delivery of patient care.

Our current actions to enable a skilled and adaptable workforce

- Identifying and nurturing current and future leaders through offering a range of leadership programs, such as the LIFT Emerging Leadership program and the Clinical and Executive Leadership Programs
- Offering mentoring and professional development opportunities for high-potential staff
- Providing opportunities for nurse and allied health advanced scope of practice, e.g. in ED
- Fostering and supporting innovation, e.g. through the Improvement and Innovation Hub (iiHub) programs and support
- Providing ongoing access to staff education, including on site, via HETI and externally
- Building competence of managers to support staff and promote improvements and prevent risks
- Support for programs covering Aboriginal employment and peer support mentoring, employment of persons with disabilities and refugees
- Ensuring a skilled workforce by compliance with:
    - Mandatory training and competency, in partnership with Organisational Development and Learning (ODL)
    - Registration and credentialing
    - Performance development and review cycle to clarify expectations of roles, address gaps and identify development roles (70% compliance at TSH)
    - All record checks (criminal record, license, etc.)

Our vision for the future

It is noted that the healthcare workforce is ageing nationally, and maintaining a skilled workforce into the future will require considerable national training, planning and equitable distribution of doctors, nurses and allied health professionals, including into new roles, to ensure future capacity.

- Sustainability:
    - For any expansion in activity to occur, a commensurate increase in skilled staff will be required, including medical, nursing, allied health, medical imaging, Pharmacy, etc. and to allow the introduction of new models of care, e.g. thrombolysis, Respiratory COU, enhanced Sleep Lab service, Day Only Rehab, 7-day ART service; RCCP; opening beds in ICU; expansion of the PIMHS and the development of an EPAS; potential expansion of SCN; and for trainee supervision
    - Ensure appropriate staffing resources to provide new ambulatory care and outpatient services and enhanced community services to support the shift in balance from acute hospital to community-based care
    - Consider corporate service staff increases commensurate with increased activity (security, linen, cleaning, communications, engineering, Chaplains, etc.)
    - Continue to seek advanced trainees for TSH, e.g. in ED

- Consider increased allied health support, including for weekend and after-hours care and to support earlier discharge; and new roles e.g. social work position for SESLHD DAS services for capacity building at local facilities, Orthoptist for Ophthalmology service, community-based speech pathology and occupational therapy, enhanced physiotherapy and social work in CCM for evening and weekend support, and dietician and speech pathology support in CCM
- Consider support roles complementary to nursing and allied health (these would need to be industry approved and accepted district wide) such as:
  - Ward assistants / technicians to perform non-nursing duties (such as stocking), anaesthetics technicians
  - Auxiliary nurses to perform personal care on patients
  - Allied Health assistants
  - Pharmacy technicians to aid in the dispensary and enable pharmacists more time on ward for clinical activities
  - Technical assistants to work in consultation with senior medical and nursing staff in ED
- Consider the implications of an ageing health workforce and recruitment and retention of staff for the future, for example, Child and Family nursing have a disproportionately ageing workforce and requires resources and support to address the significant challenges of this issue

- Provide an improved management structure and skill mix:
  - For pharmacy, with regrading for senior positions to assist with management, education and provide opportunities for education and professional development
  - Consider the implementation of a Director of Surgery role
  - For Allied health, with more senior positions to manage complex patients and support junior staff
  - For Cardiology to enable the management of higher acuity patients in the CCU and reduce need for HDU care
  - Ensure adequate administrative support so that clinicians are not burdened with increased administrative responsibilities and can complete their roles more efficiently, e.g. for consultants, clinics
  - Provide medical governance for the RCCP to support rapid medical assessments and medical home visits if required, similar to the GFS model, to avoid the need for ED presentation and keep people as well as possible at home
  - Ensure nurse to patient ratios align with industry standards and are equivalent to services at other peer hospitals
  - Consider new subspecialties e.g. foot and ankle surgery, neuro-ophthalmology
  - Consider allocated inpatient beds on medical wards for smaller specialties e.g. renal and infectious diseases, to enable a skilled workforce to care for them

- Enhance Skills:
  - Foster links with universities for new graduate placements to encourage recruitment and retention
  - Support staff research with improved access to data managers and biostatisticians
  - Increase clinical nurse and midwifery educator support in an expanded service e.g. full time Diabetic Educator with CNC skills and full-time midwifery educator for GDM patients; support for enhanced outpatients, ambulatory care and community services; increased clinical support particularly after hours; CNE in CCM
  - Seek access to allied health educators, currently only available for social work
  - Provide training opportunities for advanced trainee accreditation, e.g. increase registrar and consultant-supervised clinics at TSH to meet the requirements of College training post accreditation
  - Investigate opportunities for advanced medical roles, e.g. Neurology advanced trainee position and Neurophysiology fellowship

- Consider opportunities for advanced practice roles in nursing and allied health, e.g:
  - Nurse led Clinics in midwifery, wound clinic, chronic asthma, outreach clinics
  - Nurse Practitioners in respiratory, palliative care, surgery, paediatrics (for ambulatory care and ED), midwifery, ED for dedicated acute and fast track care, CCM
  - Allied health led clinics, ED advanced practitioners
  - New CNC roles e.g. Inflammatory Bowel Disease
- Consider new workforce roles:
  - Care co-ordinators for management of the growing number of complex patients who require support for their ongoing self-management and specialised health and social care
  - Funded Consultation Liaison roles, e.g. for DAS, Clinical Psychologist in Southcare, to support assessment, follow up and avoid readmission or more complex issues developing
  - Equipment nurse and CIS manager to assist staff with IT systems in CCM
  - GPs working in the hospital to enhance integration
- Expand a mentoring role to different groups across the LHD, as a driver for engagement and staff retention. Currently a TAFE course for Aboriginal mentors is under development, this could be expanded to encompass a wide range of groups, e.g. disability support, allied health peer mentors
- Build capacity of managers to encourage an increasingly diverse and high performing workforce under the umbrella of a positive workplace culture, i.e. with ways to support individuals, framework for implementation
- Provide comparable Librarian staffing to other similar hospitals
- Improve training for staff in new technologies to reduce stress and potential workplace injuries associated with implementing new technology and systems

- Systems:
  - Review after-hours medical rosters for services networked with SGH
  - Simplify/standardise recruitment and mandatory training processes across sites for staff that rotate between sites to prevent duplication of requirements
  - Consider a Cloud based recruitment system that is easier to access and use
  - Support professional collegiality, staffing efficiencies and enable expansion of the scope of practice with hub and spoke models for community-based care, e.g. Oral health incorporating dental clinics in community health centres
  - To reduce WHS risks for community staff, robust checks will be required to ensure driving licenses are up to date, driver competence, and style of car is ergonomically suitable

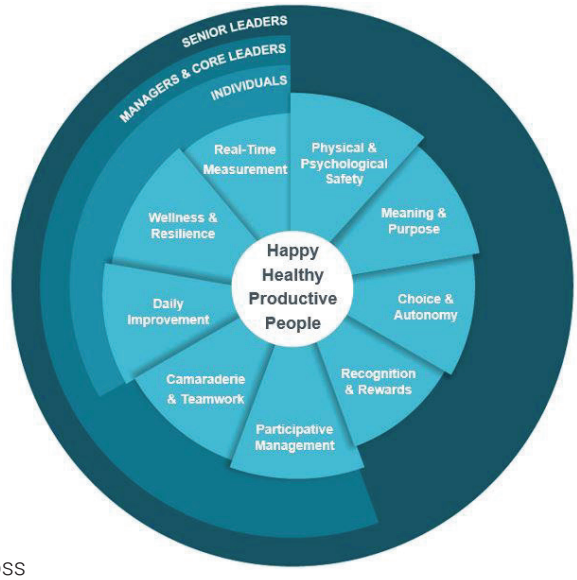
- Support a wellbeing culture for staff and promote Employee Assistance programs

4.3.3 Ensuring adaptive leadership and staff engagement

Leadership is about connectedness through shared vision, co-ownership, co-design and empowering partners in implementation.[144]

To be successful, organisations must constantly adapt and change in order to respond to a changing health context and environment. Leaders need to be responsive in seeking out and supporting new ways of working. Evidence suggests that the best performing hospitals have high staff engagement in decision making and widely distributed leadership. Leaders who motivate and engage staff, patients and others deliver better results on a range of measures, and engaging staff and patients is essential in making change and improvement happen.[145]

Managers and clinical leaders who have learned the skills of improvement and are able to put them into practice are linked with high levels of staff engagement and development and organisational performance.[146]



IHI Framework for Improving Joy in Work

Integrated care and integrated systems require strong leadership across the different organisations and systems of care to support the needs of patients and populations. Leadership development programmes should thus bring together leaders from different groups and professions within and outside health care.

The Institute for Healthcare Improvement recommends steps for leaders to restore, foster, and nurture joy in the health care workforce, including:[147]

Step 1: Leaders engage colleagues to identify what matters to them in their work

Step 2: Leaders identify the processes, issues, or circumstances that are impediments to what matters locally

Step 3: Multidisciplinary teams come together and share responsibility for removing these impediments and for improving and sustaining joy

Step 4: Leaders and staff use improvement science together to accelerate improvement and create a more joyful and productive place to work.

Our current actions to ensure adaptive leadership and staff engagement

- Identifying and nurturing current and future leaders through offering a range of leadership programs, such as the Emerging Leadership program
- Offering mentoring and professional development opportunities for high-potential staff members
- Regular Staff Forums to keep staff engaged and aware
- Nursing and midwifery engagement surveys, with feedback received and responded to
- Engagement with nursing and midwifery staff at monthly "town hall meeting" which provides a forum to listen, receive honest feedback, provide ideas, provide solutions and action where required
- Leadership and management meetings provide a forum for information sharing and establishment of goals.

Our vision for the future

- Build the capacity of senior staff with leadership and general management skills for the benefit of the health service of the future
- Provide Staff Education programs including research and technology, population health, leadership, change management, system redesign and quality assurance and ensure adequate time is made available away from clinical responsibilities for these initiatives
- Facilitate new career pathways into senior administrative roles beyond traditional boundaries, which will allow more diverse career pathways
- Ensure appropriate staffing resources to provide new ambulatory care and outpatient services and enhanced community services to support the shift in balance from acute hospital to community-based care
- Partner with Universities to ensure that teaching and education aligns with new career pathways
- Recognise new workplace roles e.g. nursing and allied health led clinics, nursing and allied health advanced practitioners, allied health assistants, general physicians
- Acknowledge changed settings for some services, e.g. in homes and RACFs; increased day only services; digital monitoring; increased telehealth
- Continue to support innovation activities that produce “joy at work” and make SESLHD, and in particular TSH&SCHS, a great place to work for our people.

4.4 Better Value

GOAL

We will deliver value to our patients and community through maintaining financial sustainability and making investments consistent with our vision.

SESLHD objectives for achieving better value include to:

- > Provide the right care, in the right place, at the right time
- > Use innovative models that shift care into the community
- > Operate in a financially sustainable way
- > Continuously reduce waste and duplication across our system
- > Make decisions that align with our strategic priorities.

Improving the health of the community is a fundamental aspiration of any health service. The Sutherland Hospital and Sutherland Community Health Services are expected to deliver consistently high-quality care at lower cost against a backdrop of rising patient expectations and demand, increasing technology, and rising health costs.

Meeting these rising demands within existing funding and staffing resources will require new evidence based treatments, technologies and models of care to enable the delivery of the best care at an acceptable cost. Decisions about which services will leave hospitals to be better managed in the community or ambulatory setting will need to be made.

Internationally, healthcare systems are exploring new ways to organise and finance healthcare to increase value for patients and societies. Simply increasing volumes of services, under the impetus of activity-based funding and performance reporting metrics, does not necessarily translate into better health and a better experience for patients

Safety, quality and reducing waste and inefficiency are important areas of focus in order to deliver sustainable health care into the future. This includes:

- An ongoing continuous improvement of processes and systems to define the appropriateness of care, i.e. low versus high value care, and an effective system to monitor progress
- Using state wide, national and international healthcare datasets to measure value and the benefit of change
- In co-operation with consumers, staff, key partners and stakeholders, co-create new models of care aimed at reducing waste and improving integrated, person centred care
- Ensuring the perspective of patients and service users as well as the systems' or organisational perspectives are considered when measuring and evaluating outcomes[148]
- Providing Research funding that is pertinent to population health programs to keep people healthy along the life course and an ageing population
- Ensuring a sustainable workforce. The health workforce is ageing and it will be challenging to replace these experienced people. It is important to grow an effective, skilled workforce with both generalist and specialist skills to allow transformation of care into the future.

Funding and budgetary arrangements also need to consider the savings that ultimately accrue to society or consumers by improving outcomes for patients, rather than siloed delivery and funding models. Taking a values-based approach to health makes improved wellbeing, independence, social connectedness, choice and control a priority, and supports people to manage their own care.

The incentives created by value-based purchasing initiatives (such as the Medicare funded primary care model – *Health Care Homes*[149]) may prove cost effective in reducing emergency presentations and hospital admissions in the longer term. High admission rates for long-term diseases *"are an indicator of a health system which is not adequately investing in primary care and managing the integration between primary, secondary and tertiary care. This leads to excessive spending on treatments in hospital for conditions which can be better managed through primary care."* [150]

Combining information and data collected on disparities in health and wellbeing with strategies that reach and are co-produced with those people most in need will help generate improvement of population and community health, and thus provide greater value and long-term sustainability for our health system. Securing greater value and sustainability for health services of the future is thus largely contingent on better models of care, and support and treatment for these high need groups who need ongoing care, including at the end of life.[151]

Leading Better Value Care program [152]

NSW Health is changing its focus away from the traditional approach of measuring value in terms of volume/output in relation to costs, to an emphasis on the delivery of value based care.

The key goals of the Leading Better Value Care (LBVC) program are to:

- Focus on patients through adopting a patient experience and health outcomes approach
- Focus on value across the triple aim to support moving away from volume
- Address future demand and fiscal pressures by creating future system capacity through efficient and effective care and services.

LBVC initiatives will impact clinical teams across NSW who are caring for people with osteoarthritis, at risk of osteoporotic refracture, with chronic heart failure, with COPD, with diabetes, at risk of diabetes related foot complications, at high risk of falls in hospital, and with end stage renal disease.

All of NSW shared services and pillar agencies are part of the support network for the implementation of the LBVC initiatives, including investment in analytics to support informed decision making. The Sutherland Hospital and Sutherland Community Health Services' relationship with the CESPHN will be critical to the work of providing better value healthcare.

Our current actions to build value and financial responsibility and sustainability across the system

- There are a number of projects underway investigating variation, best practice processes and potential efficiencies across SESLHD. These include:
    - The sensible test ordering of Pathology project (STOP), to improve the quality of pathology ordered within our hospitals to reduce unwarranted clinical variation in pathology ordering, minimise risk of harm to patients and to reduce waste
    - Increased data quality and improved access to data to make informed operational decisions
    - Introduction of the District wide Vendor Managed Inventory (VMI) system to improve the supply chain management of ward Imprest medication and increase Pharmacy clinical capacity, and allow facilities to purchase stock and District level volumes
- An LBVC initiative underway at TSH&SCHS includes the Osteoarthritis Chronic Care Program for people with osteoarthritis.

Our vision for the future

- Continue to identify opportunities to eliminate waste, duplication and variation across the system to provide reliable, exemplary care in the right place at the right time, delivered by the right clinicians
- Continue the development of care pathways for specified conditions to reduce variations in outcome
- Continue to implement the recommendations of the NSW Health LBVC Program
- Local initiatives to consider at TSH&SCHS include:
    - Promote new and enhance existing hospital avoidance models
    - Provide an expanded Outpatient and Ambulatory Care Precinct to promote early intervention and management, avoid crisis and avoid the need for expensive hospitalisations
    - Establish a High Volume Short Stay Surgery (HVSSS) Unit to improve service efficiency and access to elective planned surgery and procedures
    - Promote earlier discharge planning of Pharmacy requirements, with potential promotion of P.B.S scripts for discharge for some patients (as in after-hours discharge).

4.4.1 Embedding continuous quality improvement and innovation

Quality improvement and innovation requires a systematic process focusing on activity to reduce waste, harm and variation; promote safety, transparency and efficiencies; and to improve health outcomes, performance, and patient satisfaction. Measurable goals need to be identified for tracking performance and evaluation so that improvements are linked to performance measures.

The South Eastern Sydney Health District is building the capacity and capability of staff across the system to use improvement science as an enabler to transform healthcare. Improvement science is *"an applied science that emphasizes innovation, rapid-cycle testing in the field, and spread in order to generate learning about what changes, in which contexts, produce improvements."* [153] Improvement models employ Plan-Do-Study-Act (PDSA) cycles for small, rapid-cycle tests of change.

The SESLHD Improvement Academy aims to build a centre for lifelong learning within the District and to foster a culture of staff-led, continuous improvement. This will be achieved through building capacity and capability in improvement, including:

- Using customised education for the entire workforce at all levels of the organisation
- The Bright spots program, which provides an opportunity for teams across SESLHD to celebrate their achievements in improving patient care and share what makes them proud
- The Inspiring Ideas Challenge (TIIC) Program, to improve the health and wellbeing of patients, staff and/or the broader community, through the application of innovative ideas. TSH&SCHS has submitted a number of successful initiatives
- Whole of system improvements using the Breakthrough Series Collaborative with facilities, multi-disciplinary teams and services to identify specific and measurable aims in a chosen topic area, measure improvements over time (generally 6-15 months) and identify changes that facilitate the desired improvements.

Organisations with engaged staff and patients deliver better patient experience, fewer errors, lower infection and mortality rates, stronger financial management, higher staff morale and less absenteeism and stress, with improved organisational performance.

The Kings Fund Leadership Review 2012. Leadership and engagement for improvement in the NHS

Our current actions for improvement and innovation

Examples of Improvement programs currently underway include:

- SESLHD Mental Health Patient Safety Program – Towards Zero Together, which aims to reduce harm to patients in hospital and those accessing our Mental Health Services through initiatives such as improving the reliability of our clinical processes
- SESLHD Acute Adult Patient Safety Program, to work on reducing harm and improving reliability for ventilator associated pneumonia, catheter associated urinary tract infections and recognition and management of the deteriorating patient
- The 'Big Conversation' provides an opportunity for staff feedback on ways to improve service and system performance and find out what is important to them.

The Sutherland Hospital and Sutherland Community Health Services has established a number of quality improvement projects aimed at improving patient safety and care, including:

- Processes for medical, nursing and allied health handover which prioritise patient involvement where possible, with a structured approach to ensure the essential information is always covered, and that the process is documented
- PEEP – person centred care program, a locally developed hybrid of the essentials of care and productive ward nursing models
- Implementation of REACH – Recognise, Engage, Act, Call, Help is on the way - a patient, family and carer escalation process developed by the Clinical Excellence Commission which provides a graded approach to patient and family activated escalation where there are clinical concerns. REACH empowers patients, families and carers to participate in care decision making by identifying potential deterioration. REACH responders are senior clinicians who will not only provide a "fresh set of eyes" but also question the current medical and nursing plan to ensure the patient is safe
- Open Disclosure: an open discussion with a patient and/or their family and support persons about an incident that could have or did result in harm to that patient while they were receiving healthcare. The five essential elements of Open Disclosure are:
    - An apology
    - A factual explanation of what happened
    - An opportunity for the patient /family / support person to relate his/her experience
    - Discussion of potential consequences
    - An explanation of the steps taken to manage the event and prevent reoccurrence
- Innovation projects including:
    - Patients as Partners –Steady Steps
    - Keeping People Healthy – The T.R.Y. Project
    - Supporting our People – Implementation of an online wound and pressure injury portal to improve access for staff to best practice guidelines and education,
    - Patient Safety First—Drop the draw sheet
- Audits, including monthly Bedside Clinical Audits, including:
    - Patient identification
    - Documenting evidence of medication allergies
    - Completion of Waterlow tool
    - Staff introducing themselves to patients
    - Signed bedside clinical handover forms
    - Skin inspections within 8 hours of admission
    - A complete Falls Risk Assessment and Management Plan (FRAMP) and use of sticker on handover form
    - Line and cannula dressing labelling
- TSH has implemented the Sensible Test Ordering of Pathology (STOP) project, a District led initiative aimed at reducing unnecessary pathology ordering and increasing efficiency of patient pathology.

Our vision for the future

- Continue to identify and implement quality improvement opportunities both at TSH&SCHS and working collaboratively across SESLHD
- Continue to foster and support innovation
- Ensure ongoing access to staff education and opportunities for research
- Continue to build clinically led pathways to ensure standardised protocols for agreed conditions to reduce variation in outcomes and improved access to services
- Continue to provide/enhance access for consumer, staff and community accessible and interactive feedback, e.g. Patient Opinion, an internet accessible and transparent web-based programme where patients or carers can post their story, which is then immediately escalated for resolution.

4.4.2 Partnerships that deliver

Partnerships can provide innovative ways to reduce costs and improve services. To identify and reduce health risk along the life course and reduce demand on our health services, Health cannot work alone, and needs to partner with other agencies and communities in a cross-sectoral approach to the life course management of health and wellbeing and reducing health inequities.

This includes working with patients, families, carers and other public and private hospitals, other health and social care providers, research, education and training organisations and industry partners to ensure sustainability of the health system, the best integration of care and sustainable access to high quality care and facilities for our residents.

To optimise population and individual health and wellbeing and support self-care, we will need to proactively seek out and draw upon the assets and strengths that individuals and communities and other health and social care partners have. We will need to co-design our services with consumers and our broader community partners to optimally address our population health needs.

Primary Care

An essential partnership is with primary care and in particular local general practitioners, who are a core component of integrated patient care. *The NSW State Health Plan: Towards 2021*[154] acknowledges that more than half of all health care is delivered outside of NSW Health and that most of our population keep well or are able to manage their own health needs in partnership with primary care.

General Practice is involved in every episode of care for every patient, from prevention through to continuing the work of the hospital in the community and are active partners in work to prevent readmission by promoting self-management, anticipatory care and risk stratification. General practice also has a key role in co-ordinating care and helping people to navigate the system.

The need for specialists to work more closely with general practice is well documented.[155] Innovative models of care include holding specialist clinics in GP practices; mechanisms to provide easy access to specialist advice; joint outpatient clinics with GPs; and working in multidisciplinary teams for the management of people with chronic conditions.

Our current actions to promote partnerships that deliver

- The Consumer Advisory Group (CAG) is our key body for partnering with consumers. We include consumers in key governance committees and consult with them when considering changes to hospital services or the facility environment. Our patient information brochures are reviewed by the CAG for clarity and relevance prior to publication. We also try to provide as much publicly available information as possible on our performance against safety and quality measures, so patients and carers can see our performance
- Consumers are involved in quality projects through taking part in surveys and focus groups
- GPs have been consulted and involved in future service planning for TSH&SCHS
- NSW Health, including NSW Ambulance, has partnered with NSW Police in a memorandum of understanding[156] which sets out the principles which guide how agencies will work together when delivering services to people with mental health problems, situations involving patients in police custody and the management of public safety issues in health settings
- Research partnerships include multicentre trials with other facilities
- University partnerships are crucial for undergraduate and post graduate education to ensure a sustainable health workforce, e.g. SHIRES, the Sutherland Health Improvement, Referral and Education Service, is an innovative interdisciplinary student led clinic for people with chronic disease run by medical and allied health students, in partnership with their universities.

Our vision for the future

Further engagement with partners, including other health and social care providers, NGOs, local councils, schools, teaching and research partners, will support our partners to do the things that TSH&SCHS do not do, or help us do them more efficiently and effectively.

For example:

- Increase our partnerships in shared care with local general practitioners, e.g. Antenatal GP shared care, including a midwife working alongside GPs
- Create a collaborative care service with the TSH Ophthalmology service and Centre for Eye Health for glaucoma, similar to diabetic retinopathy collaborative care service now active, to meet significant demand and provide early intervention to prevent blindness
- Explore options for partnerships and co-commissioning between SESLHD and CESPHN. CESPHN has developed a Commissioning Framework with the aim of providing a framework within which health services will be planned, commissioned and procured, to provide a range of programs focused on delivering integrated care with local health districts and specialty health networks including Aboriginal health, antenatal shared care, aged care, HealthPathways, immunisation, mental health, drug and alcohol and sexual health
- Investigate further public private partnership models, similar to the CESPHN/ private/ SESLHD partnership funded Integrated Health Service model at Miranda, so that not all services need to be provided by TSH&SCHS clinicians on site
- Investigate potential collaborations/partnerships with Sutherland Shire Council
- Investigate potential for new partnerships with universities for research and education and for improved Library infrastructure and resources.
- Explore opportunities for SESLHD and TSH&SCHS to partner with NGO's, disability support providers, Ability Links for care co-ordination, carers, government agencies such as FACS and NDIA to develop strategies to better support people with a disability in the community setting to prevent avoidable hospital admissions and decrease length of stay
- Consider formalised partnerships or memorandums of understanding between TSH and providers for client transfer to community placements
- Work in partnership with Aboriginal people to enable the health service organisation to identify priorities, understand cultural beliefs and practices, and involve Aboriginal and Torres Strait Islander in determining their own health priorities.

4.5 Foster research and innovation

GOAL

We will focus on translating research and innovation into clinical service models that deliver positive health outcomes.

"We are committed to research. Research is the backbone of our ability to provide leading-edge healthcare to our patients and communities."

Michael Still, Chair of the Board, SESLHD

4.5.1 Promoting research and evidence led decision making

Research at TSH&SCHS is guided by the *SESLHD Research Strategy 2017-2021*,[157] which focuses on applied and translational research that is directly relevant to improving health care system performance and the wellbeing of patients and the community. It spans prevention research within communities through to clinical research within hospitals and services. This includes medical, nursing, allied health and multi-disciplinary research.

Funding for medical research is increasingly centred on collaborative multicentre research and less on individual research projects, so enhancing collaboration and partnerships with universities, other networks and research organisations and industry partners will increase grant opportunities.

As part of SESLHD, staff at TSH are members of the Sydney Partnership for Health, Education, Research and Enterprise (SPHERE) to enable collaborative research. With links formed through SPHERE and networks with other universities and LHDs, clinicians will be better supported to more effectively translate new research to clinical practice and use healthcare data to support clinical practice and the implementation of quality improvement programs.

SESLHD objectives to foster research and innovation include to:

- Build research and innovation capacity and capability within SESLHD
- Increase community access to research and innovation
- Promote research and innovation to deliver sustainable health outcomes
- Foster a culture of innovation, research and translation within SESLHD
- Influence, partner and align with key academic and commercial partners
- Embrace technology to drive research through big data and data handling initiatives.

Our current actions to foster research and evidence led decision making

Research is conducted across the TSH&SCHS campus by medical, nursing and allied health staff in recognition that a research based approach to clinical care encompasses cycles of continuous improvement or translational research activities that provide best practice and reduced unwarranted clinical variations.

The Sutherland Hospital and Sutherland Community Health Services also reviews models of care in line with recommendations from our pillar agencies (NSW Agency for Clinical Innovation, Clinical Excellence Commission, Health, Education and Training Institute and the Bureau of Health Information) to ensure we provide the latest evidence based care and make our health services safer, more efficient, better performing and sustainable.

Resource allocation is available via various pathways, for example funding for research is provided by the St George and Sutherland Medical Research Fund, TIIC grants from SESLHD, state funding bodies for Translational Research Grants and National bodies such as NHMRC, etc.

Research is undertaken in a number of locations on campus, principally by individual disciplines, e.g. Respiratory, Aged Care, Critical Care Medicine, with links to Universities and Research Institutes, however there is little opportunity for collaborative research activity. There is little research identity or infrastructure to support research on the TSH campus. Current issues identified on consultation include:

- Research hubs or environments or laboratories on campus are not fit for purpose
- There is no direct research support available on campus for medicine, nursing or allied health, e.g. for biostatistics, ethics or grant funding application
- There is no clinical trials capacity other than what clinicians achieve within their own resources and time
- There is no research access to health information systems; data and technical support for research is currently non-existent
- Historically medical staff have been VMOs and there has not previously been a culture of research at TSH.

Our vision for the future

An active translational research program at TSH&SCHS will support improved patient care, staff retention and cost effectiveness, and will include embracing translational research in fields relevant to our population, such as ageing, chronic disease and community services.

There are opportunities to better centralise support and develop academic oversight for translational research on campus. Opportunities also exist in promoting and developing the Workforce capacity to embrace research related activities.

Service Solutions

- Establish links for wider collaborative research with other research organisations, universities, hospital campuses and other community partners. TSH has an untapped patient base for translational research and excellent relationships with the community and local GPs
- Consider the creation of a TSH Research Institute, in conjunction with SPHERE partners and/or other affiliated or independent academic institutes linking academics and clinicians to provide knowledge transfer, scholarships and fellowships, improved health and clinical pathways, reduce unwanted clinical variation, better utilisation of health information and data analytics and support for Leading Better Value Health Care programs. Similar examples include the Ingham Institute at Liverpool and the Kolling Institute at Royal North Shore Hospital (RNSH)
- In keeping with the *SESLHD Research Strategy 2017-2021*, develop new partnerships beyond traditional links with research, e.g. University of Wollongong, MRI or Industry partnerships, to stimulate wider opportunities for research funding and collaboration
- Consider TSH&SCHS becoming a Research Centre of Excellence for:
    - Aged Care, Integrated Care and community-based models of care, with research focused on keeping people well and cared for in the community and avoiding the need for hospitalisation
    - Cardiology should also be considered for collaborative research due to its large number of services and links to the Eastern Heart Clinic
    - Respiratory and Sleep Medicine is already involved in multi-centre NHMRC trials in lung cancer, pleural diseases, smoking cessation, and is an important interventional bronchology centre in NSW (one of 3 that offer bronchial thermoplasty and medical pleuroscopy)
- Build upon existing ICT links with Illawarra Shoalhaven LHD for data sharing
- Recognise that improvement and innovation can draw upon cycles of continuous improvement sponsored by iiHUB and Quality and Safety units housed at TSH. Explore synergies between safety and quality, improvement and innovation and translational research possibly linked to the futuristic ambitions of any proposed Research Institute on site
- Support TSH&SCHS submissions to SESLHD innovation awards
- Consider focusing translational research on chronic disease entities and comorbidities including key SPHERE areas of interest e.g. community and chronic disease care (including ageing), respiratory and sleep disorders, Aboriginal health, musculoskeletal, obesity, etc. with high clinical representation in the demographic served by TSH
- Capitalise on existing linkages between the Universities of Newcastle, NSW and Wollongong for translational research activity
- Explore potential collaborative research with St George Microbiome Research Unit
- Build collaborative research programs, e.g. for melanoma with RNSH
- Ensure TSH&SCHS staff are involved on site in collaborative research projects to build a research culture, e.g. in linked projects with other hospitals
- Explore opportunities for projects that use SESLHD Big Data
- Ensure support is provided for research e.g. for Biostatistics, ethics and grant funding applications. This could potentially be provided through partnerships with Universities, CESPHN, privates, etc. This is particularly important to enable junior researchers
- Investigate funding opportunities from local community sources to support this plan
- Develop strategies to maintain the focus of UNSW for TSH and SGH research and education with the pending redevelopment of Randwick campus
- Ensure any external funding is quarantined for research and research infrastructure.

Infrastructure Solutions

- Create a purpose-built Research Institute with associated infrastructure on the TSH&SCHS campus (see Section 5.1.8) in a prominent location to establish the critical space/mass/identity for research to thrive on campus, with potential assistance of community-based funding
- Consider co-location of research and education facilities.

Workforce Solutions

- TSH&SCHS requires greater academic leadership: consider creating a senior academic appointment dedicated to research to provide leadership and governance and stimulate a research culture at TSH&SCHS in a chosen field of excellence shared by many and open to all. This could potentially be a shared research and education university appointment, with opportunities for innovation in teaching at TSH&SCHS; or a shared Research academic and clinical specialty role, e.g. an Aged Care academic
- Consider creating a Research Co-ordinator role that can provide support to multiple departments
- Support research by TSH&SCHS staff with quarantined time
- Support nursing and midwifery research at TSH&SCHS with recruitment of a professional research position to lead and support nursing and midwifery research at TSH&SCHS.

4.5.2 Strength in education and teaching

A high quality health service is dependent on a synergy between clinical services, teaching and education and research. Effective partnerships will be required with universities and other key stakeholders such as professional colleges to enable new career pathways and align teaching and education with the challenges of future public health service delivery.

High performing models of teaching and education include:

- Point of care education, with integration of ward and outpatient services and teaching opportunities
- Dedicated multi-disciplinary teaching precincts with advanced technology and effective communication systems
- An acknowledgement of the importance of the role of teaching in the facility
- Strong alliances with associated universities and learning organisations
- Linked IT systems
- Research education, with an education program in how to conduct research.

Our current actions to foster strength in education and teaching

The Sutherland Hospital and Sutherland Community Health Services provides clinical educational activities for medical, nursing, and allied health students at undergraduate and postgraduate levels, orientation and training programs for new or junior clinicians, and continuing and professional development programs.

It is a teaching hospital of UNSW for medicine, and provides clinical education for first to sixth year undergraduate medical students and post graduate students. It also provides education for nursing and allied health students from a number of associated universities, including the University of Sydney, University of Wollongong, University of Western Sydney, University of Technology and others.

There is educational expertise available in the hospital across all clinical disciplines, and many staff have experience in designing, conducting and evaluating educational activities.

A variety of educational and advanced training opportunities are also available for staff from the NSW Health Education and Training Institute (HETI).

There is currently a wide range of clinical education service delivery modes, such as “point of care” teaching with the involvement of patient, student and educators, small group tutorials or discussion groups, computer training activities, lectures, clinical skills training, simulation lab and on-line education e.g. HETI modules, in a limited number of teaching spaces across the campus.

Undergraduate Medical education is provided from the UNSW at the Sutherland Clinical Teaching Unit (demountables) on campus and in many clinical settings within the hospital, although access to training or seminar rooms is limited and there is no clinical skills lab or simulation centre for undergraduate students on campus.

The UNSW medical student curriculum provided at TSH includes a broad range of exposure with an integrated care focus, including rotations to the community and GP practices, and partners with St George Hospital for some clinical exposures e.g. drug and alcohol and sexual health services. The Sutherland Health Improvement, Referral and Education Service (SHIRES) is an innovative interdisciplinary student led clinic for people with chronic disease run by medical and allied health students on campus, in partnership with their universities.

Graduate students are provided with funding for clinical exposures outside the hospital e.g. as a community registrar at TSH; rotation to a Private Hospital; and a rotation between TSH, SGH and CHCK to provide a variety of different exposures from different clinical services provided at each hospital. Registrar clinics are provided by a number of specialties.

Staff teaching rooms are located on Level 2, co-located with the TSH Auditorium, which is used for group learning. A Computer room for training is also available with 11 chairs.

A Simulation Centre is located in the operating precinct and includes a control and simulation room, links to a tutorial room in theatre and Studio level recorders,
run in collaboration with the operating theatres, critical care medicine and the Emergency Department.

The Medical Library, located on the 4th floor, provides an Information service for clinicians, students, researchers and support staff at TSH, with access to a wide variety of journals and text books.

Our vision for the future

The provision of a Research, Teaching and Education Precinct on the TSH&SCHS campus has been proposed, in order to:

- Foster training and education to medical, nursing and allied health students
- Support professional development for TSH&SCHS staff and health professionals in SESLHD
- Serve as a focal point for educational activities for the wider health community, including General Practice, non-government organisations and community groups
- Provide an opportunity to share and collaborate as interdisciplinary health care professionals.

Service Solutions

- For staff:
  - Ongoing support for staff participation in education and training
  - Review current models of staff education to become more proactive and focussed on safety, person centred care and staff wellbeing
  - Integrate siloed services so that all staff have access to education support
  - Simplify/standardise recruitment and mandatory training processes across sites, i.e. for staff that rotate between sites to prevent duplication of requirements
  - Increase educational support to assist in the transition of new staff from novice to expert in specialist areas, for example:
    - In CCM, provide unit based education and activities to develop staff
    - Renal specific education to nursing staff aligned with renal beds
    - After-hours educational support for Maternity Services to allow the recruitment of increased numbers of student midwives
  - Include Registrar led clinics to meet College accreditation guidelines for a number of specialties, e.g. surgery
  - Consider including a rotation to the community for second year nursing graduates to enhance integration with hospital services and give exposure for future recruitment in a growing area of demand
  - Consider establishment of Advanced Life Support training at TSH in future, with accredited instructors and appropriate resources and staffing capacity. This would help attract staff to TSH

- Enhancement of specialised staff education at Garrawarra Centre and rotation of staff
- Develop community carer support and education programs to assist families in maintaining patients at home
- Investigate opportunities for rotations to gain experience, for example:
  - From oncology or GP registrars to palliative care
  - Between TSH and Garrawarra Centre

- For students:
  - A strengthening of the integrated approach to clinical teaching is required, with increased exposure to community and clinic involvement, including offsite clinics e.g. in VMO rooms
  - Investigate the potential for future partnerships with other community-based teaching opportunities off campus, e.g. with RACFs, private hospitals.

Infrastructure Solutions

- Investigate opportunities for an education precinct on campus, potentially co-located with research, with access to increased fit for purpose undergraduate and postgraduate teaching spaces, and a full range of staff development services across all clinical disciplines
- Ensure education spaces are equipped with Wi-Fi, audio-visual communications, etc.
- Support readily accessible information systems (SESLHD and University)
- Workplace based education also requires integration with ward and outpatient-based services, with education being delivered at point of care, and capacity to debrief close to but away from patient areas to maintain confidentiality. To enable this, requirements include:
  - Teaching rooms on wards
  - Dual purpose outpatient/education spaces
  - Providing space for students and allied health assistants within the department, i.e. clinic and workstation space
- See section 5.1.8 for more information on infrastructure requirements.

Workforce Solutions

- Ensure quarantined time is provided for clinicians to provide education
- Investigate opportunities for advanced roles, e.g. Neurology Advanced trainee position and Neurophysiology fellowship
- Increase Consultant-supervised clinics at TSH&SCHS to meet the requirements of College training post accreditation e.g. for ophthalmology, surgery
- Consider increased nurse educator positions to support increased bed base, aged care, a new Outpatient and Ambulatory Care Centre and after-hours support
- Investigate opportunities for increased resources for allied health student and staff education
- Provide clerical staff to support registrar clinics.

4.5.3 Technology Enabled

Digital technologies are a critical enabler to transform the way healthcare is delivered. Harnessing technology has the potential to provide training and clinical decision support, to support standardisation of processes where required, to improve safety, reduce variation in outcomes, to improve access to services, and to enhance self-management.

Using innovative health technology

Innovative health technology also facilitates the linking of information and services to improve patient access and efficiency, including My Health Record, telehealth and tele web services, remote health monitoring and medication management technologies.

Technology may also be used to support people to self-manage their health more easily, for example text reminders for lifestyle interventions, phone and web services to support self-management, computer games as therapy, apps and decision aids to support patient decisions, care navigation aids and peer support networks. It can also be used to monitor the patient experience and outcomes, to ensure this is embedded in all performance management and governance.

In the future, health care will be increasingly personalised, with intelligent designs to improve the management of our health and wellbeing. Some of these intelligent designs may include:[158, 159]

- Using big data from virtual computer networks working together to advise on medical decisions from translational research to create better outcomes and value
- DNA analysis (Genomics) will become a standard step when prescribing treatment, to ensure it is personalized and optimized for a particular patient's metabolic background
- Robotic-assisted surgery to enhance the skill of the surgeon and allow for less invasive procedures, as part of an integrated surgical team
- Portable diagnostics and management for personalised care to allow diagnostic procedures with portable devices able to be performed from home, e.g. for monitoring blood pressure or choosing medications. The smartphone may serve as a health-medical dashboard
- Digital therapeutics such as computerised cognitive behavioural therapy and new preventative digital therapies, Smart pills and implants
- Augmented reality and virtual reality to expand and enhance communication, e.g. a surgeon streaming a live surgery procedure in order to create an enhanced learning tool for students
- Proton Therapy for treatment of cancer that causes less damage to healthy tissue surrounding the tumour, resulting in fewer side effects and a better quality of life during and after treatment, replacing traditional radiation therapy
- Combining knowledge from different specialties and cognitive computing to improve patient outcomes, e.g. using social media and other digital technologies for collaborative solutions
- Decentralised health records and connected community.

Digitally Connected

Information Technology is a vital component of providing safe, reliable, quality care. The SESLHD ICT Strategy[160] identifies six focus areas to facilitate the priorities of the SESLHD Roadmap to the Delivery of Excellence:

- Core Clinical Systems
- Integrated Care Solutions
- Workforce and Business Management Systems
- Data and Analytics
- Access to Information
- Infrastructure and Security.

The Sutherland Hospital and Sutherland Community Health Services uses Information Technology to manage patient bookings, hold patient information and monitor the patient journey. The key clinical information system is the eMR. The eMR receives patient demographic data from the Patient Administration System (PAS) and clinical data from attached modules. Examples of these modules are the Patient Flow Sheet, FirstNet (ED specific), SurgiNet (operating room specific), Outpatient Scheduling, Electronic Medications Management, Community Health and Outpatient Care, Mental Health and Drug and Alcohol. PACS/RIS and EIR systems digitise and store radiology images for both rapid access and integration with the patient's eMR. The ARIA integrated Cancer Patient data record is also used.

The District Information Management Services has a dedicated support team that manages and configures the eMR. There are other teams that provide support for applications in addition to information technology operations who ensure that the ICT infrastructure is in place to support the clinicians in their day to day work.

source: SESLHD ICT Strategy

For integrated patient care to be successful, a responsive ICT system that connects consumers and carers and providers is a high priority, including easy access to electronic records and appointment scheduling by all providers and convergence of e-health platforms for all services.

In response to technological constraints across NSW Health, eHealth NSW is in the process of deploying a number of clinical, corporate and infrastructure programs. These include:

- SMS reminders for appointments
- Providing a State-wide Conferencing, Collaboration and Wireless (CCW) solution that supports clinical services across NSW Health
- The HealtheNet system can be accessed by NSW Health community health clinicians, through a patient's eMR. HealtheNet provides a summary view of a patient's available health information and also sends discharge summaries to a patient's nominated GP
- A patient/guest Wi-Fi solution: Health Infrastructure will provide systems to facilitate in-building coverage for mobile phones in addition to Wi-Fi infrastructure, in accordance with agreed NSW Health standard.

Various systems are also exploring how to capture from patient's information required during clinical encounters before the actual visits and at key times following treatment.

Analytics capability

Health analytics is the "use of data, technology and quantitative and qualitative methods aimed at gaining insight for making informed decisions to improve health outcomes and health system performance."[161] It is a useful tool to generate evidence to help streamline and inform operations in healthcare, including clinical redesign, drive better health outcomes for our patients and community, and ensure evidence-based practice is embedded in our health system. Health data is also collected to inform clinical decisions and can be used to shape personalised predictive medicine.

Data analytics at SESLHD is guided by the NSW Health Analytics Framework, which seeks to enable NSW Health "to provide world-class and truly integrated healthcare, by delivering data and insights that support evidence-based decision making, planning and performance", [162] with strong links to whole-of-government initiatives to drive a co-ordinated approach to analytics. A number of tools are available from NSW Health for data analytics.[163]

Our current actions to ensure technology enabled decision making

- Use of the organisational reporting and business intelligence for transformation (OrBiT) application. The application is a locally developed tool that assists data analysts and senior management in the district with health intelligence on performance, ABF and Key Performance Indicators (KPI)'s
- Use of the Lightfoot tool, a flow based system-wide approach for operational management and to view outcomes on improvement initiatives
- Implementation of eRIC, to integrate ICU records with the eMR and allow for the delivery of ICU handover documents (eHOC), which provides medical and nursing discharge summaries from ICU to the wards
- eMR2 has been implemented across the campus which extends the use of existing eMRs by adding electronic clinical documentation to the inpatient setting
- The introduction of eMEDs, an eMR module that enables documentation of medication histories, inpatient and discharge prescribing, nurse administration, and pharmacy review
- Introduction of point of care testing and rapid molecular testing to improve turnaround time for pathology.

Our vision for the future

Any redevelopment of the TSH&SCHS campus needs to include:

- Core ICT infrastructure
- Service delivery platforms
- Service delivery applications
- Operational processes.

Recommendations include:

- Develop greater access to quality data to inform new approaches and models of care, including preventive health analytics, and better data analytics to be used more functionally e.g. live dashboards
- Ensure that patient experience and outcome data is embedded in all performance management and governance
- Implement a single, integrated patient record accessible from one system in real time that combines all information from multiple sources across the District (inpatient, outpatient, community, etc.) to allow integrated patient care
- Ensure convergence of e-health platforms for all services, with easy access to electronic records and appointment scheduling by all providers
- Ensure patient information is accessible from anywhere for care provision and shared care plans
- A more flexible workforce working 24/7 will require 24/7 access to technology
- Provide an enhanced hospital website including a Directory of services available, Consultant list, patient criteria and central referral portal, with acknowledgement of receipt and timeframe for appointment
- Improve and increase telehealth capability
- Provide self-service patient check ins for outpatients and SMS appointment reminders

- Support use of My Health record to enable better communication of information between hospitals and general practice
- Implement electronic referrals for consultation liaison to promote early assessment and discharge planning and avoid loss to follow up for difficult to reach clients
- Provide upgraded wireless connectivity across the organisation
- Consider the supply of Wi-Fi enabled electronic tablets for clinical staff with the introduction of eMR2
- Replace ageing computers across the campus
- Use digital morphology to capture, store and transfer images within NSW Health Pathology to provide support for routine morphology services along with real time access to specialist consultation and opinion when required
- Review technology at patient bedside – provide USB points on bedside power outlets and potential for use of Guest Wi-Fi for patient's own entertainment device rather than installation of Patient Entertainment System (PES)
- Ensure compatibility across the campus of systems, e.g. cabling, Wi-Fi, Duress tags, asset tagging
- For ED, consider tap on/ tap off sign in for EMR, bar code scanner for patient's eMeds and integrated ECG records
- For Medical Imaging, consider improvements in booking procedure and reporting to GPs
- For GPs:
    - Create electronic referrals that link directly from the GP's software package
    - Improve availability of investigation results by copying results to patient's GP, to avoid the need for GPs to follow up results on discharge from ED or inpatients
    - Build upon on CESPHN promoted digital health initiatives such as Healthlink and HealthPathways
    - Create a communication platform for GPs to raise issues/make comments or recommendations for patient management/experience so that TSH&SCHS can improve integration of care
    - Consider an IT resource to co-ordinate interface between GP/primary care and hospital/community health databases
- Enhance Library services, e.g. Wi-Fi access, improved audio-visual equipment, better computer access, database resources, etc.
- IT infrastructure to support service delivery in community based locations and to support centralised intake systems
- Consider the needs of community-based services to improve access to data and provide efficiencies e.g. in-car access to eMR, Tablets and provide mobile phones and tracking system for community staff to enhance safety.

4.5.4 Ensuring effective communication

Effective communication is an essential component of caring for our patients and community. This includes communication between clinicians and patients/clients and their carers and families, between clinical disciplines, between staff members, with primary care and between health and social care providers to ensure integrated care.

Similar to other healthcare procedures, communication skills can be learned and improved upon and requires commitment and practice. Evidence indicates that there are "strong positive relationships between a healthcare team member's communication skills and a patient's capacity to follow through with medical recommendations, self-manage a chronic medical condition, and adopt preventive health behaviours..... as well as patient satisfaction and experience of care." [164]

Communication among healthcare team members can also influence the quality of working relationships, job satisfaction and impacts on patient safety and health outcomes. Good communication also encourages collaboration, helps prevent errors and can support the improvement of health literacy.

Communication can include verbal, written and telecommunication forms. This includes ensuring our document content makes sense to patients/clients and their families and they are consulted in their creation. It also means we have to actively listen to feedback from other health and social care providers, patients and our community. Roles such as GP Liaison may also support improved communication and integrated care with primary care.

Technology can also be used to support improved communication, e.g. with shared care records, referral and discharge communication systems, etc. (See Section 4.4.3 for more information).

Our current actions to ensure effective communication

- Electronic medical records to allow improved access to patient information
- Introduction of Healthlink for communication with GPs
- Including GPs and consumers in planning processes, e.g. in the development of this Plan
- Consumers are involved in the production/review of documents for patients
- Patient portal for feedback
- Improved hospital website for information of available services
- NSW Health Pathology provide a client liaison officer for SGH and TSH.

Our vision for the future

Service Solutions

- Advocate for and ensure patient experience is recognised to inform service delivery
- Enhance communication with local GPs, for example:
  - Consider regular meetings with local GPs and creating a hospital liaison role for GPs to feedback information about system issues, concerns or things that need improving and transfer of care
  - Consult GPs at the planning phase of new hospital clinics and initiatives as they are integral to keeping patients out of the ED and hospital
  - Provide GPs with more data on their own patients from the hospital system e.g. frequent presenters and readmission rates
  - Ensure more timely and electronic communication
  - Improve the provision of electronic discharge summaries
  - Consider telephone handover to GPs from inpatient care
  - Provide regular information about services available locally, such as The Three Bridges Community Services
  - Improve communication between Aboriginal services to improve utilisation of Aboriginal GPs and improve access of Aboriginal residents to services and programs in the community
- Strengthen the promotion of HealthOne integrated care services and improve formal communication channels between TSH&SCHS and HealthOne
- Ensure communication skills training in undergraduate programs
- Include the availability of communication training for clinicians and members of the healthcare team.

Technology Solutions

- Continued improvement of the TSH&SCHS website to allow better access to information by GPs and the public
- Establish an electronic services directory for district health services
- Create a communication platform for GPs to raise issues/make comments or recommendations for patient management / experience so that TSH&SCHS can improve integration of care
- Utilise Healthlink to email hospital securely, send referrals and to receive return information
- Improve electronic processes for referral and notification, including SMS reminders for appointments.

Workforce Solutions

- Consider the appointment of a GP Liaison officer for better communication and transfer of care with GPs community services and improved integrated care.

5. Capital implications for the future integrated TSH&SCHS Campus

KEY POINTS

A redevelopment of the TSH&SCHS campus provides an ideal opportunity, in partnership with our community, to create system change which supports people to remain healthy, empowers them to manage their own care effectively where possible, and ensures that when complex care is required, it will be timely, safe and appropriate.

An investment in infrastructure on the TSH&SCHS campus will provide a purpose-built integrated health service campus with expanded capacity to allow us to transform the way care is delivered. It will ensure staff can implement evidence based models of care to provide safe, person centred care and deliver the highest standard of health care into the future.

5.1 Infrastructure Requirements

Continuing the transformation of the TSH&SCHS campus to provide cutting edge, holistic, person centred and integrated care will require capital redevelopment, informed by clinician advice and evidence based models of care.

This would include:

- Purpose-built Operating precinct with appropriate streaming for planned and unplanned activity
- Purpose-built Outpatient and Ambulatory Care Centre for most non-inpatient activity
- Creation of a Rehabilitation Precinct with an expanded bed base and provision of Day Hospital facilities currently not available on campus
- Enhanced Aged Care bed base, including expanded ACAU and Behaviour Management Unit
- Provision of palliative care beds on the TSH&SCHS campus for patients not appropriate for transfer to CHCK
- Increased capacity for Diagnostic Imaging
- Enhanced Mental Health Service facilities
- Reconfiguration of acute bed base to allow the introduction of new models of care (e.g. Neurology precinct with Acute Stroke Unit, Respiratory COU, Cardiology precinct)
- Refurbishment of ageing Critical Care Medicine beds
- Provision of appropriate meeting rooms, e.g. family conference room suitable for end of life discussions, psychiatric liaison consults, patient and family/carer education, etc.
- Dedicated research and education (including point of care) facilities.

Refurbishment of the Garrawarra Centre and existing Community Health Centres will also allow us to transform our services to ensure people receive the right care in the right place at the right time.

5.1.1 Providing a new Operating Precinct

The provision of 10 new purpose-built operating rooms and supporting services will help address the shortfall in surgical capacity and capability for both planned and unplanned surgery at TSH (unplanned surgery currently represents 39% of surgical activity), and meet the projected demand until 2030/31. This would provide access to theatres for:

- New case lists that are not currently performed at TSH to meet local demand and reduce inequity of access for local residents, e.g. for endogynaecology, vascular, urology, ophthalmology, maxillofacial, colorectal, ENT and paediatric procedures
- Allow the extension of the range of procedures that are suitable for the short stay environment as models of care and medical technologies make early mobilisation and early discharge not only possible but preferable
- Increase access for endoscopy to reduce extended waiting lists.

Our vision for the Sutherland Hospital Operating Precinct

The Operating Precinct would include:

- Dedicated emergency surgery operating rooms
- Dedicated HVSSS to improve service efficiency and access to elective planned surgery and procedures, including operating rooms and pre- and post-anaesthetic care for:
  - Planned Day Only surgery
  - Extended Day Only surgery – length of stay less than 72 hours
  - Short Stay Surgery – length of stay up to 72 hours
- Dedicated planned surgery operating rooms
- Dedicated Hybrid operating room to allow further surgical activity to be implemented at TSH to meet unmet demand, e.g. Interventional radiology, urology, vascular and ERCP activity
- Dedicated endoscopy operating rooms
- Appropriate accommodation for day surgery admissions and post-anaesthetic care, including Stage 2 recovery space
- Co-located pre-admission clinics
- Enhanced peri-operative space, including step down beds/chairs for endoscopy patients that don't require a bed
- Anaesthetics area
- Recovery spaces commensurate with increased operating room capacity, including for the short stay environment
- Adequate storage areas, including for clean and dirty trays
- Point of care teaching facilities
- Replacement of ageing surgical equipment, including new phaco machine
- Improved access to medical imaging (x-ray and ultrasound), including in hybrid theatre and mobile image intensifiers
- Control room adjacent to theatres
- Communications cabinet large enough for expanded services and projected future services

- Replacement of existing ageing computers and additional computers or tablet devices to enable improved 'point of care' data capture: 1x Each Anaesthetic room, 2 Per Operating Room and centralised print/reporting area
- Investigate the use of technology that improves real-time data capture e.g. patient barcode used for time-benchmark capture, and improved product usage capture system that enables staff to easily review data at time of case
- Camera systems and wireless technology require major upgrading
- Consideration of location and capacity of CSSD. Sterilising services function optimally if located on a separate floor, accessed directly by clean and dirty lifts. Otherwise consideration will need to be given to the transport and storage of sterile and used trays
- Increased Outpatient surgical clinics, including:
    - Preadmission clinics co-located with/adjacent to the operating rooms to allow specialist supervision of registrar clinics
    - Admission offices, Assessment and follow up clinics could be located in an Outpatient and Ambulatory Care Centre (it is noted that travel time to wards and theatres would need to be a consideration for efficiency of staff time and emergency requirements).

All these rooms need to be Operating rooms to allow for the level of technology used in the typical HVSSS specialities such as Upper GI, Urology, ENT, and for flexibility of function. The HVSSS unit will ideally be co-located with the operating room suite, with good access to medical imaging and sterilising services required. (If the HVSSS operating rooms are remote from the main operating rooms, consideration needs to be given to the transport and storage of sterile and used trays).

5.1.2 Developing an Outpatient and Ambulatory Care Precinct for non-admitted and community facing activity

Demand for new outpatient and community services is increasing as the model of care shifts towards outpatient and ambulatory services that keep people well in the community for as long as possible.

A purpose-built outpatient and ambulatory care centre would create a "front door" for non-inpatient care, and improve links and ensure connectivity to the surrounding health precinct to better support patient health, their healthcare experience and community expectations and preferences.

Outpatient and ambulatory care precincts can support efficient operational models and new services to respond to the future healthcare needs of the population, creating efficiencies in space requirements and throughput, staffing requirements, staff and patient time. A more integrated patient care pathway and comprehensive, co-ordinated care can be provided, with access to the range of providers and services available in the one place.

New technology in the precinct can support new models of care such as telehealth services, and allow a patient or GP to communicate effectively with health professionals through electronic means such as e-mail, Skype or with SMS results.

Currently, outpatient services are located in disparate areas of the hospital campus, including on Level 2 and 3 of the hospital and in the Southcare and community health buildings, making wayfinding difficult for patients, carers and families.

The dedicated outpatient area within the hospital is too small to allow expansion of clinics, and has insufficient waiting area space for patients with wheelchairs, mobility frames, transport stretchers and prams and strollers, which may block access and cause trip hazards. The overcrowding also increases the likelihood of transfer of communicable diseases. The lack of space available for administrative staff in Outpatients means that a consult room is used for some patient check-ins, further reducing clinic availability. The current set up with separate check in areas is inefficient and can be noisy, and while the Dental reception has a secure glass enclosure, Antenatal and Eye reception has no security.

Our vision for the TSH&SCHS Outpatient and Ambulatory Care Precinct

The development of an outpatient and ambulatory care precinct to create a dedicated 'one stop shop' for outpatient and ambulatory care services, with on-site services that may include outpatient clinics, same day medical services (e.g. minor procedures, and/or infusions), co-located Allied Health Services, ambulatory Mental Health Services, Drug and Alcohol Services, Sexual Health Services, other on site community services such as those provided by Southcare and PICH, Diagnostic Imaging Services, pathology collection, satellite Pharmacy, etc. to provide better integrated and more accessible care for patients. Multi-disciplinary rehabilitation services may also be provided, if not co-located with the rehabilitation inpatient services in a rehabilitation precinct.

Increased access by specialties and disciplines to clinic and ambulatory care space will potentially avoid the need for admission, and allow the introduction of new services currently not available at TSH&SCHS, MDT clinics, rapid access clinics and an increased number of clinics overall to improve equity of access, reduce waiting lists, prevent patient deterioration and increase the Hospital's ability to provide less invasive services. It will also enhance staffing efficiencies, staff security and capacity to grow specialist skill sets, with teaching opportunities for advanced trainees, JMOs and students.

This precinct does not exclude a hybrid model where some services are located in an outpatient and ambulatory care precinct and others may be in clinical speciality pods (e.g. cardiac services, renal services, respiratory and sleep medicine services, surgical services, paediatrics services, obstetrics services, and endocrinology and diabetes services). Cardiology, for example, would ideally be in a discrete precinct with clinics, examination (including for allied health) and procedure rooms and offices and education rooms co-located with the Cardiac Cath Lab for staff, patient and service efficiencies.

Engagement with patients, carers and their families is an important consideration in the planning, design, implementation and evaluation of the Outpatient and Ambulatory Care Precinct and the implementation of new and existing models of care to ensure a "healthy neighbourhood" for all users.

Provision of a flexible design would ensure future-proofing and an ability to change function to suit unanticipated uses with the introduction of new technology or models of care.

Infrastructure Solutions

- Provide a fit for purpose Ambulatory Care Unit within the Outpatient and Ambulatory Care Precinct , e.g. for minor procedures, infusions, intravenous antibiotics, dressings, etc. as a proven admission avoidance model
- Centralise the majority of outpatient services, currently scattered around the campus, in the Outpatient and Ambulatory Care Precinct, with a single point of access for referral and booking appointments, with clear referral processes and criteria, and registration for appointments
- Ensure close adjacency and direct connectivity of the Precinct with the Hospital building:
    - To enable urgent access e.g. for rapid response to PACE calls, emergencies, theatre access, etc.
    - For safe inpatient transfer to ACU
    - For ease of access to other services e.g. Pathology, Medical Imaging, Pharmacy and CSSD for the transport of instruments for sterilisation
    - For efficiency of staff travel time
- Include a variety of outpatient rooms for example:
    - Standard clinic/therapy rooms used for planned speciality clinics
    - Multi-disciplinary clinic/therapy rooms of sufficient size to allow integrated care e.g. accommodating a patient with multi-morbidities, their family members and/or carer as well as multiple practitioners
    - Multi-purpose and multi-function clinic/therapy rooms which could be shared by different specialties/disciplines and allow for point of care teaching and supervision
    - Specialised clinic/therapy rooms, purpose-built for equipment needs e.g. ultrasound, colposcopy, ENT equipment, ophthalmology equipment and testing (including shielding for laser room), allied health, oral health chairs
    - Dedicated urgent access clinic/therapy rooms e.g. for rapid access clinics
    - Group rooms for classes e.g. education programs, family counselling, patient support groups, etc. for Mental Health, Drug and Alcohol, Southcare, Allied Health uses
    - Access to Procedure rooms, e.g. for cystoscopy, Botox injections, dermatology excisions
- Ensure suitable space is provided for:
    - Shared technology enabled teaching spaces (patient, student and staff)
    - Shared technology enabled staff meeting rooms
    - Shared family meeting room/case conference
- Ensure sufficient clinic space/treatment areas are provided for:
    - New and expanded clinics, to reduce the need for ED presentation and/or admission, assist with waitlist reduction, target complex patients, improve clinical outcomes, address current service deficits and allow closer connections for integrated care
    - Co-located Southcare services to ensure continued integration of services
    - A Pathology collection centre to provide a more integrated, centralised and convenient model of care for patients
    - Co-located specialised allied health treatment areas, outpatient rooms, meeting rooms, equipment, storage and office space to promote collegiality and opportunities for multi-disciplinary care and research and education opportunities
    - Dedicated Departmental spaces, e.g. when specialised equipment is required

- Dedicated space for community services based on site, e.g. Southcare, Child, Youth and Family Health, Child and Adolescent Mental Health, Drug and Alcohol, Oral Health, Mental Health, Needle and Syringe Program and DPPHE Sexual Health Services

- Consider adjacencies of clinic spaces, e.g. Endocrinology clinics co-located with Diabetes Education Services and other related clinics e.g. with Obstetrics for women with Gestational Diabetes Mellitus to promote integrated care
- Consider dedicated Departmental spaces. Many Departments and services expressed a preference for dedicated spaces for their service within the Ambulatory Care precinct. These spaces may include for example clinic/therapy rooms, procedure rooms, research laboratories, specimen collection and clinical storage, staff offices, specialised equipment rooms, etc.
- Ensure appropriate dedicated accommodation (office and storage space) for expanded community-based services, including access to computers, Wi-Fi, storage, access to meeting, education and training rooms, to maintain integration of services and ensure close connections with hospital services are maintained
- Consider the provision of a satellite Pharmacy service
- Provide Office space (including hot desks with computer access)
- Ensure sufficient storage space for equipment, drugs, etc. as well as pamphlets, educational materials, promotional materials, etc. on site
- Provide separate service/waiting areas for child and adolescent patients/clients and their families
- Provide appropriate space for disability access, including ground floor disabled access suitable for large wheelchairs, wheelchair accessible corridors, access to disabled toilets with adult change tables
- Consider the needs of the frail elderly and cognitively impaired in the access to and design of the Precinct
- Ensure consideration is given to the expected increase in translational research activity, with increased demand for clinic/therapy rooms, clinical storage, research laboratory, etc., which could potentially be co-located with the Outpatient and Ambulatory Care precinct
- Foster a “healthy neighbourhood” within the Outpatient and Ambulatory Care Precinct
- Due to increased sensitivity to confidentiality for patients with particular health concerns, consideration should be given to discrete entry points to some services e.g. Drug and Alcohol, Needle and Syringe Program and Sexual Health Services
- Consider transport solutions/access to transport to Precinct and parking, particularly for frail elderly and the disabled to facilitate patient attendance
- If the rehabilitation outpatient gym is not co-located in the Rehabilitation Precinct, provide Gym space(s) for allied health, Southcare models and to ensure access to clients of the Mental Health Service
- See section 4.2.2 for further information on new and expanded outpatient and ambulatory services for TSH&SCHS.

Technology Solutions

- Centralised intake and booking for all outpatient referrals to avoid duplication of administrative responsibilities, provide a standardised referral and booking process, enable triaging and to promote information sharing between clinicians and GPs
- Access to online referral forms (potentially as a part of HealthPathways)
- Online booking systems where patients/GPs can register their referrals/details online for an appointment and receive confirmation of registration
- Linking outpatient clinic appointments and addressing ways to communicate well where a patient attends two or more outpatient services
- Waitlist management system to review demand/supply for services and improved reporting/recording of non-attendance

- Self-registration for appointments, integrated with eMR/ Information Patient Manager (iPM) to provide efficiencies for staffing and improved recording
- Patient Paging System that allows patients to wait for their appointment in a nearby location of their choice, e.g. café, and are paged when they are due to be seen by their treating health care provider. This reduces crowding in waiting areas and improves the patient experience
- Consider a shared, dedicated telemedicine facility within the outpatient and ambulatory care precinct to enable outreach to other facilities, consult to GPs and RACFs and allows systems that screen patient's function at home to determine need/triage for appointment
- Technology enabled offices to allow skype for real time assessment, remote monitoring, telephone follow up, advice to community teams, etc.
- Access to teleconferencing and virtual clinic/therapy rooms
- Provide Wi-Fi and ensure reliability and availability across the campus
- Access to shared patient records
- SMS normal results to avoid appointments
- SMS reminders to avoid missed appointments
- Hospital website that contains a Directory of services available, consultant list and selection criteria for referral.

5.1.3 Providing a Rehabilitation Precinct at Sutherland Hospital

Rehabilitation services at TSH are currently provided in spaces no longer adequate to meet demand or allow the introduction of new models of care. There is no opportunity for outpatient or Day Hospital rehabilitation. This constrains efficiency of service provision to meet the demands of a growing and ageing population, or the needs of the higher acuity patients now being managed by TSH rehabilitation services, and hampers the service's ability to deliver the ideal model of care in the right place at the right time.

Our vision for the Rehabilitation Precinct

Development of a Rehabilitation Precinct with co-located inpatient and multi-disciplinary Day Only/Outpatient services would provide a one stop shop for rehabilitation services. This would bring together rehabilitation services currently located in allied health and Southcare to support multidisciplinary interventions and integrated, patient centred care and service the current gaps in outpatient services.

A dedicated Rehabilitation Precinct would also allow improved staff and infrastructure efficiencies, concentration of expertise, better opportunities for education and training and an improved patient journey and experience, with care provided in the right environment tailored to their needs. It would also reduce the inequity of access for Sutherland Shire residents to local outpatient rehabilitation services, particularly for those without transport who cannot access outpatient services currently provided at SGH.

Infrastructure Solutions

This precinct would include co-located:

- Inpatient rehabilitation beds (increased to meet future projected demand) with bariatric capacity (See Table 1)
- Purpose-built rehabilitation day hospital services, a well-established model recommended by the ACI, including physiotherapy, occupational therapy, speech pathology, therapy aides, social work, psychology and admin support officer, to allow:
    - Reduced length of stay for suitable patients and improve throughput on rehabilitation ward
    - Improve whole of hospital flow by reducing outliers in acute beds and reducing wait for rehab beds, with earlier discharge from acute wards to rehabilitation ward or Day Hospital care
    - The provision of enhanced services to meet the current gap in follow up care for rehabilitation patients who are not suitable for community-based services, in particular for stroke patients who have no access to publicly funded outpatient care in the Sutherland Shire
    - Avoidance of inpatient rehabilitation admission for some patients, e.g. from neurology, orthopaedics, aged care, community
- A large, well-equipped gym and treatment area, potentially co-located with the rehabilitation inpatient wards, large enough to provide multi-disciplinary services for inpatient and day hospital patients and cardiac and respiratory rehab groups and accessible to clients of the Mental Health Service
- Allied Health therapy rooms for multi-disciplinary assessment and ongoing care
- Dedicated space for group activity/education
- Associated reception and administration area
- Adequate storage areas (equipment, etc.)
- Outpatient clinic / therapy rooms
- A base for a multidisciplinary in reach rehabilitation service (ART) to acute wards
- Close functional links to Neurology services and Aged Care
- Consideration of drop off/pick up zone for Day Rehabilitation.

5.1.4 Providing an Aged Care Precinct at Sutherland Hospital

The integrated model of care for Aged Care Services at TSH&SCHS involves supporting frail, older people to be managed at home for as long as possible, with community facing services for hospital avoidance and home based care (see section 4.2.8 for further information on these models). When inpatient care is needed, providing timely support for early intervention and management and support for early discharge is required.

It is recognised that not all older people accessing hospital services require aged care services however the need for specialist aged care services is often not immediately recognised, and many older people require "non-acute" aged care services.

To avoid the need for presentation to the ED or admission to hospital, services to manage older people in their own environments (home or RACF) such as the GFS, ASET, and SOS will need to be enhanced. However, when admission is required for the frail elderly or those with dementia, a dedicated, purpose-built environment that caters for both acute and subacute needs will provide the safest, most appropriate care.

For this to be successful and to improve whole of hospital flow, sufficient inpatient aged care beds, with enhanced supporting models for early assessment (ACAU) and behaviour management are essential to meet future demand.

Our vision for the Aged Care Precinct

To meet the future demands for Aged Care services at TSH&SCHS, it is recommended that a purpose-built aged care inpatient precinct be developed, considering the needs of older people and those with dementia and delirium, to create an Aged Care Centre of Excellence. Providing a dedicated and expanded aged care precinct would improve whole of hospital flow by meeting the current and future demand for specialist aged care management and avoid the need for outlier beds on other specialty wards.

It would also ensure earlier assessment and management of patients, earlier discharge planning and a shorter length of stay.

Infrastructure Solutions

- Expansion of the inpatient bed base, specifically designed for aged care, with a mix of acute and sub-acute aged care beds (See Table 1)
- Expansion of the behavioural management unit and creation of a separate discrete area for younger onset dementia patients to maintain the safety of frail, older patients. These patients typically have a longer length of stay and can create access block for acute aged care beds, which in turn can reduce access and flow to acute and subacute beds throughout the hospital
- An 8 bedded purpose-built falls room with high visibility from hallway, close to main nursing station as part of the precinct
- A small gym area (potentially shared with other specialties e.g. neurology) for early intervention to prevent deconditioning and reduce length of stay
- Provision of a family conference room, suitable for end of life discussions, psychiatric liaison consults, etc.
- A dedicated education space for point of care teaching
- Potential relocation of ACAU to be adjacent to ED to ensure the right patient is in the right place and for improved flows
- Ideal physical adjacencies would include proximity to rehabilitation services.

5.1.5 Enhancing Palliative Care at Sutherland Hospital

Specialist palliative care services to the residents of the Sutherland Shire are provided by Calvary Health Care Kogarah (CHCK).

Although the trend in service delivery is towards people having their palliative care services delivered in the community and more people are choosing to die at home, not all people wish to die at home or can be effectively managed in the home environment, e.g. people living alone or without adequate carer support.

Currently there is no access to designated palliative care beds or step-down beds at TSH and the existing infrastructure at TSH does not support current models of palliative care. As a result, many patients requiring uncomplicated end of life care are managed throughout the hospital.

Provision of palliative care beds at TSH would meet the specialised needs of the growing cohort of cancer and non-cancer patients currently managed at TSH who:

- Are not suitable for transfer to CHCK
- Require uncomplicated end of life care
- Have complex nursing as well as major medical problems who are more easily cared for in palliative care beds at TSH
- Are waiting for transfer to CHCK for specialised palliative care
- Are waiting for transfer for palliation in nursing homes or at home, and are otherwise currently occupying acute beds.

Patients that no longer require short term care will be referred to other appropriate care such as return to home with community support, or care in a hostel or nursing home. Appropriate access to Specialist palliative care consultation at TSH will continue as part of the networked service with CHCK, with those patients requiring specialist palliative care continuing to be transferred to CHCK or the CPCT.

Our vision for palliative care beds at Sutherland Hospital

Providing capacity for palliative care at TSH would support contemporary models of care to be practiced and allow experienced staff to work more efficiently and effectively to provide a better patient experience that encompasses the physical, psychological, social and spiritual needs of all patients requiring end of life care.

Infrastructure Solutions

- Address subacute capacity issues at TSH, including access to dedicated palliative care or step-down beds for patients at end of life not requiring transfer to CHCK for specialist care or too unwell for transfer. Currently the end of life care patients who are not suitable for transfer to CHCK for specialist palliative care services occupy the equivalent of 6 acute beds at TSH and this is projected to double by 2031 (See Table 1)
- Maintain specialist palliative care beds and service at CHCK and investigate opportunities to expand the CHCK subacute bed base
- Provide a place for grieving that is private and accessible from the main atrium.

Technology Solutions

- A centralised referral system and database for palliative care for inpatient and community services to improve access and referral for services
- Pathways to fast track admission from ED to CHCK of known patients to prevent acute admission at TSH, e.g. with eMR alerts, CHCK admission criteria
- eMR flags for advanced care plans and ambulance palliative care plans, with links to palliative care service.

5.1.6 Meeting the demand for emergency and acute inpatient services

The recent opening of the new and expanded Emergency Department, including a short stay unit, has improved the capacity for the management of emergency presentations at TSH. The projections indicate that there will be sufficient existing physical capacity for acute inpatients if there are sufficient aged care and rehabilitation beds made available to improve whole of hospital flow and allow "the right patient in the right bed at the right time." However, capital will be required to reconfigure and make these beds fit for purpose to provide recommended models of care, with refurbishment of some existing areas, such as CCM, to meet current guidelines.

Our vision for emergency and acute inpatient services

To better meet future demand from our growing and ageing population, it is recommended to:

- Progressively open and staff unfunded acute beds to increase bed base to meet future demand (ED, critical care and general), improve ward configuration to provide efficiencies and allow new models of care to be implemented
- Critical Care Medicine:
  - Physical space in the unit is lacking and requires further refurbishment:
    - Refurbishment of the 12 'old' bed spaces to meet current health facility guidelines and allow for continued use of these spaces in the future. This would involve converting these 12 bed spaces in to isolation rooms, which includes anti rooms with additional positive/negative pressure as well as the creation of additional 'bariatric 'rooms
    - Additional space to allow for the creation of additional office space that is sufficient and meets standards for current staffing numbers
    - Additional staff Bathroom and break room facilities to support the increasing staff numbers.
    - The unit does not meet college standard for educational spaces for physician training and general education
    - Meeting room is too small for large meetings
    - Family meetings are difficult to hold and video conferencing facilities need to be considered as the demand for remote access is increasing, including family members living overseas
- Neurology:
  - Development of a dedicated neurology precinct to meet increased demand, particularly from the introduction of a thrombolysis service, in order to provide a 24-hour stroke service, reduce outliers, improve whole of hospital flow and improve patient care with earlier intervention. This would include:
    - Standalone Neurology ward with increased inpatient bed base and a larger acute stroke unit- ideally 8 beds with increased telemetry equipment for monitoring existing and future patients in the acute stroke unit
    - Therapy area to provide early intervention and rehabilitation, including small gym and storage area for equipment and a sound proof room for voice therapy
    - A neurophysiology laboratory with appropriate space for equipment, patients and staff, reception desk, preferably co-located with Neurology ward, with access for inpatients and outpatients. This would allow a 5-day EEG service to provide an enhanced service to the community (5-6 patients per day), reduce wear on equipment from moving it constantly and make better use of consultant and technician time
    - Access to group room for education and support groups
    - Doctors room on ward
    - Dedicated nursing and allied health staff
    - Provision of a 24/7 acute stroke thrombolysis service at TSH, to provide local treatment and avoid the need for transfer to St George Hospital

- Respiratory and Sleep Medicine:
  - Create a Respiratory Precinct, which would include:
    - Provision of a dedicated respiratory ward
    - Creation of a Close Observation Unit model within the existing bed base for acute respiratory failure patients requiring non-invasive ventilation, with 3 beds (capable of flexing to 6 in times of need), fully equipped with Bi-PAP and Hi flow, skilled staff and adequate staff to patient ratio (1:3 nursing). This will reduce length of stay for respiratory failure patients in ED and relieve demand on critical care beds, resulting in improved access to critical care beds when required and reduced outliers on other wards to improve whole of hospital flow
    - Lung function laboratory, sleep services, co-location of pulmonary rehab, asthma education, and potentially smoking cessation education
  - Explore options for a publicly funded outpatient sleep medicine clinic and laboratory for respiratory failure and other complex patients, in collaboration with paediatrics, to:
    - Help improve management of complex patients and reduce admissions for patients with acute/chronic respiratory failure
    - Improve access for Sutherland Shire residents and avoid lengthy wait lists at SGH
    - Provide teaching and training opportunities for advanced trainee accreditation

- Cardiology:
  - Create a cardiology precinct, which spans from the current Yarrabee ward to the Sutherland Heart Clinic. This would include:
    - Increased cardiology bed numbers commensurate with demand
    - Appropriately sized, structured and resourced dedicated cardiology clinic area, with specialty equipment including treadmill and echo machine
    - Dedicated chest pain assessment unit in 4 bedded area for patients referred from ED (likely same day discharge)
    - Dedicated cardiology rehab gym – could potentially be part of an expanded rehab outpatient gym with designated area
    - Patient lounge area and communal staff area

- Paediatrics:
  - Increase funded capacity to 6 beds for Special Care Nursery (including suitably trained nursing staff and additional JMO support). May need specialised equipment such as Hi-Flow, and support in education and enhancement of nursing, medical and allied health staffing and skills
  - Provide enhanced management of eating disorders with 2 funded beds for a growing cohort of paediatric eating disorder patients who have an extended length of stay (3-4 weeks) and require intensive nursing (1:1) support, to support the outpatient service. Care needs to be multidisciplinary and requires nursing, mental health, social work and dietician support. It is expected this program will generate increased presentations to CARS and outpatient clinics requiring medical staff, CNC, dietician and physiotherapist
  - Provide increased capacity for CARS service (within the bed base in the ward area) and the inclusion of a multipurpose room within this space and access to procedure room
  - Provision of an equipment pool and storage for consumables such as dressings, tubes, etc. and equipment for families who would otherwise need to source from SCH
  - Short stay unit dedicated beds in Paediatrics to reduce length of stay and ED presentations

- Mental Health:
  - Investigate the potential for a short stay unit on a medical ward for assessment of patients presenting with mental health problems who do not fit the EDSSU criteria
  - Improved communal facilities

- Drug and Alcohol:
  - Drug and alcohol to provide a specialised service for local residents with complex substance use issues and an equitable pathway for care if appropriately subsided with hospital activity based funding
  - Provide space for the Drug and Alcohol Service consultation and liaison CNC and the drug and alcohol Chemical Use in Pregnancy CNC within hospital footprint
- Consideration of dedicated beds for specialties including:
  - Infectious diseases beds for optimal patient care and reduced length of stay, with appropriate medical support
  - The endocrinology service requires a comprehensive, integrated acute inpatient service, with an increased funded endocrinology bed base to improve patient management, provide skilled nursing staff and staff efficiencies
  - Renal beds to provide a skilled workforce to care for patients
  - Increased access for Ophthalmology surgical beds
- Consider expansion of bed/chairs for RADIUS as a proven admission avoidance model, and expansion of the general medicine service to manage the increasing cohort of people with complex long-term conditions
- As a flow on effect from an increased bed base and larger ED and Outpatient Services, there will be increased need for:
  - Clinical support services, such as Allied Health, Pathology, Diagnostic Imaging, Pharmacy and an expanded foot print for equipment, storage and staffing will need to be considered, with consideration of important adjacencies to ED, operating rooms and wards
  - Corporate services, such as cleaning, linen, food services, maintenance, etc.

5.1.7 Improving Diagnostic Services capacity

As with any increase in projected activity, particularly operating rooms, ED, inpatient and outpatient services, there will be a substantial flow on impact on the demand for diagnostic services (including workforce, equipment, technology and space). Any delays in access to diagnostic services will have an adverse effect on the rest of the services provided by the hospital.

Demand for diagnostic imaging services is increasing as it plays a critical role in disease prevention, early detection and treatment of patients. The medical imaging department is currently expanding into a refurbished space in the old ED space, providing space for 2 CT systems and 4 dedicated US rooms and expanded waiting bay spaces, however there is limited office space or patient and staff amenities.

Our vision for TSH Diagnostic Services

Recommendations to meet the future demands for diagnostic services at TSH, to improve equitable access to services and an improved, safer experience at TSH for Sutherland residents include:

Service Solutions

- Medical Imaging:
  - A second CT scanner is urgently required to manage volume of work and downtime of existing machine, allow the introduction of the thrombolysis service and to perform cardiac CTs. A second CT is planned to be operational in 2019, which will allow new models of care to be introduced
  - Provide an MRI machine on site at TSH to reduce delays in diagnosis, treatment and discharge; reduce length of stay; avoid some admissions; enhance patient safety and satisfaction and provide care locally
  - Conversion and installation of full field digital general X-ray rooms to meet capital sensitivity requirements and improve radiographer efficiency by an estimated 50%
  - Replacement of existing Mobile X-ray machine with a wireless DR System to increase timeliness of films to ED and critical care areas which impact on the ETP targets
  - Provide improved Angiography / interventional services in MID to avoid interventions in operating theatre or the risks of transferring unstable patients to SGH
  - Provide allocated cardiology time for the CT scanner
  - Increase ultrasound facilities from 4 to 6 rooms to accommodate demand, with a further 2 US systems
  - Provide mobile image intensifiers x-ray units in high usage areas e.g. ED, ICU
  - Provide increased inpatient holding area to support patient flow into clinical rooms and recovery bays in MID
  - Provide office space
  - Increase storage space
  - Provide changing facilities for patients and bathroom facilities for both patients and staff members or spaces to manage outpatients pre and post examination/intervention
- Nuclear Medicine:
  - Provide a new SPECT-CT in a refurbished space (underway) with close adjacencies to medical imaging, ED and theatres

- Pathology:
  - Increase provision for Point of Care Testing access throughout the acute areas of the hospital such as ICU, Theatres, Maternity, including Special Care Nursery, and Ambulatory Care
  - Provision of a collection service in a new outpatient and ambulatory care precinct, with close functional links with the laboratory
- Emergency Department:
  - Provide an extra point of care high end ultrasound machine to meet demand (total 2)
- Ophthalmology:
  - Provide appropriate space and equipment (2 endoscopes) for acute care service
- Respiratory:
  - Consider the provision of a publicly funded outpatient sleep medicine clinic and laboratory for respiratory failure and other complex patients, in collaboration with paediatrics, in order to:
    - Help improve management of complex patients and reduce admissions for patients with acute/chronic respiratory failure
    - Improve access for Sutherland Shire residents and avoid lengthy wait lists at SGH
    - Provide teaching and training opportunities for advanced trainee accreditation
  - Ideally the Sleep Lab and Lung Function Lab should be co-located within the hospital footprint
- Neurology:
  - Provision of a second EEG machine to allow prolonged EEG testing and enhanced access to services
  - Provision of a second NCS/EMG machine to allow neurophysiology fellowship training
  - Increase telemetry equipment for monitoring existing and future patients in 8 bedded acute stroke unit
- Obstetrics and Gynaecology:
  - increase outpatient colposcopies to meet predicted demand due to changes to the cervical screening guidelines
- Paediatrics:
  - Investigate potential for Paediatric EEG at TSH (currently sent to SGH)
- Surgical Services:
  - Increasing the theatre capacity requires more imaging, including in a hybrid theatre and an additional mobile x-ray and ultrasound.

Infrastructure Solutions

- Medical Imaging:
  - The Medical Imaging Department (MID) should have close adjacency with ED and critical care, with a potential for a satellite service within / adjacent to theatres
  - Need to redesign MID department to improve patient flow, facilities, enhance current equipment and incorporate increased space for trolley bays, CT, MRI and DSA
  - Need to consider separate flows for outpatients and inpatients in department design
  - Department design need to allow space for expansion for new technologies
  - Adequate support space needs to be considered, e.g. for recovery, reporting, equipment storage, Ultrasound sterilising area, drug storage, reception and waiting areas, bathrooms (patient and staff) and office space
  - Allocated space within ED, critical care, theatres and wards to support parking of imaging equipment and access to IT systems to facilitate image processing and distribution in a timely manner
  - Improved ICT solutions with wireless connectivity across the organisation

- Nuclear Medicine:
  - Future service and equipment implementation require significant consideration of the siting of equipment, floor loading, radiation shielding, dedicated supply and discharge of gases, heating, ventilation, and air conditioning and power

- Pathology:
  - Enhanced collection rooms to meet appropriate guidelines and compliance to support patient privacy and safety needs and adequate space for collections and storage. The collection services would need to maintain close functional links with the laboratory via an upgrade of the pneumatic tube system
  - Increasing provision for PoCT access throughout the acute areas of the hospital such as ICU, Theatres, Maternity including Special Care Nursery, and Ambulatory Care to provide direct access to critical patient results
  - A contemporary designed laboratory to improve laboratory workflow and improve result turnaround times, positioned in the acute areas of the hospital to provide direct access, including for massive transfusion and Point of Care Testing support
  - Adequate provision of space to accommodate any pre-analytical technologies, receipt of samples and storage
  - Staff amenities to support the 24/7 pathology service
  - A dual staff meeting / staff training room
  - The use of digital morphology to capture, store and transfer images within NSW Health Pathology to provide support for routine morphology services along with real time access to specialist consultation and opinion when required.

Workforce Solutions

Ensure staffing is commensurate with increased load and hours of service. See individual consultation reports for suggested staffing requirements.

5.1.8 Enhancing research and education infrastructure on campus

Currently, there is little research identity or infrastructure to support research on the TSH&SCHS campus:

- Research hubs or environments or laboratories on campus are not fit for purpose
- There is little opportunity for collaborative research activity, and research is siloed around the campus
- There is no direct research support available on campus or clinical trials capacity other than what clinicians achieve within their own resources and time.

Similarly, educational resources are limited:

- Clinical teaching space for medicine is limited, with existing demountables overcrowded and alternative venues, e.g. rooms at Southcare, must also be used for teaching purposes
- There is minimal access to point of care teaching spaces or meeting rooms
- Staff education spaces are at capacity
- Clinic rooms are at capacity and there are insufficient clinics to meet JMO training requirements.

Our vision for Research and Education

Infrastructure solutions are required to demonstrate a commitment to research and education on campus for the long-term and improve and promote collaboration, (interdisciplinary and inter specialty) to provide opportunities for multi-disciplinary research and excellence in education. This includes consideration of the co-location of new research and education facilities.

For Research

- Create a purpose-built Research Institute on campus in a prominent location to establish the critical space/mass/identity for research to thrive on campus (consider assistance of community-based funding)
- Provide research precincts, laboratories, venues, hubs, networks and alliances on campus in an integrated and collaborative environment. Virtual and physical. It is noted that most research at TSH&SCHS will require dry labs and appropriate office space
- Ensure any external funding is quarantined for research and research infrastructure
- Consider physical relocation of SESLHD Research Office (Ethics and Governance) to TSH&SCHS campus to complete a spectrum of safety and quality, improvement and innovation, workforce development and research support with area wide capacity supervised from a TSH&SCHS hub as is currently the case for improvement and innovation. Aligned with the SESLHD Research Strategy 2017-2022, innovation and research will be supported at each SESLHD facility in a co-ordinated and collaborative partnership
- Consider co-location of iiHUB and Safety and Quality Units for collaborative research for improved patient care and outcomes
- Consider creation of space for research in the proposed Outpatient and Ambulatory Care Centre for recruitment and assessment of outpatients for research and to provide opportunities for collaborative research, improve communication and sharing of information and knowledge, and prevent duplication.

For Education

- Provide access to increased fit for purpose education spaces, adequately equipped with Wi-Fi, audio-visual communications, etc.
- Provide appropriate point of care educational spaces
- Consider an education hub, with the co-location of skills lab, auditorium, educational room, Clinical School tutorials room etc.
- Provide meeting room for medical staff handover, training and confidential meetings, etc.
- Improve educational facilities for JMOs: require dedicated teaching spaces (point of care and larger groups) and Simulation Lab
- Increase equipment available e.g. mannequins for life support training
- Provide a larger computer room and computers for staff training. Could be shared by other disciplines e.g. for HETI online training
- Provide a second large education space (auditorium or training room) for up to 100 people to meet demand
- Provide increased office space for education staff
- Enhance Library facilities to allow improved access to resources and facilities for research and education for staff and students
- Consider using the Library as a meeting place e.g. for Journal Clubs, staff education (use of Endnote, CIAP, etc.), GP collaboration.

Technology Solutions

- Ensure education and research spaces are adequately equipped with Wi-Fi, audio-visual communications, videoconferencing, etc.
- Support readily accessible information systems (SESLHD and University)
- Invest in contemporary education/training software
- Provide video equipment to allow videoing of simulations and education sessions for use by after-hours staff
- Consider a SharePoint site as a single point of access for staff educational material
- Replace ageing data projectors
- Provide ICT support for educators in use of new technologies and programs
- Provide more upgraded computers for workforce training.

5.1.9 Mental Health facilities

Mental Health Units ideally should provide safe and therapeutic, recovery-oriented care in the least restrictive environment. The built environment has great influence on the mental health of a patient. Providing a pleasant environment is crucial, while maintaining a facility that is secure and safe for patients, visitors and staff.

Our vision for Mental Health Services on the TSH&SCHS campus

Mental Health Service clinicians have identified that an increased footprint for Mental Health Services is needed.

Infrastructure Solutions

- For inpatients:
  - Enhanced outdoor areas
  - Enhanced rehab gym space or access to outpatient rehab gym
  - Potential for a short stay unit on a medical ward for assessment of patients with mental health problems who do not fit the EDSSU criteria
  - Consideration of the provision of two funded Paediatric beds for a multidisciplinary eating disorders service, which is currently provided in outpatients
- For staff:
  - Meeting rooms and offices
- For outpatients:
  - Increased access to outpatient clinic rooms to provide increased capacity for ambulatory (outpatient) Mental Health Services and reduce demand on acute inpatient and ED services, (see Table 1), as part of a purpose-built and easily accessible Outpatient and Ambulatory Care Precinct with:
    - Separate services/ wait areas for child and adolescent patients/clients and their families
    - Access to education and group rooms in ambulatory (outpatient) community settings
- Provision of additional CT and MRI services at TSH would avoid difficult patient transfers for all specialties in TSH including patients of the Mental Health Service.

5.1.10 Community Health Facilities

In order to keep people well and out of hospital, an expansion of community-based services will be required. Currently, services are provided on campus at Southcare, Health One, at the Caringbah Community Centre on campus and within the hospital building in Mental Health, or in Community Centres at Engadine and Menai, as well in locations leased from local council for early childhood nursing services.

Our vision for our Community Health Facilities

Infrastructure Solutions

- Refurbishment of the Engadine and Menai Community Centres would be required to accommodate new outreach services and staff to provide place based care in the future, e.g. a hub and spoke model for oral health, enhanced Aboriginal Health Services, Child, Youth and Family Services and new integrated care models. Existing agreements for rental spaces from Council will continue to be negotiated to allow care closer to home for our community.

- An Outpatient and Ambulatory Care Precinct on campus would provide:
    - Space for expansion of campus based community services (Southcare, PICH, DPPHE and Mental Health) and better integration of care with other hospital outpatient services
    - A base for community services, with access to office space, computers, meeting, education and training rooms, and adequate storage space for educational material and equipment

- Fleet car parking space would also need to be considered with safe and easy access for staff.

Technology Solutions

- A centralised information management and technology system would promote information sharing between clinicians and GPs
- A centralised referral service with a single point of access for referral and booking appointments
- Telehealth services to support people at home to avoid attending in person where possible
- SMS reminder system for appointments
- Consider the needs of community-based services to improve access to data and provide efficiencies e.g. in-car access to eMR, Wi-Fi enabled Tablets
- Mobile phones and tracking system for community staff to enhance safety.

5.1.11 Garrawarra Centre

Current facilities at the Garrawarra Centre are no longer fit for purpose or meet best practice guidelines. The four cottages which house up to 30 residents (currently at 26) hold twice the number of recommended patients required in order to reduce interactions and physical conflict. There is insufficient space and amenities such as single rooms with ensuites, family conference space to allow for privacy and personal space, service / treatment rooms and therapy areas for physiotherapy sessions.

Our vision for the Garrawarra Centre

- Refurbish or redesign a purpose-built facility to provide appropriate accommodation for existing resident numbers, and capacity to meet future demand which will meet current guidelines, enhance the patient experience and meet community expectations (see Specialist Mental Health Service for Older People model[165])
- There is potential to create a dementia "village" within the existing grounds, with recognisable community spaces and enhanced sensory gardens – based on international best practice models
- A new facility would require smaller units (accommodating up to 15 residents) with single room accommodation for residents. Design would need to be dementia specific, incorporating visual cues, with smaller cottages interlinked with sensory gardens and multi-sensory environments to reduce agitation and create more diversional recreation space and a more home like environment
- Smaller spaces for communal areas need to be considered to divert behaviours
- Rooms would need to be acoustically modified, with durable fittings and fixtures
- Fittings and fixtures under rigorous wear and tear require constant repair and would benefit from being refit/ rebuilt in line with state-of-the art dementia high care environments.

5.1.12 Other capital implications

Environmental Sustainability

The development of new infrastructure at TSH&SCHS provides an opportunity to consider how we can minimise our impact on the environment and reduce the greenhouse gases we produce. All new buildings should consider environmental solutions to reduce emissions and environmental actions need to be supported by the organisation and staff. Consideration needs to be given to:

- Ensuring sustainability in all business practices
- Focusing on waste management and minimisation across the campus
- Developing a culture of environmental sustainability to support waste minimisation, sustainable procurement and a reduction of power and water consumption.

Appropriate infrastructure for bariatric patients

In 2016/17 there were 74 inpatients coded with a primary or secondary diagnosis of obesity at TSH. These patients are more complex than other patients with a very high average National Weighted Activity Unit (NWAU) (2.73 compared to 1.20), a significantly longer average overnight length of stay (10.9 days versus 4.4 days) and had a requirement for 3 beds. They are admitted for a variety of reasons (for example diseases and disorders of the circulatory and respiratory systems, endocrine, nutritional and metabolic diseases and disorders, etc.) and therefore may be accommodated throughout the hospital.

While it is noted coding of obesity may be an unreliable measure, it is likely the data for TSH reflects an underestimate of the number of morbidly obese patients treated at TSH.

As the prevalence of obesity in the Sutherland Shire is increasing and this trend is expected to continue, it is considered prudent for the redevelopment to provide special rooms (spread throughout various wards, intensive care unit and the ED) to accommodate morbidly obese patients at TSH.

In addition, these rooms could be used by:

- Other bariatric patients (i.e. very tall patients)
- Noisy or disturbed patients
- Rooming-in of relatives
- High dependency patients
- Patients requiring privacy
- Patients with a lowered resistance to disease or infection.

Infrastructure suited to adolescents and young adults

Care of adolescents and young adults in hospital differs from those for adults. With an increasing number of children transitioning into adult care the space required may need to include:

- Family centred care
- Use of decor to create a positive environment that is as non-institutional as possible
- An indoor area (e.g. an adolescents and young adults centre) where adolescents can use to meet with their peers/ friends, watch TV, listen to music or play games
- General principles around greater delineation of paediatric and adult zones:
    - Promote the separation of traffic flows between patients and the public (including where possible the separation of adult and paediatric traffic flows)
    - Separate and improved patient zoning for paediatric and adult patients. i.e. dedicated paediatric environments specialised to the treatment, care, and management of paediatric patients
- Provide space (can be shared) for education and group activity.

Design fit for older patients

Consideration needs to be given to the specific needs of older patients. Mobility and balance difficulties as well as vision and hearing impairment are common characteristics of older patients that should be catered for in facility design. The unfamiliar hospital environment and disruption of life-long routines and habits are significant sources of stress. To lessen the impact of these factors design should consider:

- Providing good visual access so consumers can see everywhere they need to go
- Maximising penetration of natural light and, where possible, views
- Ensuring sufficient storage for mobility aids such as walking frames, wheel chairs, and lifters
- Discouraging long corridors as they cause echoes and orientation difficulties that may confuse the elderly
- Creating clear hospital wayfinding and signage with appropriate contrasting colour, lettering size and font type, and other orientation cues
- Ensuring enough space for walking with mobility aids as well as rest areas
- Providing parking and drop-off areas with limited distance to major entrances and seating.

It is suggested dementia specific guidelines[166] be used in designing patient areas including the outpatient, community-based and inpatient areas.

Accommodating people with disabilities

Many people (including patients, clients, visitors and staff) attending the TSH&SCHS campus have disabilities. They may face barriers to everyday activities such as hearing what is said, seeing small print, climbing stairs and understanding signage. Many environmental barriers can be avoided, and capital planning should be informed by the *NSW Health's Disability Inclusion Plan 2016-2019*. [167]

While the Australian Health Facility Guidelines contain an extensive list of references to ensure disabled access, some requirements are not as apparent. For example, consumer feedback has highlighted the need for adult changing places, [168] which will assist people with severe disability and their carers attend several appointments on one day, improving delivery of service and patient care.

Culturally appropriate care and physical environments

It is suggested that all care and physical environments should be culturally appropriate. Specific actions in the detailed capital planning process could include:

- Ongoing involvement of the Aboriginal community and/or Aboriginal Health Unit in planning committees, particularly at the stage of facility design and interior decorating and maintain this involvement and engagement with the same people/ organisations from the start/design phase
- Provide an Aboriginal room for patients, families and carers within the acute campus, and include an additional culturally safe space for Aboriginal patients within an outpatient setting, given the likely increased demand for specialised outpatient services
- Improve signage throughout the buildings on the campus acknowledging the traditional owners of the land
- Use of Aboriginal designs/plaques and flagpoles to acknowledge the traditional custodians on which the hospital is built. This is an important visual reminder that the campus is a 'culturally safe place' to visit, and provides a welcoming environment for people to access services
- Where possible posters and/or art depicting Aboriginal culture or Aboriginal specific information can further assist to ensure the Aboriginal patient feels welcome and can assist to ensure an appropriate length of stay for any treatment received
- Refurbishing the Chapel to provide a safe, quiet and welcoming space for all faiths, easily accessible to patients and their families and staff.

Consideration also needs to be given to funding sources and accommodation options to enable relatives/families who travel long distances the opportunity to reside close by while their family member is in hospital.

Providing a safe and healthy workplace

"SESLHD is committed to maintaining a safe and healthy working environment for workers and visitors to NSW Health facilities and services, in accordance with Work Health and Safety legislation, Codes of Practice and Australian Standards.

Our workers are anyone who carries out work for SESLHD, including employees, volunteers, contractors (including agency staff and Visiting Practitioners), subcontractors, the employees of contractors and subcontractors, students, trainees and apprentices. SESLHD will consult with workers and their representatives on health, safety and welfare matters to ensure that our work health and safety risk management is a continuous process that is of the highest standard.

We will take all reasonable actions to prevent injury and illness from occurring. SESLHD will also consult, co-operate and co-ordinate activities with other organisations, as far as possible, where there is a shared duty of care concerning the same workplace health and safety matter, for example where other businesses are located on a hospital campus. Incidents will be reported to WorkCover NSW in accordance with the law." [169]

There is an imperative to ensure staff safety across the campus. Work, health and safety priorities should be reflected in the facility planning process. Priorities may include: ensuring the precinct provides safe access and egress; adequate storage, including adequate room for manual handling aids and secure storage for hazardous chemicals; non-slip surfaces that are easy to clean; lighting that is appropriate for the work to be undertaken; and the facility's design meets 'crime prevention through environmental design' standards including no hiding/concealment places, appropriate access control, appropriate barriers between public and private areas, appropriate lines of sight for staff; and ready access to mechanisms for summoning assistance, e.g. duress alarms and rapid access to an appropriate duress response.

Improved balance of single and multi-occupancy rooms

It is recommended the redevelopment includes an improved balance of single and multi-occupancy rooms throughout all inpatient areas. In addition, the provision of carer zones to allow carers to stay overnight in some single rooms has been shown to have benefits for patients, carers and staff.[xxiv]

Increasing the number of single rooms[170] has been found to:

- Reduce the rate of cross infection and transmission of infections between patients. This is particularly the case for long stay patients who tend to have high levels of multi-resistant organisms
- Decrease the number of patient transfers between beds and wards
- Reduce the length of stay
- Increase patient privacy
- Decrease noise level and sleep disturbances
- Improve patient satisfaction and sense of control
- Decrease medication errors
- Provide opportunity to commission carer zones in single rooms across the new facility.

Conversely there are sound reasons for having multi-occupancy rooms including:

- Reduce falls for patients requiring supervision
- Decrease sense of loneliness and isolation
- Lower capital costs.

Increased storage

In terms of capital planning a key theme raised consistently throughout consultation from many staff working in a variety of areas was the lack of storage. Any new development must thus ensure there is sufficient storage for equipment, goods and supply for an efficient hospital operation.

Included in this is the need for an appropriately sized delivery area with adequate parking for a range of vehicles.

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xxiv As part of the Blacktown and Mount Druitt Hospitals Expansion Project (Stage 1) almost 60 unique carer zones were commissioned in single rooms across the new facility. The carer zones were created directly in response to consumer feedback during design and provide dedicated facilities for a patient's carers or relative to stay overnight. See URL: http://www.bmdhproject.health.nsw.gov.au/WWW_Blacktown/media/Media/Files/Fact%20Sheets/Blacktown-Hospital-Carer-Zone-Information-Sheet.pdf

Ensuring capacity of the Mortuary

Consideration needs to be given to increasing the capacity of the Mortuary, in line with hospital bed increases and population growth, particularly of the increasing ageing community. Currently in the winter months it is already exceeding its capacity for 15 patients (assuming none are bariatric).

Staff Amenities

In terms of capital planning, challenges associated with the number and location of offices and staff facilities across the range of disciplines was raised consistently throughout consultation from many staff working in a variety of areas. This includes adjacencies to clinical space. Many staff expressed the need to be co-located to enable professional support and better co-ordination of their roles and workload within the increasingly desired multi-disciplinary team approach.

Any new development must ensure there is sufficient office space, meeting rooms and staff facilities for the efficient operation of clinical services. Ready access to parking also needs to be considered, as well as end of trip facilities such as improved access to staff showers, to support the capacity for staff to walk or cycle to work.

On consultation, suggestions included a Doctors room on ward, dedicated office space for consultants and medical support staff, space for students and allied health assistants within the department, i.e. clinic and workstation space, access to group room for education, a co-located meeting room for medical staff handover, training and confidential meetings, etc. and a meeting space for private/confidential meetings for staff. Refurbishment of JMO rooms and associated amenities was also considered a priority.

Library Services

Library services are an integral part of education, training and research at TSH&SCHS and can contribute to staff wellbeing. The Library therefore needs to be in a convenient and easily accessible location for all staff, including for afterhours access.

The current space does not allow for expansion or flexibility to meet the needs of employees and students. Improvements suggested include a central service desk for Librarian, meeting space for staff and students, access to training rooms and study rooms/spaces, communal area for staff interaction, break out space to allow conversations in the Library, and provision of hot desks for visiting staff, staff without computer access or for short term staff use.

Other requirements include Wi-Fi access and up to date IT, including audio-visual equipment and smartboards, providing a social media presence for Library, removal of firewalls to enable online learning and access to University libraries, additional data base access, e.g. for Elsevier, Allied Health and Nursing databases, additional computers for student use and a Library intranet page with links to library databases and other resources.

Corporate services implications

Corporate Services supply a wide range of non-clinical services that support the effective operation of clinical services across the TSH&SCHS campus, and any redevelopment needs to consider the increased demands that will be placed upon these services.

Consideration would need to be given to:

- Adequacy of existing power plant for new building or services, e.g. MRI. An extra generator would be required to support more services
- New contracted services would have to factor in the increased activity/requirements from any new building, e.g. increased linen, waste, cleaning, servicing of equipment, extra deliveries (food, linen, etc.)
- Warehouse and receiving Dock capacity with adequate storage for the additional supplies required and waste produced and service vehicle parking
- Engineering services, e.g. electrical, fire systems, generators, water systems, air conditioning, medical gases, etc. and ensure compatibility of systems across the campus
- Review of the roads and access to the dock in new building footprint
- Extra security/security cameras for new areas
- Provision of dedicated service lifts and utility rooms in new building for storage of dirty linen, waste etc. and space for cleaning equipment to avoid inefficient travel times
- The location of the Cashiers Office in a new outpatient and ambulatory care precinct, as well as the site and facilities required for 24-hour Switchboard services
- Increased access to parking for staff and patients in an enlarged facility.

Master Planning

Master planning and capital planning will identify the location of major components of infrastructure such as outpatients and ambulatory care, aged care precinct, rehabilitation day hospital, operating theatres, etc.

Non-asset strategies (including Public Private Partnerships) may also be considered. The District currently has a number of successful partnership arrangements where independent providers and the District are working together with the private or non-government sectors as a means of improving access, quality and cost of delivery of care.

5.2 Capital Implications Summary Table

Quantifying the impact of scenarios on future bed and space requirements is detailed in the table below.

Table 1: Current and future space requirements

Clinical Description	2018 Physical Beds	2018 Average Available (funded) Beds	Projected 2020/21	Projected 2025/26	Projected 2030/31
Aged Care Inpatient					
Acute Aged Care	46	46	74	79	85
Subacute Aged Care	19	19	31	33	39
Other Subacute Inpatient					
Overnight Rehabilitation	25	21	51	55	62
Day Only Rehabilitation	0	0	4	4	5
Palliative Care	0	0	10	11	12
Interventional/procedural suites					
Operating Theatres	6	6	8	10	10
DSA Suite	0	0	1	1	1
Recovery	14	10	17	22	22
Ambulatory and Outpatient					
Clinic / therapy rooms			66	71	77
Mental Health			20	20	22
Support Services	Equipment	Equipment			
Medical Imaging					
X Ray	3	3	3	4	4
CT Scanner	1 (2 in 2019)	1	3	3	4
MRI Scanner	0	0	1	1	1
Fluoroscopy	1	1	1	1	1
Angiography	1	1	1	1	1
Ultrasound	3	3	4	5	6
Nuclear Medicine					
SPECT/CT	0	0	1	1	1

Note: Aged care current bed numbers are based the proportional split of patients on the ward coded as acute or subacute

Beyond 2031

The time horizon for this Plan extends to 2031. However, the life of the redevelopment will extend well beyond this timeframe. Therefore, it is suggested, in keeping with the campus master planning, sufficient space is provided around high cost infrastructure to allow for future technological requirements and reconfiguration of services.

Staged commissioning

It is noted that the future space requirements (refer Table 1 above) will have a phased opening based on the incremental growth in activity and to ensure matching to recurrent funding.

The commissioning timeline will be documented in the capital planning phase of this project.

5.3 Scenario projections

Base case projections are a requirement of the NSW Government for capital projects. The base case projections are sourced from the NSW Ministry of Health's HealthAPP projection tool. The projections take account of population growth and ageing and patterns of disease but assume models of care and patient flows remain unchanged. Specifically, the projections use historical trends (15 years) of hospitalisation and projected population growth and structure to project future hospital admission rates and length of stay by age group, sex, Local Government Area of residence and clinical specialty. It also applies various assumptions (e.g. public/private mix, proportion of urgent versus non-urgent activity, hospital of treatment) to develop the base case projections. Scenario modelling is also a Ministry of Health (MoH) requirement for all capital projects, and is a process of analysing possible future events and considering alternative possible outcomes to the base case, which must be quantifiable in terms of separations and/or length of stay.

Inpatient Scenarios

- Revising trends for acute and rehabilitation services to account for the introduction of thrombolysis
- Establishing a day only rehabilitation service
- Improving access to aged care beds, including creating a discrete unit for younger onset dementia patients
- Revising trend analysis for palliative care

Scenario Outcomes

- Improve whole of hospital flow
- Relieve demand on acute beds by ensuring patients are occupying the right bed at the right time
- Improve bed utilisation by releasing capacity (including beds, staff and other resources)
- Improve capacity to manage acute strokes
- Enable the provision of a multi-disciplinary one stop shop for rehabilitation services
- Increase capacity to provide palliative care on site

Ambulatory Care Scenarios

- Establishing new clinics to meet gaps in services
- Increasing capacity of admission avoidance services e.g. rapid access/crisis clinics and more community based activity
- Increasing capacity to provide new models of care e.g. more multidisciplinary clinics and nurse or allied health led clinics
- Increasing capacity of services to provide care that is anticipatory and predictive

Scenario Outcomes

- Provide an improved patient experience and staff satisfaction with a dedicated 'one stop shop' for ambulatory care services
- Allow for greater collaboration and integration between clinical disciplines
- Improve the management of patients with long term conditions
- Provide an appropriate care setting as an alternative to inpatient admission or ED presentation
- Care that is anticipatory and predictive
- Improve equity of access

Operating Theatre Scenarios

- Revising trends to account for:
  - Additional surgeons
  - New of models of care (interventional bronchology, shift for less complex paediatric ENT being delivered locally)
  - Restricted surgical activity due to lack of availability and ageing infrastructure
  - Best practice guidelines for cataract surgery

Scenario Outcomes

- Improve access to planned surgical services and reduce the wait list
- Improve operating theatre efficiency by streaming short stay patients away from the complex and unplanned activity
- Improve capacity to provide more surgical services locally for interventional radiology, urology, vascular etc
- Improved training opportunities for advanced trainees and/or registrars

5.3.1 Scenario Operating Room Projections

Assumptions

The projections for operating rooms used the following assumptions:

- Data source: Baseline case numbers (mapped to Enhanced Service Related Group – ESRG) and average room duration sourced from Surginet (2017/18 data)
- Assumptions:
  - Planned theatres operate 240 days per year, 8 hours per day, at 80%
  - Emergency theatres operate 365 days per year, 12 hours per day at 65%
  - Balance of planned surgical activity (considered complex planned surgery) streamed to separate theatres
  - Included provision for dedicated theatres to accommodate specialised fixed equipment and technology
- Projection methodology:
  - Mapped Surginet cases to inpatient projections by ESRG and type of case (emergency and elective). Source: HealthAPP
  - Applied projected growth rates of TSH's inpatients by ESRG and urgency of admission to number of Surginet cases
  - Multiplied the projected cases by average room duration (by ESRG and type of case (emergency and elective))

The following scenarios were developed that increased the number of theatres required, these are:

- Respiratory medicine introduced a new model of care (interventional bronchology) and are doing more procedures than previously (as evidenced in the recent growth in surgical/procedural data for respiratory medicine). The scenario assumes increasing their capacity by an additional session per week (i.e. 4hrs) multiplied by 48 weeks, divided by average case duration. The additional procedures were mapped to 244 Bronchoscopy
- TSH has recently acquired two new colorectal and general surgeons. The scenario assumes increasing capacity by an additional session per week (i.e. 4hrs) multiplied by 48 weeks, divided by average case duration. The additional procedures were mapped to 411 – Breast surgery, 439 – Colorectal surgery and 449 – Other upper Gastrointestinal Tract (GIT) surgery.
- There is a significant paediatric tonsillectomy wait list at TSH (12 months at TSH and 2 years at SCH). The clinicians indicated that there is a shift for less complex ENT being delivered locally rather than at SCH. The scenario assumes increasing their capacity by an additional session per week (i.e. 4hrs) multiplied by 48 weeks, divided by average case duration. The additional procedures were mapped to 481 Tonsillectomy or Adenoidectomy
- There is a 12 month wait list for cataracts. It is best practice to have both eyes completed within a 12-month period to reduce the risk of falls. The scenario assumes increasing their capacity by an additional session per week (i.e. 4hrs) multiplied by 48 weeks, divided by average case duration. The additional procedures were mapped to 503 Glaucoma and Lens Procedures
- Due to lack of available theatres, a range of procedures that previously were performed at SGH will be reversed back to TSH for Sutherland shire residents. These are: 521 Cystourethroscopy, 522 Urinary Stones and Obstruction, 523 Trans Urethral Resection of the prostate, 529 Other Urological Procedures, 531 Vein Ligation and Stripping and 539 Other Vascular Surgery Procedures
- There is a significant wait list for outpatient endoscopies. The scenario reduces the extended wait list. The additional endoscopes were mapped to the 161 – Diagnostic colonoscopy, 162 – Diagnostic gastroscopy
- There is currently a lack of theatre access for obstetrics and gynaecology. The scenario improves access for caesarean births and to meet demand for gynae-endoscopy procedures for those needing endometriosis screening by increasing their capacity by an additional session per week (i.e. 4hrs) multiplied by 48 weeks, divided by average case duration.

Table 2: Projections for operating room cases, Sutherland Hospital, 2016/17 to 2030/31

Data	2017/18	2021	2026	2031	17/18 – 2030/31 (AAGR)
Inpatient	7,044	10,375	10,482	10,986	3.5%
Outpatient	1,733	2,188	2,371	2,454	2.7%
Total	8,777	12,563	12,853	13,440	3.4%

Source: Surginet, FlowInfo V17.1, HealthAPP

Table 3: Projections for operating rooms, Sutherland Hospital, 2020/21 to 2030/31

	2021	2026	2031
Planned	5	6	6
Procedures	1	2	2
Emergency	2	2	2
Total	8	10	10

Source: Surginet, FlowInfo V17.0, HealthAPP
Note: All theatre projections have been rounded up.

5.3.2 Scenario Acute Projected Activity

ACUTE AGED CARE

Assumptions

Uses NSW Health's HealthAPP projection tool

- Accounts for state-wide populations projections, epidemiological, clinical practice and technological
- Revised trend analysis to account for the significant increase in activity since 2015/16 onwards for many specialities.

Note

Several scenarios were created as there has been significant increases in acute activity in more recent years from 2015/16 onwards, particularly for neurology, cardiology, respiratory medicine, urology, renal medicine, ENT and other select ESRGs which has not been adequately reflected in the base case projections. Constrained surgical activity due to limited theatre availability has also limited growth over the period. Flow reversals (from SGH back to TSH) were also modelled for Sutherland Shire residents for the following specialities: stroke and TIA and those residents that arrived via ambulance (to SGH) for the other neurology ESRGs. This activity is being reversed for the introduction of thrombolysis and the future change in the ambulance matrix. Other flow reversals were also modelled for Sutherland shire residents (SGH back to TSH) for low complexity surgical/procedural activity such as plastic and reconstructive surgery (ESRG 513), vascular surgery (ESRGs 531,532,539) and urology (ESRGs 521,522,523,524,529).

The rate of decline in the projected average length of stay was also considered too significant in some SRGs where more recent data (previous 5 years) showed the rate of decline has slowed. This is consistent across peer group hospitals. The average length of stay was thus adjusted for 13 SRGs. The scenario still predicts a reduction in length of stay (and efficiencies are modelled in length of stay through the projected period) but the rate of decline is more moderate and consistent with recent data.

The acute aged care projections are outputted by SRG/ESRG which makes it difficult to identify aged care patients as the patients are coded across many specialities. To identify acute aged care, the scenario acute aged care projections have been subsequently mapped from SRG to Admitting Medical Officer (AMO) speciality based on 2016/17 and 2017/18 averaged proportions. The critical care bed days (ICU/HDU, coronary care) were also removed from the projections before the mapping occurred. **It is important to note the base case projection for aged care is 72 beds required by 2031. With the above scenarios included the scenario aged care projection increases to 85 beds required by 2031.**

The data indicates that around 61 beds are occupied by acute aged care patients (excluding subacute aged care patients) with only 65 aged care beds available in total (including both acute and subacute beds).

Table 4: Scenario projections for acute aged care inpatient activity, Sutherland Hospital 2014/15 to 2031

Data	2014/15	2015/16	2016/17	2021	2026	2031
Separations	2,619	2,777	2,754	3,468	3,800	4,181
Bed days	17,007	19,589	18,970	22,898	24,626	26,244
Average length of stay	6.5	7.1	6.9	6.6	6.5	6.3
Beds	55	63	61	74	79	85

Source: NSW MoH HealthApp (projections), HIE

5.3.3 Scenario Subacute Projected Activity

SUBACUTE AGED CARE

Assumptions

Uses NSW Health's HealthAPP projection tool

- Revising trend analysis to reflect a more reasonable projected average length of stay for geriatric evaluation management
- Adjusting the relative utilisation for psychogeriatric care to account for the increasing numbers of younger dementia patients presenting with behavioural issues and constrained activity due to lack of available beds
- Adjusting the maintenance care projections to reflect the proportion of activity undertaken on the aged care ward.

Note

The data below captures geriatric evaluation management (GEM), maintenance care and psychogeriatric care. The data has been combined in the data table below as this is the mixture of patients that is seen on the aged care wards. A relatively small amount of palliative care is also undertaken on the aged care wards but this activity is reflected in the palliative care projections.

GEM activity is sourced from ESRG 902 rehabilitation – other overnight and is adjusted to take into account a small proportion of projected activity is under rehabilitation. The average length of stay was also adjusted (for GEM) from the base case to reflect a more reasonable projected average length of stay (from 18.7 days base case to 9.1 days scenario). The historical data shows consistent trends for GEM, with the length of stay remaining around 8 to 9 days in the previous 7 years and is predicted to remain broadly similar in the future.

Most of maintenance care activity occurs in the aged care wards but some activity does occur outside aged care. On average for maintenance care, 74.3% of separations and 74.1% bed days occur on the aged care wards with the rest distributed across other acute beds in the hospital, this has been reflected in the historical and projected data below.

Psychogeriatric care activity has been constrained over the projected period due to the lack of beds and predictably the average overnight occupancy is 100%. The relative utilisation was adjusted for all age groups with the largest increase for the 45-69 age group as the clinicians noted the increasing numbers of younger dementia patients presenting with behavioural issues. These younger patients often have long length of stay due to the complexity of their issues, and require ongoing comprehensive multidisciplinary approach to manage their care. The department would like to expand the bed base to create a discrete unit for younger onset dementia patients.

Table 5: Scenario projections for subacute aged care inpatient activity, Sutherland Hospital 2014/15 to 2031

Data	2014/15	2015/16	2016/17	2021	2026	2031
Separations	599	479	549	974	1,076	1,275
Bed days	6,252	5,376	6,030	10,131	10,827	12,545
Average length of stay	10.4	11.2	11.0	10.4	10.1	9.8
Beds	19	16	18	32	34	39

Source: NSW MoH HealthApp (projections), Flowinfo V17.0

In summary, it is projected that aged care will require an additional 59 beds by 2031 (from 65 beds to 124 beds) which is a significant increase however, there are substantial outliers for aged care patients who currently occupy on average 80-95 beds with only 65 dedicated aged care beds available. Predictably the average overnight occupancy is 100% for the two aged care wards and 90% for the aged care assessment unit which is similar to the Medical Assessment Unit (MAU) short stay model.

REHABILITATION

Assumptions

Uses NSW Health's HealthAPP projection tool

- Accounts for state-wide populations projections, epidemiological, clinical practice and technological
- Establishing a day only rehabilitation service
- Reversing flows from SGH to TSH for Sutherland shire residents for day only and overnight activity to enable care closer to home
- Reverses flows for stroke patients from SGH to TSH for the introduction of thrombolysis.

Note

A scenario was created to establish a day only rehabilitation service to support earlier discharge and reduce readmissions. It is planned that Sutherland Shire residents accessing day only rehabilitation at SGH will be reversed back to TSH. In addition, with the introduction of a thrombolysis service at TSH, this will have significant impact on the proposed day only and overnight rehabilitation service.

There has also been significant growth in Sutherland shire residents accessing day only rehabilitation services at SGH that has not been adequately reflected in the projections and current data supersedes the projections. To better reflect the increase in activity, the projected relative utilisation for Sutherland Shire residents was adjusted (increased) for the following ESRGs: 842 – rehabilitation stroke – sameday, 895 – rehabilitation other orthopaedic – sameday, 901 – rehabilitation other – sameday. The relative utilisation was also increased for overnight stroke (for Sutherland shire residents) as the current 2016/17 data supersedes the projections. The outpatient clinics that rehabilitation currently provide will also be moved into the admitted day only rehabilitation service to enable the provision of a multi-disciplinary one stop shop for rehabilitation services (and subsequently removed from NAP projections).

In addition, in regard to ESRG 902 rehabilitation – other overnight. This activity is mostly geriatric evaluation management (GEM) activity but a small proportion of projected activity is for rehabilitation. This has been reflected in the projections.

Table 6: Scenario projections for inpatient rehabilitation activity, Sutherland Hospital, 2014/15 to 2031

Stay Type	Data	2014/15	2015/16	2016/17	2021	2026	2031
Day Only	**Separations**				961	1,079	1,219
	Beds/space				3	4	4
Overnight	**Separations**	631	589	521	938	1,084	1,158
	Bed days	9,343	7,817	8,210	16,515	18,065	20,275
	Average length of stay	14.8	13.3	15.8	17.5	16.6	17.5
	Beds	28	24	25	51	55	62

Source: NSW MoH HealthApp (projections) Flowinfo V17.0, OrBiT (NAP activity)
Exclusions: ED only, ESRGs 897 and 898 are excluded in the data as these patients are routinely managed on the cardiac and respiratory wards

PALLIATIVE CARE

Assumptions

Uses NSW Health's HealthAPP projection tool

- Accounts for state-wide populations projections, epidemiological, clinical practice and technological changes
- Revising trend analysis to include most recent inpatient activity.

Note

The scenario was developed to take into account recent improvements in the recording of palliative care data. The recording of palliative care data has improved from 2016/17 and has continued into 2017/18. The base case projections are based on pre-2015/16 data and therefore the improvements are not reflected in the base case projections. The current utilisation data supersedes the 2021 base case projections.

Table 7: Scenario projections for overnight palliative care subacute inpatient activity, Sutherland Hospital, 2014/15 to 2031

ESRG	Data	2014/15	2015/16	2016/17	2021	2026	2031
Palliative Care – Cancer Related	Separations	13	20	122	286	298	326
	Bed days	109	184	908	2,392	2,471	2,652
	Average length of stay	8.4	9.2	7.4	8.4	8.3	8.1
	Beds	0	1	3	7	8	8
Palliative Care – Non-Cancer	Separations	34	29	85	217	284	322
	Bed days	152	171	489	1,066	1,154	1,321
	Average length of stay	4.5	5.9	5.8	5.8	5.6	5.4
	Beds	0	1	1	3	4	4

Source: HealthAPP, HIE, FlowInfo v17.0
Inclusions: patient flag=subacute, version 5.0 ESRG
Exclusions: ED only
Beds required is based on a 90% occupancy

5.3.4 Mental Health Projected Activity

Projections were modelled for the Sutherland Shire population using the National Mental Health Service Planning Framework (NMHSPF) V2.1, for Mental Health beds. The data was provided by the MoH Mental Health Branch. The estimates in this Framework are based on a standard population of 100,000 people, not specific to the Sutherland community profile.

Care is modelled across providers and settings and care profiles are based on an adequate level of care (not premium), i.e. not only public Mental Health Services. Any analysis of gaps must therefore take this into account. It is important to note when considering the projections that a number of services are networked, including:

- Child and Youth is a networked service with SCN and the Illawarra Shoalhaven Local Health District (ISLHD)
- Intensive Care Unit is a networked service based at POWH
- TSH provides a networked service for inpatient Adult Mental Health Rehabilitation.

The modelling, when compared with current services, suggests gaps in the number of residential services provided to Sutherland residents – both non-acute 24 hour support and subacute services.

Because these are not hospital based, they have not been included in the Capital Implications Summary Table (Table 1) within this document. Further to this, Table 1 does not include the Mental Health inpatient beds at TSH due to the focus for the development of Mental Health Services being on outpatient and community services and these being part of a District network.

The projections (Table 8) are included here as a reference point for future planning, in particular with regard to future negotiations for residential based services.

Table 8: Projections for mental health beds, Sutherland Hospital, 2021 to 2031

Stay Type	Data	2021	2026	2031
Acute	Perinatal and Infant Mental Health (Hospital)	1.4	1.4	1.4
	Child and Youth (0-17 years) (Hospital)	2.9	3.0	3.1
	Intensive Care Unit (Hospital)	6.0	6.2	6.4
	Adult (18-64 years) (Hospital)	18.6	18.7	19.1
	Older Adult (65+ years) (Hospital)	4.3	4.8	5.3
	Older Adult (65+ years BPSD) (Hospital)	1.9	2.1	2.3
	Sub Total	35.0	36.2	37.7
Non Acute	Older Adult (Hospital/Nursing Home Based)	13.0	14.7	16.1
	Adult and Older Adult (24-hour support) (Residential)	25.7	26.3	27.2
	Intensive Care Service (Hospital)	5.8	5.9	6.1
	Intensive Care Service – Older Adult (65+) (Hospital Based)	1.3	1.5	1.6
	Sub Total	45.9	48.4	51.1
Subacute	Subacute Older Adult (65+ years) (Hospital)	5.1	5.7	6.3
	Rehabilitation – Adult and Older Adult (Residential)	6.2	6.5	6.8
	Step Up/Step Down – Adult (Residential)	4.3	4.3	4.4
	Subacute Intensive Care Service (Hospital)	0.9	0.9	0.9
	Step Up/ Step Down – Youth (Residential)	0.1	0.1	0.1
	Sub Total	16.6	17.6	18.6

Source: National Mental Health Service Planning Framework (NMHSPF) V2.1, Build 4.0.6, 1 May 2018. Provided by the MoH Mental Health Branch.

5.3.5 Scenario Non-Admitted Projections

Note

Baseline used 2017/18 data sourced from OrBiT, cross-checked with EDWARD data supplied by Performance Unit, SESLHD Mental Health Services, SESLHD Primary and Integrated Community Health and Centre for Oral Health. Mapped IHPA Series 2 Clinics to inpatient SRGs. The growth rate applied is the scenario growth rate.

Scenarios were developed from numerous clinical consultations, with additional advice and/or clarification provided by the Planning Advisory Group and Executive Steering Committee.

In total nearly 70 scenarios (see Table 12) were considered, with the majority aiming to improve access to care, and were broadly grouped into the following:

- Addressing unmet demand
- Establishing new clinics
- Enhancing existing services
- Fostering multidisciplinary clinics

Table 9: Scenario projections for non-admitted patients, 2017/18 to 2031

	2017/18	2021	2026	2031
OPD activity on the TSH campus				
Occasions of service	176,004	262,172	279,798	304,226
Service events	108,494	183,500	196,876	216,533
NWAU 17	3,940	7,233	7,814	8,674
Clinic / therapy rooms		86	91	99
Off TSH campus (including Community Health / Home Based Service)				
Occasions of service	164,346	209,689	225,011	244,806
Service events	97,752	123,425	133,788	147,391
NWAU 16	3,304	4,265	4,677	5,230

Sources: OrBiT, cross-checked with EDWARD data supplied by Performance Unit, SESLHD Mental Health Services, SESLHD Primary and Integrated Community Health and Centre for Oral Health, HealthAPP and inpatient scenario projections, clinician's advice and Victorian Health space requirement benchmarks

Note: Service event projections were based on rate of service events to occasions of service by IPHA Clinic Type in 2017/18. NWAU projections were based on average NWAU per service event by IPHA Clinic Type in 2017/18.

Exclusions: Non-admitted activity accounted for in other settings including: medical imaging, nuclear medicine, day surgery, procedure rooms, pathology, emergency department and pharmacy.

5.3.6 Scenario Subacute Projected Activity

MEDICAL IMAGING

Assumptions

- Projections segmented by inpatients/outpatients and by modality
- The outpatient projections are based on the availability of 10 hours per day and 240 days per year and the inpatient projections are based on the availability of 12 hours per day and 365 days per year
- 85% occupancy is applied
- Average procedure times were provided by the medical imaging.

Note

The existing infrastructure (space, equipment and technology) is inadequate to cater for the existing demand and therefore has impacted on the growth of MID. There is a limited angiographic service due to ageing and inappropriate equipment, unable to meet demand for ultrasound, old technology for x-ray which impacts on efficiency and lastly the lack of MRI on site impacts on efficiency, patient safety and contributes to increased cost.

MRI projections are based are on the assumption that 3 patients per day are referred to SGH and approximately 6 patients per month are referred to private radiology. In addition, the introduction of thrombolysis will have a significant impact on medical imaging. MID noted that on average stroke patients may need up to 4 CT scans and TIA patients may need 1 CT scan and 1 ultrasound.

Table 10: Projected medical imaging examinations, Sutherland Hospital, 2017/18 to 2031

Data	2017/18	2021	2026	2031
General X ray	29,353	30,877	32,618	34,459
CT Exams*	20,363	23,729	25,642	29,215
Ultrasound Exams	6,750	8,570	10,540	12,659
Fluoroscopy	2,026	2,174	2,345	2,521
Angiography	100	119	142	170
MRI*	792*	959	1,161	1,406
Mobile Exams	9,334	N/A	N/A	N/A
Total	62,895	66,427	72,448	80,431

Source: RIS

* The actual number of CT scans in 2017/18 is 14,480 with 5,760 estimated activity (3 patients per hour *240 days) the second CT will generate. The second is due at TSH in 2019

Table 11: Projected medical imaging room requirements, Sutherland Hospital, 2017/18 to 2031

Data	2017/18	2021	2026	2031
General X ray	3	3	4	4
CT Exams	1 (2 in 2019)	3	3	4
Ultrasound Exams	4	4	5	6
Fluoroscopy/Angiography	1	1	1	1
MRI	0	1	1	1
Total	9	12	14	16

Source: RIS, SESLHD Strategy and Planning Unit (methodology)

Appendix 1: Health Services Plan Development process

Health Services Planning

The Health Services Plan documents the vision and outlines the full complement of health and support services and other requirements for the proposed redevelopment to ensure health services align with changing patterns of community need and expectations and contemporary and emerging models of care, and that the most effective use of available and future resources is made.

Development of the Health Service Plan involved literature searches of other high performing health systems and contemporary evidence based models of care, consultation with staff and other key stakeholders, data extraction and analysis and investigation of pertinent information to inform the:

- Demand and supply of current and future health and support services
- Scenario modelling to identify:
    - Anticipated system/service improvements via new models of care such as diversion of inpatients to non-admitted settings, implementation of a thrombolysis service at TSH, implementation of a rehabilitation day only service at TSH
    - Changes to patient flows (e.g. future plans of other public hospitals in SESLHD and their networked services, and private hospitals)
    - Unmet demand and how this could be reduced
    - Role of other service providers (e.g. GPs)
- Quantifying the impact of scenarios on future bed and space requirements.

The Health Services Plan can then be used to inform capital planning.

Scope of this Plan

A range of services delivered by or in partnership with the TSH&SCHS have been considered to inform this Plan's service priorities and recommendations to meet the needs of the community until 2031. These include:

- Outpatient and Ambulatory Care services
- Care provided in the community
- Surgical services
- Aged Care services
- Subacute care services
- Diagnostic imaging
- Other services as identified by the Executive Steering Committee and Planning Advisory Group

The Plan aligns with and references strategic plans (refer to Appendix 5 Other Key Government Priorities and Appendix 6 SESLHD's Strategic Framework) and a range of other plans including the 2014 Sutherland Hospital Clinical Services Plan that informed the recent redevelopment of a new ED and inpatient beds.

Analysis of current health and care activity includes:

- Residents of the Sutherland Shire cared for by TSH&SCHS and other public and private hospitals
- Residents from beyond the Sutherland Shire cared for by TSH&SCHS
- The continuum of care from population and primary health care, outpatient and/or community health / home based services through to inpatient services.

The timeframe for the Plan is to 2031.

Governance framework for the Plan

The governance framework, approved by the Executive Steering Committee, was designed to:

- Define a set of principles to guide the Health Services Plan
- Deliver a consistent and robust approach to generate quality planning outcomes
- Enable decision making throughout the project
- Establish a transparent authority framework to manage planning
- Ensure strong and genuine clinical and non-clinical engagement
- Provide opportunities for community partners, community members and consumers to be engaged, informed and participate in the redevelopment of the campus
- Complement roles of partners and other hospitals and facilities in the area and
- Support the realisation of the vision of the SESLHD Research Plan 2016 – 2021 and the St George and Sutherland Medical Research Foundation.

Roles and Responsibilities

- The Executive Sponsor for this Plan is Valerie Jovanovic, General Manager, TSH and Garrawarra
- An Executive Steering Committee was established to provide strategic advice to the development of the Plan and on opportunities and gaps to inform the clinical services planning within a health system context
- A Planning Advisory Committee reporting to the Executive Steering Committee was responsible for overseeing the Plan, driving the development of the models of care, scenario modelling and change management.

South Eastern Sydney Local Health District's Strategy and Planning Unit, reporting to the Director of Planning, Population Health and Equity, supported the development of this Plan, including:

- Drafting a Background Paper
- Undertaking literature reviews, data analysis, scenario modelling
- Conducting consultation
- Drafting the Plan
- Submitting the Plan for endorsement.

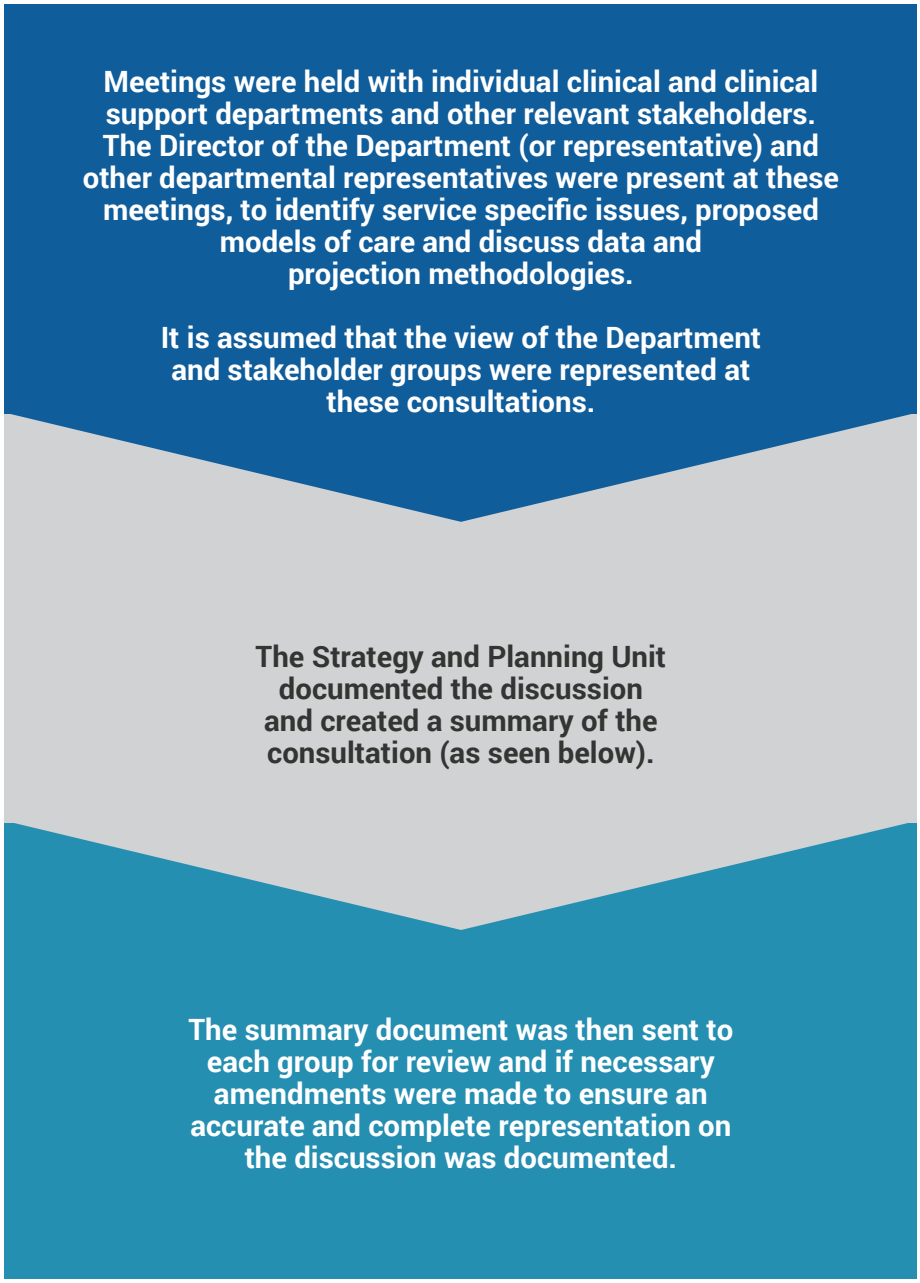
Governance Committees

Executive Steering Commitee		
Membership	Name	Role
Director Programs and Performance (July-September, 2018)	Mark Shepherd	Chair
General Manager, TSH and Garrawarra Centre	Valerie Jovanovic	Deputy Chair/Chair
Director Operations, Mental Health Service, Acting Chief Executive	David Pearce	
General Manager, SGH	Leisa Rathbone	
Director, Planning, Population Health and Equity	Julie Dixon	
Director, Primary, Integrated and Community Health	Greg Stewart	
Executive Director, Medical Services (July- August, 2018)	Jim Mackie	
University of NSW	Prof Michael Grimm	
NSW Ministry of Health	Jacinta George	
Consumer/Community Representative	(as required)	
Senior Health Service Planner	Alison Sneddon	Executive Officer
Health Services Planner	Wendy Uptin	Secretariat

Planning Advisory Group		
Membership	Name	Role
General Manager, TSH and Garrawarra Centre	Valerie Jovanovic	Chair
TSH&SCHS Clinical Council Representative	Dr Manisha Narasimhan	
Director, Clinical Services Medical TSH&SCHS	Dr Justine Harris	
Director, Nursing and Midwifery Clinical Services TSH&SCHS	Joanne Newbury	
Acting Nurse Facility Manager Garrawarra	Jan Heiler	
Nursing / Midwifery representative TSH	Maggie White	
Nursing / Midwifery representative TSH	Therese Sorensen/ Tracey Rea	
Allied Health representative TSH	Karleen Dumbrell	
Allied Health representative TSH	Elise Klumpes-Grant	
Medical representative TSH	Dr Con Archis	
Medical representative TSH	Dr Phil Conroy	
Surgical representative TSH	Dr Phillip Malouf	
Emergency Department Representative TSH	Dr Andrew Finckh	
Medical Imaging representative TSH	Karen Fisher	
Director of Corporate Services TSH	Katerina Volas	
A/Director of Finance TSH	Luke Coombes	
Service Line Manager TSH	Vicki Weedon	
Service Line Manager TSH	Auriol Carruthers	
Mental Health Service representative TSH	Evelyn Chandler	
Deputy Director, Primary, Integrated and Community Health	Tony Jackson	
Deputy Director, Planning, Population Health and Equity	Christopher O'Reilly	
Deputy Director ICT	John Straker	
Aboriginal Health representative	Samantha Knight Gifford	
Consumer and Community representative	Peter Lewis	
Consumer and Community representative	Virginia Hughes	
Primary Health Network representative	Dr Owen Brookes	
General Practitioner representative	Dr Mary Beth McIsaac	
NSW Health Pathology representative	Dr Peter Taylor	
NSW Health Pathology representative	Ingrid Solomons	
SESLHD Senior Health Service Planner, DPPHE	Alison Sneddon	Alternate Chair
SESLHD Health Service Planner, DPPHE	Wendy Uptin	Secretariat

Appendix 2: Consultation

The following process was followed to inform the development of the Departmental Consultation Reports.



Consultation List

Sutherland Hospital and Sutherland Community Health Services Consultation	
Aboriginal Health	Medical Imaging
Aged Care (inpatients)	Medical Workforce
Allied Health	Mental Health Service
Cancer Services	Neurology
Cardiology	NSW Health Pathology – Sutherland laboratory
Child, Youth and Family Health Services	Nuclear Medicine
Community Services – Older People	Nursing and Midwifery Executive
Consumer Advisory Group	Obstetrics and Gynaecology
Corporate Services	Ophthalmology
Critical Care Medicine	Oral Health
Disability Strategy Unit	Orthopaedics
Diversity Health Services	Paediatrics
Drug and Alcohol Service	Palliative Care – CHCK
Emergency Department	Pastoral Care
Endocrinology	Pharmacy
ENT	Practice and Workforce Capability Service
Finance	RADIUS
Garrawarra Centre	Rehabilitation
Gastroenterology	Renal Medicine
General Practice	Research
ICT	Respiratory and Sleep Medicine
iiHub	Sexual Health Services
Infectious Diseases	Southcare
Integrated Care – HealthOne	Surgical Services
KRC Outreach	TSH Executive
Library Service	TSH Information and Feedback Sessions
Medical Education	Workforce Services

Other SESLHD Entities consultation
Mental Health Service District Executive
Calvary Health Care Kogarah
Directorate of Primary, Integrated and Community Health
Directorate of Planning, Population Health and Equity
Information Management Services

External Consultation
Central and Eastern Sydney Primary Health Network
Community Members
NSW Health Pathology
NSW Ministry of Health, Mental Health Branch
Sutherland Shire Council

Many individuals have been consulted with or have provided comments. These include:

Aaron Berkery
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Alison Fowler
Alison Sneddon
Alys Swindlehurst
Amy Bloomfield
Amy Waters
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Jon Straker
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Julia Martinovich
Julie Dixon
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Lisa Hatton
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Nha Nhi Sisvanh
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Nicky Bennie
Nicole Marchisone
Nicole Wedell
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Partasarathy Shamugasundaram
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Wendy Mull
Wendy Uptin
Winston Liew
Yvette McKenna

Aboriginal Health

SCOPE OF SERVICES

The Sutherland Aboriginal Health service is managed within the Diversity Health portfolio, reporting to the Department Heads of Social Work at St George and Sutherland Hospitals.

There is one Aboriginal Hospital Liaison Officer (AHLO) working across St George and Sutherland Hospitals. The Aboriginal Hospital Liaison Officer (AHLO) works closely with the SESLHD Aboriginal Health Unit. Aboriginal Health services provided to the Sutherland Hospital campus include hospital liaison with a focus on social and cultural care, and linking patients and families to local and other appropriate services.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - The majority of referrals at TSH are for Sutherland Shire residents, with some orthopaedic patients and paediatric ENT patients having planned surgery from out of area
  - Demand for community based and outpatient services remains high, due to:
    - Growth of Aboriginal population in the Sutherland Shire
    - Demographics include higher percentages of youth and children
    - Earlier age at onset of chronic/long term conditions and aged care needs
  - Injuries are now increasingly seen. In Australia in 2011-2015, they were the second leading cause of disease burden for Aboriginal and Torres Strait Islanders and external injuries were the third leading cause of death, accounting for 15% of deaths
  - The leading causes of injury were:
    - Intentional self-harm
    - Motor vehicle accidents
    - Accidental poisoning
    - Assault
  - Mortality of Aboriginal males was twice the rate for Aboriginal females and injury hospitalisation rates have increased almost 40% since 2005
  - Alcohol and substance use has been found to be factors in suicide, transport accidents as well as assaults
- **Operational description**
  - Aboriginal Health services and programs serving the Sutherland Shire community include:
    - Aboriginal Hospital Liaison Officer (AHLO) for St George and Sutherland Hospitals. The current employee is a female. Types of assistance requested of the AHLO include social and cultural support, accommodation for family visiting from out of area, transport and other financial issues and to provide information about hospital services. Referrals are also made to other Aboriginal health services
    - Southern Sector 48 Hour Follow Up – 'Just calling to have a yarn' for post discharge support
    - Bulbuwil 'Healthy Living' – An Aboriginal Healthy Lifestyle Support Program
    - Narrangy-Booris – Aboriginal Early Childhood and Midwifery service
    - Aboriginal Health Education Officer – Chronic Care Services
    - South East Aboriginal Health Care (SEAHC) –Integrated Care Service SESLHD Supplementary Services Program for Aboriginal and Torres Strait Islander people. Care Co-ordinators and Aboriginal Health Outreach workers work with the client's Doctor to help co-ordinate client care, organise and communicate with appropriate health providers and may be able to assist with financial assistance for specialist appointments, transport to medical appointments and medical equipment

- Cultural Healing through Paint and Colour – A culturally specific art therapy program for Aboriginal and Torres Strait Islander patients to undertake whilst being hospitalised which aims to improve health outcomes, reduce patient stress and anxiety and to improve the patient journey through the healthcare system

- The majority of referrals to the Aboriginal Health service come from within the hospital wards and specialty areas, outpatient services, Preadmission clinics, Mental Health Service, social work, community and self-referral
- Networking occurs within the services with close links with Diversity Health co-ordinators. The AHLO service is shared across the St George and Sutherland sites
- Role delineation: Level 4 Aboriginal Health services
- Hours of operation are dependent on staff availability, and AHLO time allocation is split between St George Hospital and The Sutherland Hospital

- **Activity**
  - In 2017/18 there were 226 inpatient separations at TSH for people identifying as Aboriginal and Torres Strait Islander, with 79% being residents of the Sutherland Shire. It is recognised that this may be an undercount as some people do not choose to identify or identification is not recorded. The Aboriginal Liaison Officer recorded 226 consultations
  - In 2016/17 (Source: CaSPA FlowInfo v. 17, including day only and excluding ED only)
    - 54% of Aboriginal and Torres Strait Islander admissions were female and 46% male
    - People aged 70+ represented approximately 9% of separations for Aboriginal and Torres Strait Islanders, as opposed to approximately 40% for non-Aboriginal people, reflecting the differences in ageing populations
    - Obstetrics and neonates provided the highest numbers of separations
    - Sutherland shire residents also accessed services from other hospitals, most notably private hospitals, Sydney Children's Hospital network and St George Hospital

- **Models of care**
  - Within Sutherland Hospital, the model of care is an Aboriginal Liaison Service model

- **Staffing**
  - 1 FTE AHLO covering St George and Sutherland hospitals.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - There is a growing Aboriginal population within SESLHD, particularly in the Sutherland Shire
  - There is unmet demand not fully explored for Aboriginal people
  - Many Aboriginal people, particularly women, are multigenerational carers, which limits their own access to services

- **Constraints on activity**
  - Models of care have limited Aboriginal perspectives, of particular note was the importance of increasing the focus of 'older age related' services having age-specified criteria and not recognising the earlier onset of conditions with Aboriginal clients
  - Many Aboriginal and Torres Strait Islander people find health service organisations – including hospitals– unwelcoming. Negative experiences can lead to reluctance to access services, disengagement with clinicians and care in these settings, and high rates of discharge against medical advice. These, in turn, affect health and wellbeing. (Wardliparingga Aboriginal Research Unit, 2017)
  - There is no culturally appropriate space available across the campus for culturally specific activities and gatherings for both small and larger groups
  - Activity is constrained by a lack of human resources and space. Expansion of the service and reorienting mainstream services remain a priority

- **Accommodation for families**
  - Patients from regional areas often need additional assistance with accommodation. There are very restricted options in the TSH local area
- **New clinics/ services**
  - Any additional clinics would be subject to staffing and infrastructure requirements
  - KRC Outreach is commencing services for Aboriginal people
  - A Drug and Alcohol program is starting with a co-ordinator for Aboriginal services and consumer workers.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Maintain and foster strong relationships with Aboriginal specific services and acute and community based services (e.g. Drug and Alcohol, Oral Health, Women's Health, Child and Family, Integrated care), Mental Health and DPPHE Sexual Health Services
  - Work in Partnership with Aboriginal people to enable the health service organisation to identify priorities, understand cultural beliefs and practices, and involve Aboriginal and Torres Strait Islander people in determining their own health priorities
  - Foster relationships with CESPHN to provide more accredited GPs and better links/collaboration with Aboriginal Health services:
    - Improve pathways between HealthOne and local accredited GPs
    - Promote shared care arrangements between SESLHD Aboriginal Health services and Sutherland Shire GPs
  - Continue ongoing engagement and involvement of the Aboriginal community and/or Aboriginal Health Unit in planning committees, particularly at the stage of facility design and interior decorating and maintain this involvement and engagement with the same people/ organisations from the start/design phase
  - Consideration needs to be given to funding sources and accommodation options to enable relatives/families who travel long distances the opportunity to reside close by while their family member is in hospital
  - Consider provision of a community bus service to provide transport for appointments, treatment, etc.
  - Consider use of Library resources and spaces
  - Engage SESLHD executive to address institutional racism and how the organisation can address Aboriginal people feeling anxious about how they will be treated
- **Infrastructure solutions**
  - An overarching strategic approach is required across SESLHD for culturally appropriate spaces:
    - Use of Aboriginal designs/plaques and flagpoles to acknowledge the traditional custodians on which the hospital is built. This is an important visual reminder that the campus is a 'culturally safe place' to visit, and provides a welcoming environment for people to access services
    - Display Aboriginal artwork and cultural artefacts or interactive display depicting Aboriginal culture or Aboriginal specific information to assist Aboriginal patients feel welcome and have an appropriate length of stay for any treatment received
    - Provide an Aboriginal room for patients, families and carers within the acute campus, and include an additional culturally safe space for Aboriginal patients within an outpatient setting, given the likely increased demand for specialised outpatient services
- **Staffing solutions**
  - Increase FTE of AHLO staff and address gender mix
  - Promote role of Aboriginal consumer workers.

Aged and Extended Care including Southcare and Inpatient Services

SCOPE OF SERVICES

Southcare is a centre of excellence for integrated health care, offering inpatient, outpatient, respite and community based services predominantly for frail older people and those with disabilities and chronic disease living in the Sutherland Shire. To support and allow advancement in the integration of hospital and community services, a range of services are co-located in the Southcare building, situated on the grounds of the Sutherland Hospital.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - People of all ages can access care from Southcare outpatient and community services depending on particular service eligibility criteria, however the majority of consumers are aged 65+
  - Inpatient wards predominately care for the frail elderly and those with dementia
  - The major drivers for activity are:
    - The growing aged population with increasing acuity and complexity of illnesses
    - Changing the focus of care to community based activity
    - The introduction of ED avoidance models
    - Increasing hospital in the home/ambulatory care type activity (e.g. for IV antibiotics, wound care, continence)
- **Operational description**
  - Services are designed to provide care in the community where possible, to decrease ED presentations and hospital admissions, decrease length of stay for acute inpatients through early assessment, supported early discharge and ensure fewer premature admissions to Residential Aged Care Facilities (RACFs)
  - Non-inpatient services are provided in the Southcare building or home based, depending on need. A centralised intake is provided for Southcare community and outpatient services referral to ensure integration and ease of access for referrers.
  - Inpatients:
    - Barkala - 23 acute Aged Care beds and a 9 bed Aged Care Assessment Unit (ACAU) for up to 48 hours length of stay
    - Killara – 33 acute aged care beds (with surge to 41 beds), including a purpose built 6 bed Behavioural Management Unit (known as Killara Extension)
    - Patients are also managed in shared care arrangements e.g. Orthogeriatric model of care where patients are jointly managed on the orthopaedic ward and transferred to the Aged Care ward for ongoing management when required
    - Patients are transferred to the rehabilitation ward for rehabilitation
  - Emergency Department
    - Aged Care Services Emergency Team (ASET) (7 day service)
  - Outpatient services are provided 5 days per week and include:
    - Geriatrician clinics
    - Rehabilitation clinics
    - Pulmonary rehabilitation
    - Allied health clinics
    - Nursing clinics for hospital avoidance (7 day service)
    - Day Respite services

- Community services include:
  - Rapid response teams e.g. Geriatric Flying Squad and Southcare Outreach Service (7 day service)
  - Community generalist nursing (7 day service)
  - Community allied health
  - Community Heart and Lung team
  - Sutherland Transitional Aged Care Service (STACS) Monday to Friday plus limited weekend service
  - Continence advisor
  - Community Dementia Home monitoring program
  - Aged Care Assessment team service (ACAT)
  - Case management services – ComPacks, Community Options
- Respite services are co-located with Southcare and include:
  - The Cottage, for dementia day care
  - The Retreat, for frail aged day care
- Southcare provides the highest role delineation level services available for:
  - Geriatric Medicine – Level 6
  - Community Health – Level 4

- **Activity**
  - Current non-admitted activity
    - Non-admitted activity has been expanding over recent years, with the aim of transferring the balance of care to community facing care
    - New models of care are designed to reduce the demand for hospital inpatient services (e.g. ASET, GFS, SOS) and provide community based, patient centred care
  - Current and recent inpatient activity
    - Inpatient wards are at capacity and generally have 25 -30+ outliers managed by geriatricians in the acute wards waiting for transfer to Aged Care
    - Length of stay has declined over recent years due to early assessment models and the introduction of integrated hospital avoidance and community based models that allow supported earlier discharge. Delays to discharge are usually due to waiting for other services e.g. NDIS placement, Mental Health, homeless, guardianship issues
    - The demand for hospital services has stabilised due to Southcare's community based work to support ED and admission avoidance
    - The Behavioural Management Unit is at capacity
    - The ACAU ideally has a length of stay of up to 48 hours but at times admits longer term patients due to lack of appropriate aged care beds
    - Killara Extension (dementia behaviour management unit) is at capacity and cannot meet demand, particularly for younger onset dementia patients

- **Models of care**
  - The service promotes an integrated model, with care provided in the community or outpatients where possible to avoid ED presentation or admission, including Rapid Assessment Teams (Southcare Outreach Service (SOS), Geriatric Flying Squad for RACF support (GFS)); Aged Care Assessment Team (ACAT); Geriatricians; Generalist Community Nurses; Allied Health; Individual Care; Centre Based Socialisation/Respite; Support Services and Support and Education Groups
  - The Southcare building houses a range of outpatient and community services which are co-located to promote integrated care and hospital avoidance
  - ACAT services are co-located with Southcare to support integration
  - Shared care records are essential for integration of services
  - For those requiring admission, early assessment and intervention and management is provided, with referral to rehabilitation or early discharge with community support where appropriate

- The Aged Care Assessment Unit provides a rapid comprehensive assessment and early intervention to facilitate early discharge or reduce inpatient length of stay. Patients who meet admission criteria are accepted directly from the community, thus avoiding ED. Currently approximately 53% of patients are discharged home from ACAU
- Killara Extension provides a purpose built secure 6 bed Behavioural Management Unit for the management of patients who exhibit behaviours of concern, usually associated with Behavioural and Psychological Symptoms of Dementia (BPSD)
- Patients are type changed when they are transferred to the rehab ward

- **Staffing**
  - Aged care inpatient and Southcare staff include a comprehensive range of specialist aged care medical, nursing and allied health and support staff

- **Infrastructure location and configuration**
  - Killara and Killara Extension are located on Level 1 of TSH
  - Barkala and ACAU are located on Level 2 of TSH
  - Southcare services are located in a stand-alone facility within the grounds of Sutherland Hospital.

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - Increasing number of services are now provided by NGOs under My Aged Care
  - There are no longer case management services funded, which particularly impacts NDIS case management for people under 65
  - There is no increase in allied health staff to manage surged bed numbers
  - Increasing numbers of younger onset dementia patients requiring rapid assessment and ongoing management.
  - Avoidable admits / referrals: Southcare services aim to support this, but require increased staffing capacity for:
    - GFS to reduce RACF admissions
    - SOS to reduce community admissions
    - Sutherland Transitional Aged Care Service (STACS)
    - New multidisciplinary assessment clinic for early onset dementia to potentially decrease admissions
  - Direct admits:
    - Available for the ACAU, however ACAU is at capacity. This may in part be mitigated with the opening of the EDSSU and the implementation of the RADIIUS rapid access model of care
  - Gaps in services:
    - Geriatric Flying Squad (GFS) –requires additional medical and nursing support to support people living at home as well as in RACFs
    - Community Options Program Sutherland (COPS) – funding for case management ceased June 2018
    - There is no outpatient rehabilitation service available at TSH
    - Access to consultative and community palliative care services, provided by Calvary Healthcare Kogarah, is limited, with geriatricians managing aged care patients requiring palliative care
  - Funding:
    - The current model of ABF funding currently does not reward enhanced hospital avoidance and community facing services
    - Many funding sources are temporary, leading to difficulties in retaining staff and services

- **Infrastructure**
  - Inpatient wards are at capacity and the Behavioural Management Unit requires expansion, with a safe area for younger onset dementia patients
  - The Southcare building is very aged and currently does not meet minimum standards for disabled access, security, communications and fire safety. It needs major refurbishment or rebuild to become compliant and enable Southcare to continue to provide expanded community programs. The building is too small for the current staffing levels, with no room for expansion.
  - The infrastructure and carpark are in poor condition and require constant maintenance and are a risk
  - Southcare outpatient and community services provide an integrated model and necessarily require co-location
- **Staffing**
  - For some of the programs current funding is temporary. Attracting and maintaining suitably qualified health professionals into temporary positions is difficult.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - To meet demands from a growing and ageing population, an expansion of Southcare outpatient and community based services and hospital avoidance models will be required, i.e. shifting the balance of care from inpatient to community facing activity by organising care delivery around the patient need, keeping them out of the ED and caring for them in the safety and comfort of their home and community. For example:
    - Expansion of GFS to include community based clients who require rapid support at home and for further support of RACF patients, with a goal to reduce ED admissions by a further 50%
    - New multi-disciplinary model for younger onset dementia patients so that early intervention and case-co-ordination and management by allied health and future care planning can commence on diagnosis; preference to keep people at home
    - Investigate funding opportunities for case management services, particularly for NDIS services for under 65 years; there is a population of people who are under 65 years with cognitive impairments who end up staying in hospital for a long time
    - Investigate potential for pre-habilitation model for aged care elective surgery candidates
  - Investigate further public private partnership models, similar to the CESPHN, private and SESLHD partnership funded Integrated Health Service at Miranda, so that not all services need to be provided by hospital clinicians on site
  - Increasing shared care arrangements with other services, e.g. with general surgery, urology, vascular, cardiac and respiratory, to promote earlier discharge or ward transfer and patient centred care
  - Consideration of permanent SESLHD funding for community facing services separate from ABF model
  - Maintain mix of acute and sub-acute aged care patients in an aged care precinct for improved management of patients and shorter length of stay
  - Consider the implementation of a specialist palliative care service at TSH
- **Infrastructure solutions**
  - Provide a purpose built facility for Southcare services to allow expansion to meet growing demand and continued integration of services. This could be part of a larger Outpatient Precinct, however Southcare services need to remain co-located in a dedicated precinct to ensure continued integration of services and avoid fragmentation. This would include co-located clinic and treatment area (nursing and allied health) space, offices and a base for community services, with ease of access and sufficient space for community service vehicles (cars and buses)

- Expansion of inpatient bed base and expanded behavioural management unit to create an Aged Care precinct with:
  - A separate discrete area for younger onset dementia patients to maintain the safety of frail, older patients
  - An 8 bedded purpose built falls room with high visibility from hallway, close to main nursing station
  - A small gym area (potentially shared with other specialties e.g. neurology) for early intervention to prevent deconditioning and reduce length of stay
  - Provision of family conference room, suitable for end of life discussions, psychiatric liaison consults, etc.
  - Dedicated education space for point of care teaching
- Relocation of ACAU to be adjacent to ED to ensure the right patient is in the right place and for improved flows

- **Staffing solutions**
  - For any expansion in activity to occur, a commensurate increase in staff will be required: more medical, nursing and allied health input to support enhanced community facing services that aim to avoid hospital presentation or admission
  - Introduction of care navigator role for supportive discharge framework and supported follow up to avoid readmission.

Allied Health

SCOPE OF SERVICES

Allied Health Services at TSH include the departments of Clinical Psychology, Nutrition and Dietetics, Occupational Therapy, Physiotherapy, Podiatry, Social Work and Speech Pathology.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - All age groups are seen by allied health clinicians
  - Demand is driven by:
    - Population growth and ageing
    - Increased incidence of people living with chronic disease requiring long term management
    - Increasing complexity and acuity of patients seen

- **Operational description**
  - Each department provides inpatient and outpatient services
  - Allied Health Department offices and outpatient services are co-located on Level 2 and operate in a team environment, with shared resources
  - Most inpatients are seen on the wards, however some patients are brought to the Department for specific therapy
  - Most outpatient services are discipline specific
  - Referrals are received from other hospital clinicians, GPs and other external medical and allied health clinicians
  - SGH allied health outpatient services are available to TSH patients, i.e. Rose Cottage, Speech Pathology Paediatric Specialist Feeding, Lymphoedema, Gastroenterology Nutrition and Dietetics outpatients
  - Community allied health services are provided by Southcare, PICH and Mental Health

- **Activity**
  - Inpatient activity is increasing across the hospital, with increased throughput and increasing complexity of patients
  - Outpatient activity is limited by clinic space and staff availability
  - All disciplines have waiting lists, with referrals triaged for urgency

- **Models of care**
  - Allied health staff cover all wards, critical care and the Emergency Department at TSH
  - Outpatients provide scheduled appointments, with most seen for a course of therapy and discharged, however some patients require long term maintenance therapy
  - Allied Health are integrated in the ED Short Stay Unit
  - A dedicated Physiotherapist has recently been implemented in ED, with temporary funding for a 7 day service

- **Staffing**
  - Allied Health:
    - Aboriginal Health Worker 0.5
    - Administration 1.76
    - Clinical Psychology 0.84
    - Nutrition and Dietetics 6.89
    - Occupational Therapy 16.12
    - Physiotherapy 19.47
    - Podiatry 0.42
    - Social Work 16.41
    - Speech Pathology 3.92
    - Technical Assist 9.59.

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - The increasing acuity and complexity of patients requires more allied health clinician time and support, i.e. transiting people with high care needs home from hospital, keeping critical unwell patients in CCM overnight with Physiotherapy call backs.
  - There are gaps in inpatient cover, e.g.
    - Dietician supported parenteral nutrition and feeding, and speech pathology in critical care medicine
    - Physiotherapy in Paediatrics
    - Physiotherapy services for critical care after hours and on weekends
    - In reach for rehabilitation and early supported discharge
    - Physiotherapy and Dietetics in Mental Health Rehabilitation (to manage obesity)
    - Joint Speech Pathology and ENT fibre-optic endoscopic evaluation of swallow (FEES) at bedside for swallowing issues
    - Allied Health Assistants to support intensity of therapy and supporting patients participating in their care, i.e. PJ paralysis.
    - Therapeutic activity for patients with dementia
    - Co-ordinated allied health outpatient rehabilitation services
    - Demand for TSH and SGH outpatient services is growing, i.e. day hospital, lymphoedema, gastroenterology nutrition and dietetics
  - There is limited access to community based allied health, resulting in longer lengths of stay and more discharge planning required
  - There is no access to outpatient rehabilitation services. St George Hospital no longer accept patients from Sutherland LGA that require single discipline rehab, and TSH staff are attempting to manage these patients from within resources
  - There is a gap in management for people with disabilities who are ineligible for NDIS

- **Technology**
  - It is difficult for allied health staff to access ARIA (Cancer) records, which do not link to eMR
  - Additional technology that would support allied health interventions, such as patients using Wi-Fi and tablets for cognitive rehabilitation, robotic upper arm technology
- **Infrastructure**
  - The allied health footprint is at capacity, with no space for expansion to provide new services/clinics
  - There is limited access to space for therapy on the wards
  - Ward space is not conducive to patient activation and engagement, i.e. enriched environment
  - There is no access to a sound proof room for speech pathology voice therapy
  - There is no dedicated space for student clinics or education
  - There is limited meeting rooms available on wards for family meetings, and some rooms are not fit for purpose
- **Staffing**
  - Most staff are level 1 /2. There needs to be enhancement for skilled staffing to support new models of care, e.g. Advanced Recovery Orthopaedic Program (AROP) and to meet the demands from higher acuity patients
  - No senior podiatrist – high risk foot service
  - Weekend/on call cover is limited, with insufficient cover on weekends for orthopaedics, critical care, aged care and acute stroke, acute wards.
  - Insufficient clinical psychology support at TSH – only available for cancer and rehab
  - Medical clinics do not have planned allied health support, limited ad hoc input e.g. for equipment prescription, and this has to be covered by existing staff
  - Allied Health staff need to provide clinical placements to support future workforce, and there is increasing demands from universities to take students for placements. Allied Health require an additional staff resources of 1.0 FTE to support student placements (only 0.5 in OT for student educator).
  - There are no TSH Allied Health staff education positions.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Provide an outpatient rehabilitation service, potentially as a Day Hospital model for multi-disciplinary care, with provision for single discipline therapies as required
  - Implement a care navigator service for people ineligible for NDIS who are under 65 but require a health led approach to assist them with access to services
  - Continue the successful and growing ACI Osteoarthritis Chronic Care Program (OACCP) for people with osteoarthritis
  - Podiatry service to inpatients to improve patient outcomes, i.e. diabetic foot ulcers
  - Potential for new clinics/ services
    - Implement early supported discharge for stroke,
    - Implement Advanced Recovery Orthopaedics Program (AROP) model at TSH to support earlier discharge and improved recovery
    - Support new Osteoporosis Refracture prevention service at TSH
    - Implement pathways for increased Dietetics, Occupational Therapy and Speech Pathology support in CCM
    - Investigate opportunities for new discipline and multidisciplinary clinics to meet gaps in services, including for:
    - Vestibular clinics
    - Adult eating disorders
    - Weight reduction, e.g. prior to surgery

- Dieticians in gastro and liver clinics
- Dietician for nutrition education in Diabetes Education service based at TSH
- Speech Pathology and dietician follow up for paediatric feeding issues
- Occupational Therapy post-acute care, promoting return to previous occupational performance roles
- Lymphoedema clinic to improve timely access to service in partnership with the SGH lymphoedema service

- **Infrastructure solutions**
  - Ensure that allied health departments and outpatient services remain co-located, to promote collegiality and opportunities for multi-disciplinary care and research and education opportunities
  - Provide a sound proof room for speech pathology, potentially as part of an outpatient rehab precinct, which could be shared by other services
  - Provide a suitably sized and equipped facility to provide outpatient rehabilitation
  - Provide spaces for meetings with family members on wards
  - Ensure a meeting place for Aboriginal people is included in the Master planning process
  - Provide space for students and allied health assistants within the department, i.e. clinic and workstation space

- **Staffing solutions**
  - Additional support is required for weekend/on call cover
  - Additional allied health staff will be required to grow outpatient services and meet current demand
  - Increase skill mix with more senior positions to manage complex patients and support junior staff
  - Dedicated ED Physiotherapist, Occupational Therapist and Social Work positions as 7 day service
  - Increase access to and role of allied health assistants, particularly to get patients more active
  - Provide increased resources for student and staff education
  - Increase staffing levels commensurate with increased inpatient load and introduction of new models of care.
  - A Clinical Psychologist employed in Consultation Liaison to cover all the wards for assessments, brief psychological interventions, psychoeducation, crisis management, promotion of wellbeing and assistance with behaviour change to reduce risk factors as well as to assist with discharge planning so patients as linked to longer term psychological treatment post discharge.
  - A Clinical Psychologist employed in South Care to provide assessments and interventions in the Community for Older Adults in order to improve quality of life and reduce health burden on other services. (I.e. research shows depression is associated with low compliance with medication regimes for chronic physical health issues (such as diabetes, cardiovascular disease) this leads to poorer quality of life and poorer health outcomes).

Cancer Services

SCOPE OF SERVICE

The Sutherland Hospital cancer service is a level 5 medical oncology service focussed on cancer prevention, diagnosis and treatment of a range of cancers in adult inpatients and outpatients.

The service is inclusive of allied health and support care services and has Multi-Disciplinary Teams (MDT) networked with and based at St George Hospital for the following tumour groups: upper and lower GI cancers, head and neck cancers, lung cancers, breast cancers, genitourinary cancers, neuroendocrine and CNS tumours.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Demand is driven by:
    - A growing and ageing population who have multiple co morbidities
    - Increasing acuity in patients requiring longer hospital admissions
    - The high incidence of melanoma in the Sutherland Shire (highest in NSW)
    - Increasing numbers of residents living with cancer requiring outpatient treatments and infusions

- **Operational description**
  - Inpatient Service consists of average access to 15 beds on Gunyah Ward.
  - Inpatient management encompasses a wide range of treatments. These include management of oncological emergencies and acute symptom management as a result of disease progression or treatment. Diagnosis and end of life supportive care is also attended.
  - Inpatient treatments often include complex infusions and chemotherapy which can only be administered by accredited nursing staff
  - Neurology patients are also located on Gunyah and Cancer patients can often outlie on other wards requiring repatriation to receive specialty medications
  - The Perioperative unit is utilised at TSH for the administration of immunoglobulin for haematology patients and for pleural and peritoneal taps
  - Outpatient services comprise of 4 clinics which includes Medical Oncology, Haematology, Radiation Oncology and Psychiatry clinics and 10 chairs
  - Where possible in the outpatient setting, PICC line management is shared with the South Care Community Nursing team
  - Clinical networking occurs with Calvary and St George Hospitals. All radiotherapy inpatients and haematology inpatients requiring administration of IV chemotherapy and management of acute cytotoxic toxicity require transfer to St George
  - TSH treats a clearly defined group of haematology patients in the outpatient setting

- **Activity**
  - Inpatient and outpatient activity is increasing and is being limited by space and resources
  - Outpatient activity such as blood transfusions and specialised treatments such as chemotherapy is be given by accredited staff in the Oncology Day Centre
  - LOS is often extended due to imaging, procedural and diagnostic delays

- **Models of care**
  - Current model of care is an integrated multidisciplinary approach
  - Team nursing model exists in the ward setting with referral to allied health
  - Access to community services is used to assist outpatients to remain out of hospital i.e. Community nursing, COP (SGH based), palliative care
  - Direct admissions : Where possible admissions of acutely unwell Oncology patients during business hours is facilitated through direct admissions or from the Oncology Day Centre, bi-passing ED

- **Staffing**
  - Staff:
    - Nursing: ODC Nursing FTE 4.21 + 2.0 (NUM/CNC)
    - Medical: Shared Fractional FTE of 7 medical oncology staff specialists working across both St. George and Sutherland hospitals to cover different tumour streams

- Allied Health: Gunyah ward is allocated a physiotherapist, OT and dietician to share between the Oncology and Neurology specialties. The Oncology Social worker is responsible for covering both inpatient and outpatient areas as well as the cardiology ward Yarrabee. There is a clinical Psychologist 2 days a week, along with Psychiatry coverage each Wednesday

- **Infrastructure location and configuration**
  - The physical location of cancer services at TSH is between the inpatient ward of Gunyah and the outpatient area.

CURRENT ISSUES AND CHALLENGES

- **Patient demographics**
  - As the population increases and ages there is likely to be a greater demand for both inpatient and outpatient cancer services
  - Patients are living longer with new agents and changes in care

- **Clinical networking**
  - Arrangements are in place with SGH for haematology and radiotherapy

- **Constraints on activity**
  - Haematology and radiation oncology services are only available at SGH via networking agreements
  - The current arrangement of a shared ward with neurology is not ideal for cancer patients or staff
  - A shared Clinical Nurse Educator between cancer and neurology limits the standard of education and expertise of staff due to the dual specialties of the ward
  - Diagnostic support and timely access to interventional radiology is lacking. There is 1 session daily allocated to central line (CVAD) insertion. There is 1 x CT scanner to service the entire hospital and no on site MRI. MRI at St George has an allocated number of spots available for TSH patients daily. Whilst triaging of referrals / prioritisation occurs, waiting times can be days long which creates a longer LOS for cancer patients
  - Limitations of space and resources in the cancer outpatient clinics for the next 5 years are concerning. Physical space is only just sufficient for the current demand and expansion in the near future will be required

- **Models of care**
  - Waiting list:
    - The outpatient clinic currently has a 2 week wait for an appointment
    - There is no waitlist for the ODC chemotherapy at present
  - Potential changes:
    - Models of care for cancer patients are changing
    - New treatments such as immunotherapy has changed the prognosis and future of patients with melanoma, changing their spectrum of care and needs
    - Delivery of chemotherapy and immunotherapy in the home is a future goal and there is a project through the Cancer stream to outsource a chemotherapy at home service. This will require nursing, pharmacy, education and co-ordination. This is current practice at POWH however they provide a very limited service in terms of range of therapies
    - As treatments become more advanced and complex, inpatient stays will lengthen and inpatient and outpatient infrastructure will need to grow and accommodate
    - Tap into rehabilitation facilities such as gyms

- **Potential for new clinics/ services**
  - Currently work is in progress to enhance the outpatient haematology service
  - Unmet demand:
    - Palliative Care: is provided by Calvary and is extremely limited. The provision of a palliative care service should improve the quality of end-of-life care and enable transfers to other settings of care (RACF, home or Calvary). 50% of cancer patients utilise palliative care
    - Social work services are currently stretched and there is a high demand for emotional and psychosocial needs of patients and their carers to be met. 1.0 x FTE social worker is shared between the outpatient clinics and Gunyah inpatient ward (which services cancer and neurology)
  - Outpatient services:
    - COP service is unable to be provided out of St George to service the Sutherland Shire due to geography and required care co-ordination which needs FTE enhancement over time
    - Drop in clinic: There is unmet demand for cancer patients to receive semi – urgent specialist outpatient care. This service could be staffed by a nurse practitioner with physician backup and service patients who require trouble shooting, or who are unwell. This could avoid presentation to the ED – especially beneficial for immunocompromised patients – and could fast track them back home or to an inpatient bed if admission was required
    - Survivorship service and cancer care program to meet the physical and emotional needs of cancer patients and their families. A business care is required for this service but there is potential to use existing outpatient infrastructure such as the rehabilitation gym. A survivorship service will be established at St George and this will work out a model of care that will provide service for Sutherland
    - Reinstatement of community support groups to provide information, support and assistance to patients adjusting to illness, including support of psychosocial needs, diet and exercise:
      - > Psychology services: there are limited resources for this service
      - > There is no MDT for melanoma at TSH. There is a high incidence of melanoma in the LGA and establishing an MDT between SGH and TSH will promote and offer specialised care to these patients in their local area
      - > There is no research or clinical trials conducted at TSH. There is particular need for research and clinical trials into melanoma due to the high incidence
      - > There is no system to capture the patient reported outcomes among different tumour streams
- **Infrastructure**
  - Existing space in the outpatient area is inadequate and requires expansion
  - Waiting area covers the 4 clinics and ODC area and is limited:
    - There is no secure area for chemotherapy medication to be stored
    - Chemotherapy treatment chairs are limited and configuration of chairs in a central area does not allow privacy for treatment, care or difficult conversations
    - Will become a greater issue if/ when haematology services return to TSH
- **Staffing**
  - Current service delivery could be improved by:
    - Increased medical cover
    - Increased skilled nursing staff, educators and co-ordinators
    - Increased allied health personnel especially social work
    - Inclusion of new professional specialties such as exercise physiology (introduced at Concord for survivors)

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Cancer Services has been the subject of an independent governance review that identified a need to consolidate medical oncology services and establish a viable haematology service:
    - Medical oncology: aim is to improve continuity of care for inpatients and outpatients along with better supervision of JMO and greater access for nursing staff
    - Haematology: the aim is to provide a service which will enable access for the local community to non-malignant and malignant inpatient and outpatient-based haematology services, improve clinical care and reduce burden of activity on St George Hospital
  - Palliative Care:
    - Establishment of a palliative care service at TSH. Palliative care is a resource required by many departments in the hospital to improve the quality of end-of-life care and enable transfers to other settings of care (RACF, home or Calvary)
    - Additional care co-ordination and cancer outreach enhancement focusing on Sutherland residents
  - Increased diagnostic support, timely access to interventional radiology, CT, and on site MRI.
  - Increased allied health services (particularly social work) to align with the Cancer plan to improve patient's quality of life and help them with the practical, emotional and psychological demands of illness in addition to their physical treatment. Access to allied health also impacts on LOS
  - Establishment of a Melanoma MDT between SGH and TSH to discuss patients and cope with the current advances in immune therapy.
  - Aim to provide local area care and treatment for patients
  - Establish the use of ARIA for chemotherapy in the impatient ward areas
  - Improved delivery and co-ordination of outpatient-based services
  - Additional outpatient services including:
    - A drop in clinic for cancer patients to receive semi – urgent specialist outpatient care
    - A survivorship program and cancer care program to meet the physical and emotional needs of cancer patients and their families (e.g. Concord Hospital has an exercise physiologist post cancer)
    - Community support groups to provide information, support and assistance to patients adjusting to illness and lifestyle factors such as diet and exercise
  - Chemotherapy at home is emerging area for development to improve patient wellbeing; has been introduced at POWH and is well established in Western Australia. Requires co-ordinator, nursing positions, vehicles, education. Role for GPs to take on administration of medications and potentially a team of Practice Nurses could be trained up and provided with back up support from cancer services and on call specialist and drop in clinic at hospital
  - Strengthen preventative programs with resources, such as smoking cessation

- **Infrastructure solutions**
  - Enhanced Cancer services for patients:
    - Increase access to inpatient beds (estimated 24 dedicated cancer beds) which include the addition of haematology and palliative care. This will enable the facility to service more cancer inpatients and reduce the potential for outliers
    - Expansion of outpatient clinic areas to accommodate increasing demand for services such as outpatient chemotherapy and manage new models of care such as a drop in clinics
    - Development of a clinical research unit

- **Staffing solutions**
  - Palliative care:
    - Provision of enhanced SMO and senior nursing in palliative care:
    - Requires 1 FTE SMO (2 x 0.5); palliative care nursing – 1 – 1.5 FTE CNC, 1 FTE CNE
  - Enhanced social work FTE to support both an inpatient and outpatient service
  - Enhanced CNC FTE. At present 0.5 FTE is needed for adequate coverage of different tumour streams.

Cardiology

SCOPE OF SERVICES

TSH Department of Cardiology is a role delineation level 5 service providing inpatient, outpatient and cardiac rehabilitation services to the local community. The Sutherland Heart Clinic provides all interventional cardiac and emergency angioplasty services as a public/private partnership.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Services are provided to adults, however most patients are from the older age groups
  - Most patients are residents of the Sutherland Shire
- **Operational description**
  - Services provided include:
    - Inpatient ward (Yarrabee) on level 2, including 6 CCU beds and beds which have telemetry capability
    - Diagnostic testing for:
      - > Inpatients including ECG, Echocardiograms and Exercise Stress Testing
      - > Outpatient Exercise Stress Testing for patients who have been discharged from the Emergency Department
      - > Outpatient Echocardiogram service for discharged inpatients
    - Outpatient Cardiac Rehabilitation
    - Weekly Outpatient clinic
    - Interventional cardiology (provided by Sutherland Heart Clinic)
- **Activity**
  - Inpatient activity is exceeding current ward and CCU capacity, with over 100% occupancy
  - Cardiology Outpatient clinics occur weekly
- **Models of care**
  - Inpatient medical cover is provided 24/7
  - The Sutherland Heart Clinic, located on the campus, provides all Interventional Cardiac services in the Sutherland Shire, and includes 2 Cardiac Catheter Labs and a Pre-hospital Assessment for Primary Angioplasty (PAPA) program, and a 24 hours per day, 7 days per week Emergency Angioplasty Service, as part of a collaborative care arrangement
- **Staffing**
  - Nursing FTE is 34.84 which includes NUM, CNC, CNE, RNs and EN's
  - Medical: 9 Cardiologists (8 staff specialists).

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - Demand for cardiology services is driven by the growing and ageing population with multiple co morbidities, including those requiring long term management, e.g. for heart failure support and those requiring more complex treatments

- **Constraints on activity**
  - The cardiology ward (including CCU) is not equipped to manage higher acuity patients, who are therefore managed in the critical care medicine unit. This creates bed block and increased lengths of stay in CCM
  - Access to telemetry/ monitoring within CCU is sometimes difficult as there is no governance over monitored beds in cardiology for patients from other specialties such aged care and respiratory
  - Cardiology has experienced greater than 100% occupancy over the last 12 months due to bed numbers decreasing. This means there are cardiology patients outlying on other specialty wards
  - Community / outpatient management of long term cardiac patients, such as those with heart failure, has poorer outcomes due to their age and other co morbidities, hence a high proportion of cardiology patients require earlier admissions to prevent deterioration rather than community based care

- **Technology**
  - Access to care and patent flow is impeded by:
    - The lack of dedicated cardiac time on the CT
    - Lack of MRI service on site at TSH

- **Infrastructure**
  - The Cardiology footprint is currently too small:
    - Insufficient inpatient bed numbers for the cardiology service demand at TSH. It is noted that TSH and POWH cardiology have similar admission rates however TSH has 13 beds and 6 CCU beds compared to POWH which has 26 beds and 9 CCU beds. This causes pressure to discharge patients more quickly and requires more staffing input to prepare for discharges
    - Yarrabee is a shared ward with Renal and Endocrinology rather than a dedicated Cardiology ward with dedicated staff and infrastructure
    - Insufficient office space – currently only 2 offices for 8 staff specialists
  - Cardiac rehab occurs in a shared rehab gymnasium space remote from cardiology, which is often crowded and not purpose built

- **Staffing**
  - TSH Nurse to patient ratios are based on metropolitan hospital but need to increase to meet demands from increasing admission rates and acuity of patients
  - Specialised nursing, allied health, pharmacy, etc. support staff are not available after hours or weekends
  - The after-hours medical staff is lacking and this has added increased pressure to an already busy department.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Provide a Cardiology precinct for all cardiology services
  - Increase education opportunities for CCU Nursing Staff for improved staffing skill mix and to enable the treatment of higher acuity patients in the CCU
  - Dedicated CT scanner time
  - Enhancement of services aligned with cardiology to improve patient care and discharge planning. This includes:
    - Pharmacy
    - Physiotherapy
    - OT
    - Discharge planning/ ACAT

- **Infrastructure solutions**
  - The cardiology service would benefit from increased floor space to create a "precinct" which spans from the current Yarrabee ward to the Sutherland Heart Clinic. This would include:
    - Increased cardiology bed numbers commensurate with demand
    - Appropriately sized, structured and resourced dedicated cardiology clinic area, with specialty equipment including treadmill and echo machine
    - Dedicated chest pain assessment unit in 4 bedded area for patients referred from ED (likely same day discharge)
    - Dedicated cardiology rehab gym – could potentially be part of an expanded rehab outpatient gym with designated area
    - Patient lounge area
    - Communal staff area
  - Establish governance over monitored beds within the cardiology ward to enable full utilisation by cardiology patients and / or patients from other specialties who are approved by cardiology
  - Provide appropriate office space for cardiologists
  - Provide second CT scanner with allocated cardiology time
  - Provide MRI service at TSH for improved access to care and patent flow
- **Staffing solutions**
  - Improve staffing skills mix to enable the management of higher acuity patients in the CCU and reduce need for HDU care
  - Enhance nurse to patient ratios to be in align with cardiology units of similar size and activity
  - Equitable allocation of after-hours CCU medical cover.
  - Increased access to allied health support, including weekend and after-hours to support earlier discharge
  - Provide administrative support for department.

Child, Youth and Family Health Services

SCOPE OF SERVICES

The Child, Youth and Family Health Service is a multidisciplinary service, which provides a mixture of clinics at Sutherland Hospital/Caringbah Community Health Centre, Menai and Engadine Community Health Centres and in the community as well as home visiting services.

Within the past 12 months, the services have been restructured and are now reporting to the district Directorate of Primary, Integrated and Community Health.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Neonates and mothers discharged from TSH and other facilities following birth
  - Children with developmental concerns and their parents
  - Children up to school age where there are parenting concerns.
  - Adults who have experienced domestic violence and their children
  - Adults and young people aged 14 years and over who have experienced sexual assault.
  - Children and adults with a developmental or intellectual disability
  - Child and young people in out of home care are a priority group, linked with Family and Community Services
  - Vulnerable groups (e.g. Bangladesh and Nepalese, CALD populations with poorer outcomes at age of commencing school)
  - Aboriginal Children and Families

- **Operational description**
  - Child and Family Health Nursing
  - Child and Family Counselling Service (Parenting Place) is a prevention and early intervention counselling service for parents of children aged 0-5 years to the Sutherland and St George area e.g. parents with concerns about children's behaviour, counselling, social issues
  - Allied Health – Paediatric OT, speech and physiotherapy assessment and therapy
  - Child Protection Counselling Service (CPCS) currently resides with SCHN however it is moving across to PICH Child, Youth and Family Health in early 2019
  - Possum Cottage – sleep and settling, tertiary referral for parents re attachment and feeding, post-natal depression. Operates 5 days per week
  - Developmental Services in Early Childhood 0-5 years
  - Developmental Assessment Service – clinics run by SESLHD Development Assessment Service for assessment and early intervention for children and young people with a developmental delay/disability. Ongoing assessment, review and care of adults of all ages with a developmental disability.
  - Out-of-Home Care Clinic
  - Domestic Violence service and screening – Adult
  - An integrated Aboriginal Child and Family Service is provided to Aboriginal clients at Menai, in culturally friendly location
  - The Southern Sydney Sexual Assault Service provides support to men, women and young people over the age of 16, who have experienced a sexual assault. The service also provides a response to children aged 14-16 years old, who have experienced sexual assault by someone who is not a caregiver or relative. The service is based at St George Hospital however provides outreach to Caringbah Community Health Centre

- **Models of care**
  - The Child Youth and Family Service model of care/service delivery model is under review following a service restructure in the past 12 months and a desire to reorient service delivery towards the most vulnerable/priority groups within the community, for example, in relation to:
  - Child and family nursing –proportionate universal care. 75% of families must be visited in first 2 weeks (KPI)
  - OT, speech and physiotherapy – different ways of working to address waiting list management; screening clinics for under 2 and provision of activities for parents to do, private pathways, focus more on most vulnerable
  - Community paediatric services
  - Provision of services to children and adults who have experienced violence, abuse and neglect (allied to NSW VAN Service Clinical Redesign)

- **Infrastructure location and configuration**
  - Sutherland Hospital/Caringbah Community Health Centre, Menai and Engadine Community Health Centres
  - Council buildings around area – historical agreement that don't pay rent on council premises – some are in state of disrepair.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - There is unmet demand not fully explored within some cultural groups, e.g. Aboriginal people, some CALD populations and vulnerable families with complex psychosocial issues
  - Space --- huge challenge, tension regarding space

- **Constraints on activity**
  - Models of care
    - There is no centralised referral or booking system
    - There is a limited clinic space across the campus
    - Model of care/service delivery is under review

- **Waiting list management**
  - Currently most clinics/services have varying waiting lists, depending on specialty
  - Some allied health services have long waiting times, particularly speech pathology. Waiting time for initial assessment can be up to 15 months, and on average 16 weeks for children categorised as priority 1 (the benchmark for priority 1 is 12 weeks)
  - Affording private paediatricians and allied health therapists is a challenge for many families in this area.
  - ECEI/NDIS therapy services are limited and there are long waiting lists.

- **Workforce Issues**
  - Current Child and Family Health Nursing workforce is aging and there are recruitment issues across NSW

- **IT infrastructure**
  - To support service delivery in community based locations and to support centralised intake systems.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Centralise referral service with a single point of access for referral and booking appointments, and registration for appointments. Should result in an improved patient journey and greater patient and staff satisfaction. IT infrastructure required to support this.
  - Models of care development will inform recommendations
  - A place based initiative is currently being tested at Rockdale in the St George catchment. If successful, this could be applied to other suburbs i.e. in priority areas of Sutherland
  - Maternity services are developing midwifery models of care – women having a consistent midwife throughout care. There is opportunity for child and family nursing to continue care with identified families – linking in with maternity midwives
  - Maintain and enhancing relationships with:
    - SESLHD Drug and Alcohol Service and Mental Health Service
    - FACs
    - Department of Education
    - NGOs (multiple)

- **Staffing solutions**
  - Recurrent budgetary constraints are likely to continue and current challenge is to reorient service provision to most vulnerable.

Community Services – Older People

SCOPE OF SERVICES

The Directorate of Primary, Integrated and Community Health is responsible for the provision of Commonwealth funded community services to adults in the Sutherland Shire. These services include Aged Care Assessment (ACAT), Community Packages (ComPacks), Transitional Aged Care Program (TACP) and the Commonwealth Home Support Program (CHSP). Previously this also included the Community Care Supports Program (CCSP), however funding for this fully transitioned to the National Disability Insurance Scheme (NDIS) in June 2018.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - ACAT and CHSP: Most clients are aged 65 years and over (50+ for the Aboriginal population).
  - ComPacks: is available for all adults, however most clients are the frail aged
  - Key factors driving current demand:
    - Growing aged population
    - Increasing numbers of frail people with complex needs and multi=morbidity living in the community
    - Increasing numbers of people with dementia and challenging behaviours , including younger adults with dementia living in the community

- **Operational description**
  - All referrals for Commonwealth funded Aged Care services go through the My Aged Care system
    - **ACAT** is an assessment only service that provides comprehensive Aged Care assessment to determine suitable care and service options for clients including approval for residential aged care home packages, respite and transitional aged care packages (TACP). Assessments can be provided within the hospital and the community setting (including residential aged care facilities) and are triaged according to need and in accordance with Commonwealth KPI definitions
    - **Regional Assessment Service (RAS):** SESLHD RAS is based at Prince of Wales Hospital and provides services across the SES region. RAS assesses people in the community requiring home support services from the CHSP
    - **ComPacks** provides up to 6 weeks of packaged home care services to people on discharge from hospital services (no nursing or allied health) to facilitate a safe and timely discharge and to prevent re-admission to hospital. Southcare has been a service provider of ComPacks to Sutherland, St George and Calvary for the past 5 years
    - **TACP** provides time-limited, goal-oriented and therapy-focused packages of services to older people after a hospital stay for up to 12 weeks. Multidisciplinary package of care includes allied health, nursing and personal support to return home and avoid residential care; and requires an ACAT referral prior. TACP in Sutherland is managed under Southcare, and is one of 4 TACP in the SESLHD. Sutherland has 38 packages that can be filled on any given day
    - **CHSP :** Provides community based services to older Australians over 65+ years (or over 50yrs for Aboriginal people). Entry to CHSP requires a RAS assessment and many services provided under CHSP may include community nursing, allied health, transport and a range of other and home support services
    - **Home Care Packages :** require approval through an ACAT assessment, but Home Care Packages are currently not provided by SESLHD
  - The Aged Care Community Services described above are provided Monday to Friday in business hours. No weekend services are provided, except at CHCK which provides respite on Saturdays
    - Access, Intake and Referrals for Commonwealth funded Aged Care services are received electronically via the My Aged Care system
    - Processing of referrals from My Aged Care is currently at multiple different locations i.e. ACAT has a Centralised Intake Service located at WMH where the intake is processed then sent to Sutherland and time scheduled, RAS intake based at POWH, Intake at NNARC for northern SESLHD community aged care services; SGH ARC for St George community aged care services and Southcare also has intake for aged care services

- **Service Provision setting : location and configuration**
  - ACAT provide assessments in hospital and in the community
  - TACP and ComPacks provide assessment in hospital and then packaged care in the community
  - Majority of CHSP and CCSP services are delivered in the community- except respite and Day Centres.

CURRENT ISSUES AND CHALLENGES

- **Services**
  - The My Aged Care referral process is a complicated system that continues to evolve. There are constant system and process enhancements so referees need to adapt to new changes regularly. This may create difficulty in navigating the system and impacts on timely access to services
  - Referrals to CHSP go directly to each separate service with no central referral whereas ACAT referrals go to a central intake located at War Memorial Hospital for the whole district
  - All programs except for ComPacks operate under Commonwealth guidelines. This means that funding can be quarantined and financial accountability is very tight posing a challenge for all the sites operating under commonwealth guidelines. Business models of NGO are more flexible
  - Uptake of TACP has been variable at Sutherland: initially high occupancy of 80-90%, then a dip to 65-70% and now up to 90% in 2018.
  - Maintaining consistency of program delivery is difficult when delivering one services from multiple sites across the district e.g. CHSP runs at POWH, Calvary, SGH and Southcare and all have different governance models
  - Sutherland ACAT was one of 4 teams that had to amalgamate into a single service with a centralised intake at War Memorial Hospital. Processes and services had to be standardised across the district which was challenging because of historical arrangements – each had their own intranet pages, forms and procedures
  - Commonwealth Programs are funded on temporary basis of 2 – 3 years. Recruitment of staff into temporary positions is difficult

- **Aged care reforms**
  - Aged care reforms have been continuous since 2015 and there are further reforms predicted
  - Some anticipated reforms over the coming 2 years could mean changes to the tender process involving CHSP, ACAT and TACP
  - There is likely to be pressure to perform more efficiently and effectively by meeting performance targets
  - Current tenders are financially beneficial for the LHD and there will be significant financial implications if Southcare cannot maintain the tender for ACAT into the future. There is not enough predicted growth for a private company to operate the system, posing a risk to the model, to the workforce and to the service demand/ clients in the community

- **Servicing the Community**
  - There are increasing numbers of complex, frail elderly and people with dementia living in the community requiring assessment and provision of community services, with capped numbers of services available
  - TSH is fortunate to be networked with The Garrawarra Centre. This is a NSW State funded dementia specific residential aged care facility (RACF) located at Waterfall, providing high level dementia specific care for people, with a primary diagnosis of dementia who exhibit challenging behaviours and require a safe and secure environment to live.
  - The needs of younger adults with dementia and severe brain injury are currently not fully met by the disability sector.

- **Impact of the NDIS on provision of services**
  - Client eligibility determination for NDIS can be a lengthy process and may potentially cause delays to discharge from hospital and access to services
  - CCSP funding ceased on 30 June 2018 and was redirected to the NDIS. CCSP provided services for clients under 65 in community with a disability. Unfortunately not all clients who received this service have met all of the NDIS criteria and there is currently a service gap for these clients as well as a gap in funding and lost staff at Southcare
  - Services for those under 65 years who are not NDIS eligible will require ongoing service arrangements and may still present to Health in the absence of CCSP funding. Many people with chronic disease are not eligible for NDIS, e.g. COPD and some neurodegenerative diseases, and may result in poorer health leading to avoidable presentations and/or admissions

- **Constraints on activity**
  - Models of care
    - All ACAT referrals are prioritised in accordance with Commonwealth KPI definitions and lower priority clients in the community may wait longer (up to 36 days). In 2016/17, SESLHD ACAT had the highest number of referrals in NSW. The numbers of inpatient ACAT referrals have increased in the past year and this additional demand impacts on the activity of ACAT services
    - Unmet demand
      - > Limited services are available for adults under 65 years with existing available packages
  - Technology:
    - There is currently no centralised intake for SESLHD Community services (except for ACAT)
  - Other significant issues
    - Impact and consequences of NDIS is unknown for SESLHD residents and services provided by the LHD
    - Increasing frailty and complexity of people referred for services.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Continue the provision of ACAT, RAS, TACP, CHSP and ComPacks for Sutherland Shire residents
  - Participate in a multidisciplinary approach in the Ambulatory Care Precinct, co-locating services and making access appropriate for aged care and disability, noting that most services are delivered in the community SESLHD continue to work with the Ministry of Health and ADHC to improve services for people requiring NDIS-like services but who are currently ineligible

- **Infrastructure solutions**
  - Consider needs of the frail elderly and cognitively impaired in the access to and design of an Ambulatory Care Precinct
  - Foster a "healthy neighbourhood" within the Ambulatory Care Precinct
  - Consider a dedicated and purpose built intake service room somewhere in the LHD
  - Consider transport solutions/access to transport to Precinct, particularly for frail elderly

- **Staffing solutions**
  - Consider LHD future funding opportunities for CHSP allied health community services (not currently funded).

Consumer Advisory Group

SCOPE OF SERVICES

The Sutherland Hospital Community Advisory Group (CAG) has been created to engage people who have or likely to use Health Services in the Sutherland Shire.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **What's working well**
  - Happy with the level of care at TSH
  - Feel there is a sense of ownership and belonging
  - TSH feels like a caring community when compared to other hospitals
  - Staff feel like they belong
  - Staff seem to care for each other, for their patients, themselves and their environment (ward)
  - Don't want to lose culture if facility grows, as the culture affects health outcomes
- **Models of care**
  - Volunteers
    - Positive contribution to the hospital
    - High number of volunteers
    - Run canteen and get healthy cafe
    - 5 businesses for fundraising.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - Concerns raised regarding the increasing population of the Sutherland shire
- **Major Health issues in the Shire**
  - Falls in the elderly
  - Winter and flu season
  - Pressure injuries with older people in nursing homes
  - Medication issues – safe use / reconciliation / elderly people agreeing to take generic medications and getting names mixed up
  - Youth issues – mental health/ depression and anxiety; not equipped to deal with mental health issues in school
  - Melanoma
  - Obesity despite high engagement in sport and recreation
  - Diabetes
  - Preventative medicine / exercise
- **Constraints on activity**
  - There are services lacking at TSH that mean local area patients and their families have to seek alternatives in private facilities or travel out of the local area to receive services. This includes
    - MRI service
    - Limited CT - a second CT is needed
    - Haematology as a specialty. Patients need to go to STG which does not make sense for locals

- **Physical Space on campus**
  - No lounge areas for sitting
  - No family meeting areas or spaces to grieve
  - No facilities for staff
  - No facilities for activities
- **Technology**
  - New website does not assist in directory of services.
  - Many older residents are not on computers
- **Infrastructure**
  - Emergency Department is stretched and this has a follow on effect for the wards
    - If not near bulk billing medical centre, people will go to ED
    - Need message to community to utilise medical centres and GPs
    - Sell the message to the public and other services that some medical centres have X-ray and chemist facilities
  - Rehabilitation facilities
    - Space restrictions exist
    - Have been overcrowded for the past 10 years
    - A mix of inpatient and outpatients using them simultaneously which is not ideal
  - Transport to and from the hospital is as issue
    - Transport options from home to hospital are limited
    - Private transport (such as taxis) are expensive
    - Parking is expensive
    - There are regular bus services, but these are not always convenient from home location
    - Proposed railway station will never eventuate
  - Older patients have limited options for residential care
    - Most local aged care facilities have limited or no vacancies and have wait lists
    - If a patient is in hospital and needs discharging to a RACF they may be referred out of area
    - Residents of the Shire not happy to travel to other districts for residential care
  - There is a lack of General Practitioners in the Engadine and Menai areas and there are limited number of GPs who
    - have availability on same day of need
    - home visit or visit RACF
    - bulk bill
    - If there are no options to seek care for elderly and immobile (who have accessibility issues) they will come to the ED via an ambulance
  - Standard and quality of hospital food remains an issue – example of family bringing food in to hospital
- **Staffing**
  - Staff recruitment – particularly of JMO's is a growing concern to the community as they feel this is a critical issue to operating a hospital and there could be a risk to services such as the ED.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Need to change the community perception of receiving non urgent healthcare from the Emergency Department via:
    - Proactive approach to educate and inform the public of alternative services
    - Ongoing public education to create a social/ cultural change of where the community receive non urgent medical care.
    - Communication through social media, hard copy advertising in the local newspaper or community releases and federal politician's new sheets and in private and public places such as child care centres and GP waiting rooms
    - Direct people to alternatives at point of care
    - Engagement of state and local members
    - Encourage local communication/ word by mouth
  - Significant local publications could add to education of community and provide information on the hospital, its services and alternatives. These include Our Shire, The leader, Seniors magazines, Social media services
  - Safe use of medications – bring pharmacist into discussions with patients about medications
  - Increase and improve services which are lacking including
    - CT
    - MRI
    - Haematology
  - Improve physical space and services on TSH campus to include
    - Lounge/ meeting areas
    - Staff facilities
    - Facilities for activities
    - Place for grieving that is internal and accessible from the main atrium
  - Preventative health opportunity – Sutherland football (i.e. soccer), netball and hockey are largest associations in the country – the Shire is a sporting community
- **Infrastructure solutions**
  - Increase outpatient services especially rehabilitation to make it more accessible
- **Staffing solutions**
  - Staff recruitment is required – particularly of JMOs.

Corporate Services

SCOPE OF SERVICES

Corporate services supply a wide range of non-clinical services that support the effective operation of clinical services on the Sutherland Hospital campus. Services include:

- Biomedical Engineering
- Communications
- Fire Safety
- Engineering
- Ground Staff
- Linen transport
- Receiving Dock and goods transport
- Security
- Wards persons
- Waste Management.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Operational description**
  - The Services Centre behind Level 1 houses Engineering (includes engineers and a variety of tradesmen) and cleaning services
  - A new Dock is being commissioned, adjacent to Linen, with good access to Level 1 services including kitchens and Linen
  - The Warehouse and receiving dock is in a landlocked location at the rear of the hospital
  - Linen space has been increased to increase capacity for the recent redevelopment
  - New cooling towers and air handling units have been installed
  - There are 2 Substations with sufficient capacity for current demands
  - All equipment has battery back up in case of power fail, with generator back up
  - The Fire Control room is located on Level 1. Fire officers manage fire safety and fire safety staff education on campus
  - Security is located on Level 2, with control room and cameras. Services are provided 24 hours per day, 7 days per week
  - Biomedical Engineering provides maintenance of biomedical equipment on campus, and is currently located within the former ED space. This service is networked with SGH
  - Communications:
    - Switch is located at the entry to Level 2 with the Communications office behind Switch
    - The SESLHD Disaster Management room is located on Level 4, Executive Services
    - The TSH Disaster Management room is located in the Education Centre Seminar Room on Level 2
  - Ground Staff provide the maintenance of external grounds on the TSH campus, with a workshop for storage of equipment
  - Wards persons transport patients around the campus
  - The Renal Dialysis Centre has its own contractors and services.

CURRENT ISSUES AND CHALLENGES

- The older building stock on campus requires constant maintenance
- There is no Server on site (MoH requirement) which means a reliance on ICT reps for maintenance
- South care building requires regular maintenance, and cabling is too old to upgrade so new systems cannot be installed
- The Warehouse and Receiving Dock may need to increase to accommodate more deliveries and storage, and currently has no room for expansion
- Staffing has not increased to meet demand from recent redevelopment.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Any new contracted services would have to factor in the increased activity/requirements from the new building, e.g. increased linen, waste, cleaning, servicing of equipment, etc.
  - Continue to work on minimising waste across the campus
- **Infrastructure solutions**
  - Consider implications of any new building on engineering services, e.g. electrical, fire systems, generators, air conditioning, medical gases, etc. and ensure compatibility of systems across the campus
  - Ensure adequate storage space for storage of increased supplies and equipment required for new building or expanded services
  - Review the need for extra security/security cameras for the new Ambulatory care centre
  - Review the adequacy of existing power plant for new building or services, e.g. MRI. An extra generator would be required to support more services
  - Ensure critical systems in place for power back up while generator kicks in with central UPS with unstoppable power
  - Ensure Communications cabinet is large enough to accommodate increased services and future proofing
  - Ensure upgrading of Wi-Fi capability across campus – must be same grade across the campus
  - Ensure compatibility across the campus of systems, e.g. cabling, Wi-Fi, Duress tags, asset tagging
  - Ensure separate dedicated service lifts (appropriate width for transport of linen trolleys, etc.) are provided in any new buildings
  - Ensure utility rooms are provided in new building for storage of dirty linen, waste etc.
  - Ensure space for cleaning equipment to avoid inefficient travel times
  - Review technology at patient bedside – potential for use of Guest Wi-Fi for patient's own entertainment device rather than installation of Patient Entertainment System (PES)
  - Provide USB points on bedside power outlets
  - Any new building should have swipe card access (no keys) to ensure security
  - Consider implications of expanded services on Warehouse and receiving Dock
  - Consult with cleaning services regarding suitable surfaces in any new building
- **Staffing solutions**
  - Ensure staffing levels are commensurate with increased activity and demand for services.

Critical Care Medicine

SCOPE OF SERVICE

Critical Care Medicine (CCM) at TSH provides Level 5 role delineated Intensive Care and High Dependency Unit Care for critically ill patients who require ventilation and/or complex multiple system support.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Critical care patients are becoming older, with more co morbidities and complexities
  - Treatment of this demographic requires a longer length of stay in critical care and beyond
  - Active treatment of older, more critically ill patients is in line with technological advances and the increased expectations of the community
- **Operational description**
  - Critical Care Medicine Service is inpatient care of high acuity and critically ill patients in a 1:1 or 1:2 nursing ratio setting
  - There are 20 physical bed spaces in the unit however patient capacity is flexible within the allocated staffing budget i.e. the unit is staffed for 11 FTE nursing staff per shift and 1 x Nurse could care for 2 x 1:2 (High dependency level) patients or 1 x 1:1 (ICU level) patients
  - Clinical networking is within the critical care framework of bed declaration to the Medical Retrieval Unit and ICU to ICU transfer of patients. Transfer occurs most often from TSH to SGH if TSH is at capacity or if a patient requires a treatment or service not provided at TSH (such as MRI)
  - The separation of SGH and TSH from the one network has had little impact on the CCM service, however, for some specialties staff note there is difficulty getting consultations
  - There is a high proportion of non-ventilated patients in the unit due to hospital policy regarding care of patients with tracheostomies receiving TPN and NIV to be within a unit as opposed to ward areas
  - Research within unit is essential as there is an expectation that work and results are reviewed, however it is difficult without quality and research positions. There is a journal club that is run second weekly with St George Hospital
- **Activity**
  - Activity and in-hospital referral patterns are based on the services provided in CCM and capability/patient acuity thresholds of the ward areas
  - An increase in presentations to the ED as well as an ageing population are placing increasing pressures on critical care beds, especially during peak times of the year such as winter
  - Majority of referrals and admissions (approximately 75%) are unplanned from the ward area and the Emergency Department
  - Other activity includes unplanned emergency cases from Operating Theatres and a small quantity of planned post-operative cases
  - There is potential for increased demand if the complexity of elective Operating Theatre cases and emergency presentations increase, such as with the introduction of neuro thrombolysis, elective respiratory and elective vascular cases in the near future
  - Medical staff are required to attend ED frequently to consult on critical patients and to assist with resuscitation. The loss of a medical staff member to do this impacts on medical coverage and safety within the unit especially overnight

- **Models of care**
  - CCM staff are first responders to all arrests and PACE calls. Designated senior medical and nursing staff members must leave the unit to attend these calls, affecting clinician coverage and safety, especially in the afterhours period where there is no support staff present (such as NUM and educator)
  - A supernumerary "Access nurse" position has been generated out of existing shift FTE. This role is a support and co-ordinating position. In the future there is hope it will be independently funded and staffed by additional FTE so they can perform their role as well as attend PACE and emergency calls without directly affecting the staffing of the unit
- **Staffing**
  - Current staff includes a comprehensive range of specialist critical care medical, nursing and allied health and support staff
- **Infrastructure location and configuration**
  - Physical location of service delivery is on level 3 of TSH and accommodates an average of 14 patients made of a combination of those requiring 1:1 and 1:2 nursing ratio care.

CURRENT ISSUES AND CHALLENGES

- There will be increasing demands on critical care beds over the next 5 years due to increasing presentations to ED, admissions to the hospital and elective cases as the community is growing and aging
- An ageing population and treatment of older patients with multiple co morbidities means patients are more complex and in need of an increased length of stay in the unit
- There has been increasing demand for overnight on-call physiotherapy cover as a response to extraordinary clinical presentations. On-call overnight physiotherapy isn't a funded service and there exists no roster for overnight physiotherapy. The responsibility for providing an on-call physiotherapy service falls to weekday staff and this situation compromises the delivery of a weekday service
- There is no dedicated funded Speech Pathology service for dysphagia management, tracheostomy weaning and communication input in this population known to be at high risk of dysphagia and reduced quality of life due to communication barriers
- Patient access and exit block issues peak during certain times of the year e.g. winter. This often means demand exceeds capacity in the unit, creating a clinical risk for those patients outside the unit and deemed to require specialised care
- Majority of referrals are from ED with a relatively low referral from theatres compared to other hospitals. Increased potential demand with more elective surgery e.g. vascular surgery would mean a significant increase
- 7 additional beds have recently been added to the CCM bed base following an expansion, creating a potential overall capacity of 20 beds. These 7 additional beds are currently unfunded and so are only used when surge is required. Over the next 5 years it is anticipated they will be funded and utilised incrementally to meet projected need
- The physical bed spaces which were not included in the refurbishment are old and smaller than health facility guidelines recommend to care for a critical care patient. These patients may require multiple staff members and multiple pieces of equipment at their bedside, making the current configuration difficult and unsafe. This would be especially the case if caring for a bariatric patient
- Ageing equipment is a major issue for the CCM unit, with no replacement program in place. Existing ventilators are used for invasive and non-invasive ventilation and are 10 years past their expiry. They can't be upgraded and with no replacement program in place, once they reach failure they will be taken out of service reducing the total amount in circulation. The haemodialysis machines are also old and are in constant use. Transfer of patients to other facilities for dialysis is potentially required when all of them are in use

- **Constraints on activity**
  - Models of care:
    - There is growing expectation of the role CCM plays in the hospital outside of unit. E.g.
      - > Increasing PACE calls requiring attendance
      - > Increasing referrals and consultations of unwell patients for transfer to the unit
      - > Care of patients requiring specialised (but not critical) treatments who in other hospitals would be cared for in specialty ward areas such as:
        - Total parenteral nutrition (TPN) – service exists only within the CCM unit. No ward areas can accept and no other teams will accept patients who require TPN
        - patients who have a tracheostomy
        - Patients who require NIV (BiPAP)
    - Potential changes in models of care:
      - > If the infrastructure to care for tracheostomies, TPN and BiPAP existed throughout the rest of the hospital, CCM patient's LOS would decrease and flow-through would increase, creating capacity and improved access
    - Potential for new clinics/ services:
      - > Additional CCM beds will assist with improving access, ETP and Operating Theatres' elective waitlist. Patients requiring CCM admission will not need to be transferred to other facilities when there is no capacity, resulting in significant cost saving to the organisation in retrieval costs and associated better patient outcomes as treatment is not delayed
      - > Stroke thrombolysis is due to come online at TSH in 2019, drawing back local activity from SGH. Patients fitting the criteria may require CCM consultation and admission increasing bed utilisation and staff requirement
  - Technology:
    - Electronic record in ICU (ERIC) was recently introduced to the CCM
    - Roll out of the paperless record system was done on a state-wide level and is a big change for the department and staff
    - Some issues noted that raise concern regarding clinical risks include
    - Incompatibility with other software such as EMR
    - Problems with charting medications and fluids
    - Handover to ward areas which have paper note systems
    - Lack of ongoing IT support – currently sharing a CIS manager with POWH
    - Unreliable remote login/ access
  - Infrastructure:
    - Physical space in the unit is lacking.
    - 12 of the bed spaces are old, small and don't meet current health facility guidelines
    - Office space is insufficient for staff
    - Educational spaces are insufficient – unit does not meet college standard for educational spaces for physician training and general education
    - Meeting room is small – large meetings are held in the tea room which is not ideal
    - Family meetings are difficult to hold and video conferencing facilities need to be considered as the demand for remote access is increasing, including family members living overseas

- **Staffing**
  - The Nursing workforce is changing and recruitment for the unit is ongoing
  - There are current and ongoing clinical risk associated with nursing shortfalls and recruitment of experienced critical care nurses. This leads to risks in skill mix with rostering
  - Staff who do not have critical care experience require specific training and educational support. However current Nurse Educator position is only 3 days per week. There is enhancement planned for a Clinical Nurse Educator 6 days per week, but this will still not cover the after-hours period

- A NUM 1 position is being recruited for business hours but activity suggests it should cover 7 days and incorporate stock and equipment management
- There is no dedicated equipment nurse
- Currently have a CSO 3/7 which is not sufficient
- Currently have a dedicated orderly Monday – Friday 7:30-16:00 when 24/7 coverage is required
- Medical staff – currently down 2 x FTE (should be 6) and there is only 1 x registrar after-hours overseeing department, attending PACE calls and escorting patients (e.g. to CT). Future hope is for 6-9 positions to be filled and within that 2 x registrars covering 24/7
- Allied Health - social work, physiotherapy, speech pathology and dietetics cover needs to increase with service as well as recruitment of a dietician
- Not having a dedicated wards person after-hours impedes work practices and flow. Access for assistance with tasks such as lifting, turning and transferring patients is very difficult in the after-hours period when numbers across the hospital decrease.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - The immediate priority is for an additional 1 ICU funded bed. This will create additional capacity and improve access for emergency and planned admissions. This will also improve ETP and surgery wait lists
  - The 2-5 year plan will be to increase the funded bed base to full capacity of 20 beds. Requiring an increase in nursing FTE, medical FTE, education support and corporate services and a nurse practitioner model
  - Family meetings – solutions for overseas relatives – change structure of meetings and better use of video/ teleconference
  - Increase in educational support will assist in the transition of new staff from novice to expert. The role will also provide unit based education and activities to develop the staff
  - Research and quality – in process of involvement with St George Institute. Expectation to review quality and results and aiming to achieve the support to do this
- **Infrastructure solutions**
  - Refurbishment of the 12 'old' bed spaces to meet current health facility guidelines and allow for continued use of these spaces in the future. This would involve converting these 12 bed spaces in to isolation rooms, which includes anti rooms with additional positive/negative pressure as well as the creation of additional 'bariatric 'rooms
  - Additional space to allow for the creation of addition office space that is sufficient and meets standards for current staffing numbers
  - Additional staff Bathroom and break room facilities to support the increasing staff numbers.
  - New equipment which is on the capital plan and includes
    - Replacement of current outdated ventilators (10) and an additional 6 ventilators
    - Ultrasound machine
    - Additional BiPAP machines (5)
    - Additional Renal dialysis machines (2)
    - Blood gas machine
  - Bariatric beds required
  - Office provision to meet standards
  - Education and meeting room

- **Staffing solutions**
  - Priority needs to be given to funding the following positions for the current unit
    - A full time equipment nurse independent of the NUM 1 position, 12 hours per day 7 days per week
    - Nurse educator
    - Full time CSO
    - Registrar/CMO positions to increase from 6 to 9 FTE to allow for 2 registrar/ CMO on site 24/7
    - Increase in Consultant positions by 0.5 FTE
    - Physiotherapy and Social worker support is also essential and will need to be enhanced
  - An increase in 1 ICU funded bed will require an additional:
    - 5.6 FTE in RNs
    - An increase in CNE (as per ACCCN guidelines) from 1.0 FTE to: 12 hours per day/7 days per week = 2.50 FTE ; 8 hours per day/7 days per week = 1.66 FTE; 12 hours per day/ Mon-Fri = 1.78 FTE
    - 1.0 FTE Equipment RN at 8 hours/day Mon-Fri.
    - 1.0 FTE CSO from current 0.63 FTE
    - An increase in social work to 1.0. (currently shared with ED)
    - Additional medical officers such as RMOs, Registrars and Intensivists. At present 6 positions (2 registrars not rotated). In relatively new future should be going from 6 to 9 positions. If fully staffed, could do 2 registrars 8:00-17:00 and 1 registrar afterhours. 5 plus years require someone permanently managing outside work e.g. TPN
  - 6 additional beds will require:
    - An increase in nursing FTE by 33.6. including a 1.0 FTE nurse practitioner
    - An increase in medical support i.e. RMOs, Registrars and Intensivists.
    - There will need to be a CNE 7 days a week.
    - A clinical NUM1 7 days per week
    - An increase in corporate services
    - Dedicated wards person 24/7
    - An increase in allied health
      - > Physiotherapy cover 7 days a week plus after hours; an increase of 1FTE physio would enable a five-day evening service (800-2200) across 20 CCM beds. A further increase of 0.21FTE would enable 8-hour shifts on Saturday and Sunday (800-1630) to cover 20 CCM beds. A further increase of 0.5FTE would enable an evening on-call service across seven days
      - > Social workers – SW at every family discussion
      - > Senior dietician. To help with TPN services
      - > Speech Pathology – for dysphagia and communication management in known high risk patients e.g. post extubation >48 hours, and for multidisciplinary input into tracheostomy management, weaning and decannulation
      - > Ward clerk --- impacting on patient transfers
  - A CIS manager is required to assist staff with IT access and interface of different IT systems.

Disability Strategy Unit

SCOPE OF SERVICES

The Disability Strategy Unit, a unit within the Directorate of Primary and Community Health, provides strategic directions for disability inclusion across SESLHD. It also provides support for staff in the implementation of the National Disability Insurance Scheme (NDIS) and for people with a disability requiring complex discharge planning. Services are provided to clients of all ages with a physical and/or intellectual disability.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - In the Sutherland Shire, 7,398 (3.5%) residents are living with a profound or severe disability and 21,537 people provide unpaid assistance to a person with a disability (Source: PHIDU Social Health Atlas of Australia. New South Wales and Australian Capital Territory. Data by Local Government Area. Published 2018: October 2018. Accessed November 2018)
  - Compared to people without a disability, people with a disability
    - Experience longer stays in hospital
    - Often require intensive and complex health care
    - Experience reduced positive health outcomes
    - Experience increased avoidable adverse health impacts
    - Experience a higher range of chronic health conditions
    - Require complex discharge planning in an ever changing disability reform landscape
  - The NDIS provides support for clients aged 0-65 years, with a designated pathway for children 0-7. Those aged 65+ are eligible for the services of My Aged Care, however existing clients of the NDIS may continue with this service once they are over 65.

- **Operational description**
  - Services provided include:
    - Guiding the implementation of the NSW Health Disability Inclusion Action Plan 2016-2019 across SESLHD and the development of a local action plan for SESLHD
    - Capacity building of staff to help clients navigate the system, with the education of NDIS champions across SESLHD, including 14 at TSH&SCHS
    - Support for escalation of prioritised complex cases (inpatients and community dwelling) to reduce length of stay and/or avoid unnecessary hospitalisation
    - Provision of disability navigators for SESLHD
    - Metro-Regional Intellectual Disability Network (MRID) and Kogarah Developmental Assessment Service (DAS), based at Kogarah, provides specialist health services to children, adolescents and adults with developmental delay/disabilities and associated health and mental health conditions across SESLHD. A range of specialist clinics are held in collaboration with key partners including FACS, ADHC, DEC, NGOs, Mental Health and Community Health
    - Mental Health and Children and Young People Working groups
    - SESLHD NDIS Implementation Committee, with representation from all facilities
    - A Guide for clinicians is provided on the SESLHD intranet page
    - Partnerships with NGOs who provide disability support services in the Sutherland Shire, e.g. Sylvanvale, Civic, Disabilities Services Australia, etc.
      - > Part of interagency group across SESLHD including Mental Health, Drug and Alcohol services and Intellectual Disability Services
      - > The Local Area Co-ordination (LAC) provider for NDIS in the Sutherland Shire is St Vincent de Paul

- **Models of care**
  - The primary objective of the NSW Health Disability Inclusion Action Plan is to "ensure the NSW Health system provides equitable and dignified access to services and employment for people regardless of disability. This means we are committed to reducing and, where possible, eliminating discriminatory barriers for people with disability, whether they are in employment, seeking employment or using health services provided by NSW Health."
  - Collaboration with consumers, families, carers and interagency partners is at the core of service delivery and design
  - Recent funding from the MoH has been provided to commence a new model of care: Safe and Supported at Home (SASH) for people who are ineligible for NDIS support but require clinical support, e.g. people with COPD, obesity and other chronic diseases that are not considered a disability under NDIS. Non-clinical support is provided by ComPacks.

CURRENT ISSUES AND CHALLENGES

- The NDIS is still evolving and requires ongoing staff capacity building, with no formalised training provided
- Access to accommodation suitable for people with a disability is limited in the Sutherland Shire, with a 2-3 month waiting list
- For discharge to disability group homes, clients are required to have behavioural, communication and functional assessments. There are no guidelines for disability support workers to access their clients when in hospital, thus hospital staff are required to perform NDIS assessments and referrals which would otherwise be performed by designated and paid support workers (allied health, etc.). This results in longer lengths of stay and hospital staff are required to do extra tasks that were previously performed by ADAC.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - There is a great opportunity for SESLHD and TSH&SCHS to partner with NGO's, disability support providers, carers, government agencies such as FACS and NDIA to develop strategies to better support people with a disability in the community setting to prevent avoidable hospital admissions and decrease length of stay
  - Consider partnerships with Ability Links, a NSW government funded organisation for care co-ordination of clients with disabilities
  - Consider allowing St Vincent de Paul's LAC to have a monthly 'connection desk' in the TSH foyer for patient's families and carers to access information and support for people with a disability
  - Consider formalised partnerships or MoUs between TSH and providers for client transfer to community placements
  - Expansion of MRID to increase ward level interface for the early identification of people with disabilities to avoid longer lengths of stay and early discharge planning support
- **Infrastructure solutions**
  - Office space for Disability Strategy Unit staff (x2).

Diversity Health Services

SCOPE OF SERVICES

The Diversity Health team is responsible for driving the responsiveness to our Aboriginal and CALD population, people with disabilities and other diverse/disadvantaged groups. This includes the implementation of relevant policies at the local level, quality improvement activities, community outreach programs and partnership initiatives, which are aimed at improving access, health literacy and health outcomes.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - There is an increasingly multicultural and diverse population across all age groups.
  - There are significant Russian speaking and Chinese speaking populations in Sutherland catchment
  - Older people are brought over from China to help with caring responsibilities of younger families: challenges with not having access to Medicare
  - Older people tend to go back to using their language: a challenge going ahead for community based services and linking in with RACF and GPs
  - Aboriginal population – Kurranulla Aboriginal Corporation (KAC) provides a drop in centre for the local Aboriginal and Torres Strait Islander community. The closest aged care facility with Aboriginal services is in Illawarra – many elders stay at home (see also separate Consultation Report on Aboriginal Health)
- **Operational description**
  - The team works closely with a range of stakeholders including patients, carers and families, local community members, clinical staff, Mental Health Services, the Multicultural Health Service, Aboriginal Liaison Service, Health Promotion Service, Interpreter Service, Equity Co-ordinator, TAFE, Cancer Council, and local NGOs (Gymea Community Aid being the main one)
  - Some services work across both SGH and TSH, e.g. Aboriginal Liaison Officer, Mental Health Community Development Co-ordinator
  - Services are available Monday to Friday during business hours
- **Models of care**
  - Producing educational material, including culturally-appropriate translated material, on a range of health topics
  - Consulting patients, families, carers and staff to hear about their experiences
  - Conducting research and implement practical projects such as auditing the use of interpreter services
  - Running education and training programs for staff in diversity-friendly practices, improving hospital processes, communication skills, writing plain English and how to manage the translation process, e.g. the Teach Back Program, which ensures patients understand instructions on discharge
  - Producing diversity friendly Wayfinding around the campus
  - Providing health education outreach for the community
- **Staffing**
  - Diversity and Aboriginal Health 4.18 FTE in total across SGH and TSH and 0.6 FTE at CHCK
  - The majority of staff are part time and work across all cultural communities, i.e. not language specific programs
- **Infrastructure**
  - Diversity Health offices are located in the Pritchard Wing (ground floor) at SGH and are part of the Social Work Department
  - The Interpreter Service is based at RPA, with a centralised booking system managed there.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - The increasing CALD and Aboriginal population means the service is busier and managing with no increase in staff
  - There are increasing numbers of people with poor health literacy that require education in navigating the system as well as education in self-management of health, prevention and screening programs, medicine management, etc.
- **Models of care**
  - There are no new programs or services currently planned
  - Screening in multicultural populations, e.g. for cancer prevention, has shown that many carers do not access prevention programs and this is a growing area that will increase demand for hospital services
  - Accessing wellness services on the Sutherland campus is confusing – with Caringbah Community Health, Southcare and HealthOne as separate entities and Community Health separated from the others. Would be preferable for the wellness services to come together.
- **Technology**
  - There is no common access to shared drives on the SGH and TSH campus, which limits ability to share information across the campuses
- **Infrastructure**
  - Aboriginal meeting room needed
  - Co-location of wellness services on campus
  - More welcoming venues for Aboriginal and CALD populations
  - Children's waiting space
  - Quiet waiting areas
  - Chapel is a big space – could be multifaith --- 3 main spaces within that can be used for quiet space, prayer and reflection. Needs renovation and repair, undercover pathway, it is well-used. From sign on Mortuary viewing room is a long walk – corridor part of original building
  - Family and patient space – no overnight rooms for Aboriginal families --- families come from Illawarra and other rural areas for orthopaedic, ENT etc. and may stay 2 weeks after the procedure/complications
  - Yarrabee has no space for families or family meetings
- **Staffing**
  - Potential for increasing services is limited due to staffing availability
  - Current staffing levels with part-time staff inadequate to meet the increased demand from the growing diverse population.

Drug and Alcohol Service

SCOPE OF SERVICES

The Drug and Alcohol Service (DAS) is a District wide service that provides Level 5 role delineation services for the assessment and care of people with moderate to severe substance use disorders including alcohol, pharmaceutical and illicit drugs. DAS is a specialist services which offers a range of treatment and support for people with complex (moderate to severe) issues due to alcohol, prescription and/or illicit drug use, and provides support for their families and carers.

Services are provided in inpatient, outpatient and community outreach settings.

Core Clinical services comprise intake and assessment, counselling, case management and support, withdrawal management, opioid treatment, medication – assisted treatment, hospital drug and alcohol (D&A) consultation and liaison services, D&A hospital admissions and court diversion programs.

Additional services provided include consumer support services including Aboriginal oriented workforce, addiction medicine outpatient clinics, post-ED presentation clinics, Chemical Use in Pregnancy and Parenting consultation and liaison, cannabis clinics, GP shared care, pharmaceutical opioid clinics, Headspace outreach clinics and assertive community outreach

The responsibility for managing the health issues for people presenting with substance use disorders is shared across all parts of the health system. Due the specialist knowledge and expertise of the drug and alcohol workforce, DAS could play a stronger role in networking and supporting community based services for integrated patient care, hospital avoidance and to improve outcomes for individuals, families and the community related to drug and alcohol use.

DAS funding and activity models are predominantly focussed on the provision of direct community-based patient care. Enhancing the capacity of the DAS specialist workforce to train, educate and enhance the hospital and community workforce to respond drug and alcohol concerns, could occur with appropriate funding.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Primary focus is adults with complex (moderate to severe) substance use concerns
  - Young people 14-24 can be referred to the drug and alcohol outreach clinic at Headspace, Miranda
  - Majority of referrals are residents of the Sutherland catchment.
  - Population growth for Sutherland, additional hospital beds and an expanded ED capacity has seen an increase in demand for the drug and alcohol service. Substance use projections predict an increase of 30% by 2026/27 and it is likely that demand on DAS is likely to increase at a rate higher than the population growth
  - Demand is driven by:
    - Increasing AOD activity , which is greater than the population growth rate and is likely to continue
    - Increasing numbers of vulnerable community members who have substance use disorders as a comorbidity
    - Increasing numbers of older people with substance use disorders requiring specialist management
    - Operational description
      The majority of referrals to the service are self- initiated, however referrals are also received from ED, GPs and other specialists, Corrective Services, Magistrates, Family and Community Services, other D&A services and NGOs
    - The majority of drug and alcohol work occurs in Community setting with some consultation and liaison support provided to the ED and inpatient settings
    - The drug and alcohol service is located on campus within Caringbah Community Health, with some outreach to GPs, Community Pharmacies, Headspace, Engadine CHC and in the future in some instances, may be provided at the patient's home/ community setting

- **Activity**
  - Non-admitted activity is increasing. Clinical staffing levels, lack of space to accommodate staff and rooms to conduct clinical activity impact upon the ability for patients to access services.
  - Referrals for ED and inpatient consultation liaison support are increasing however service provision is limited to CNC availability, which is funded by DAS, not TSH. Referrals have increased by 41% since 2015/16

- **Models of care**
  - DAS supports an integrated community focused model of care, designed to avoid hospitalisation, with acute inpatient management when necessary
  - Unplanned admissions to TSH are managed by general medicine, with consultation liaison provided from DAS
  - As there are no dedicated D&A beds at TSH, complex patients requiring planned admissions are currently admitted to SGH or SSEH

- **Staffing**
  - The specialist drug and alcohol workforce at Sutherland is multidisciplinary and is made up of Medical, Nursing and Allied Health professionals
  - A full-time CNC provides consultation and liaison services to the Emergency Department and inpatient areas of the hospital with support from a community based staff specialist when required, and an after-hours and weekend on call telephone advice service
  - DAS has a CNC focussing on Shared Care and a CNC for Chemical Use in Pregnancy Services
  - A range of Allied Health disciplines provide psychosocial interventions and support.
  - Clinicians are involved in supporting intake, assessment, withdrawal management, counselling, support and case management, GP Shared Care, Community Pharmacy Liaison, D&A admissions, pharmacotherapy treatment, Chemical Use in Pregnancy Services, specialist cannabis clinic and Magistrates Early Referral in to Treatment (MERIT).

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - There is significant unmet demand, particularly among vulnerable populations who are harder to engage, with:
    - Only 1 in 6 people that need DAS accessing its services
    - Only 1 in 3 in patients with D&A issues are detected by treating teams, occasioning missed opportunities for brief intervention and/or referral to treatment and likely precipitating recurrent hospital presentations
  - There is little access to assertive outreach in the Sutherland shire – from either the LHD or NGOs, creating difficulties in accessing vulnerable clients
  - Access to crisis accommodation is limited, and clients can be housed far from their known support systems
  - The service was previously networked with St George, with patients requiring complex care admitted to SGH. Since the split in the network, access to inpatient beds at SGH has become more difficult. The service is currently developing a model of care for more complex presentations
  - DAS community services work in isolation, with little opportunity for integration with other health services, despite the majority of clients having substance use disorders as a comorbidity
  - Community Mental Health services are difficult to access due to restricted criteria, resulting in difficulties with mental health follow up on discharge from DAS
  - There is no funded comorbidity service to integrate care for Mental Health and DAS services

- **Technology**
  - Lack of an electronic referral process results in delays to referral and delayed assessment and discharge planning

- **Infrastructure**
  - Access to clinical consult rooms and staff accommodation within the Community Health setting has presented a barrier to accommodating additional clinical staff earmarked for Sutherland and for service range and complexity to grow to meet demand
  - There is no workstation available for the CUPS and Hospital Consultation and Liaison CNCs within the hospital footprint
  - Post admission and ED clinics are run in the CHC, not within the hospital footprint
  - Office space is limited – three workstations have been put into a storage room which is substandard accommodation and significant difficulty accommodating new staff and associated clinical activity
- **Staffing**
  - There is only one consultation liaison CNC, funded by DAS, with no leave cover. Hospital activity based funding supplementation could ensure full time cover I leave and backfill relief
  - Access to social work support is limited. Whilst there is no specialist drug and alcohol inpatient allied health at TSH, there are TSH inpatient allied health assigned to all wards and will see referred patients on those wards.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - That Sutherland Hospital consider implementing systematic D&A screening for all hospital presentations
  - That with patient consent, all ED presentations/inpatients with substance use disorders are referred to DAS
  - Refer all ED presentations/inpatients with substance use disorders to DAS
  - Consider hospital based activity funding to DAS services to support inpatient care, for improved discharge planning and referral for follow up to avoid readmission and reduce length of stay
  - Homelessness needs to be addressed prior to discharge to avoid representation
  - With increasing referrals for the aged, consider clinical pathways to Southcare, i.e. take DAS services to where older people access services (would require funding)
- **Infrastructure solutions**
  - Consider DAS services as part of an ambulatory precinct to promote integrated and co-ordinated multidisciplinary care along the life course. Requires consult rooms, group education spaces and office space
  - Ambulatory care spaces can be shared with other specialties, recognising DAS clients have other comorbidities and are part of the community
  - Provide space for consultation liaison CNC within hospital footprint
  - Consider funded beds for DAS to provide a specialised service for local residents with complex substance abuse issues and an equitable pathway for care
  - Implement electronic referrals for consultation liaison to promote early assessment and discharge planning and avoid loss to follow up for difficult to reach clients
- **Staffing solutions**
  - Consider hospital funded DAS consultation liaison position to support screening, assessment, follow up and avoid readmission or more complex issues developing
  - General workforce education on D&A issues to improve screening and referral processes and to avoid stigma and reduce inequities for DAS clients (additional funding required)
  - Consider funded social work position for SESLHD DAS services for capacity building at local facilities.

Emergency Department

SCOPE OF SERVICES

Sutherland Hospital provides an Emergency Medicine service for adults and children, providing vital health care for the acutely ill and injured. The purpose built department was opened in 2017.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Services are provided to adults and children
  - Demand is driven by:
    - A growing and ageing population
    - Increasing numbers of residents living with chronic disease and frailty
    - Increasing acuity in patients
    - A lack of available Primary Medical Care Services in the Sutherland Shire, especially those providing services after-hours and a decrease in bulk billing practices

- **Operational description**
  - The TSH ED currently has the capacity for:
    - 19 acute beds (plus an additional 6 x unfunded) including 2 isolation rooms and 2 x SAR (Safe Assessment Rooms)
    - 2 resuscitation rooms (plus an additional 1 x unfunded and 1 x 'cold-shelled')
    - 8 x ED SSU beds
    - 7 x Paediatric beds including 2 x single isolation rooms ; and 1 x procedure room
    - 4 funded (5 capacity) Fast Track treatment beds and 5 consult rooms, 1 procedure room, 1 plaster room
  - Clinical networking occurs with SGH and SCH for specialty admission transfers
  - Trauma is networked with SGH
  - TSH provides 24 hour Pre Hospital Assessment for Primary Angioplasty (PAPA)

- **Activity**
  - Activity is increasing (47,942 presentations in 2012/13 to 50859 in 2016/17)
  - Acuity has been increasing with the largest growth in triage category 3 and 2
  - 25% of the total ED presentations are paediatrics

- **Models of care**
  - The newly built department has allowed staff to care for patients in a purpose built emergency facility maximising use of their models of care which include SSU, Paediatric, Acute, Fast track and resus
  - ED and admission avoidance models implemented at TSH include ED Short Stay Unit, Geriatric Flying Squad, Southcare Outreach service, ASET, a short stay general medical unit model, RADIUS and CARS (Paediatric service)
  - Nurse Practitioner and specialist ED allied health to improve flow, decrease length of stay and reduce representation in ED
  - Mental Health CNC in ED and on call registrar shared with SGH
  - Safe assessment room used for patients with mental health and drug and alcohol presentations with behavioural management issues

- **Staffing**
  - Nursing: Nurse Unit Manager, Clinical Nurse Specialists, Consultants, Nurse Educators, Nurse Practitioners, RN's, ENs, AINs
  - Medical: FACEM cover 16 hours per day, 7 days per week, 365 day per year, with a minimum of 4 FACEMs per day. Registrar cover is provided 24 hours per day
  - Allied Health: Physiotherapist 7 day cover, OT 0.21FTE (on call) for specific review, Social Worker shared with critical care, with on call for overnight and weekend crisis management
- **Infrastructure location and configuration**
  - ED is located on level 2 with close functional adjacencies to medical imaging, theatres, critical care medicine and GMU.

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - Access to imaging
    - Imaging delays impede patient flow and clinical outcomes. MRI and CT are key components to diagnosis in many specialities
    - TSH has only 1 x CT. Delays to CT imaging impact daily on ETP. This is compounded when CT is down for routine or unplanned servicing
    - Lack of dedicated Interventional Radiology Service
    - Lack of MRI on site. The current practice of deferring studies until patient is discharged, or organising transfer to SGH, impacts on patient LOS, patient safety and cost
    - Delays to general imaging (2 hour KPI for MID) means delays to assessment and management of patients
  - Access to resus bay can be restricted at busy times, e.g. for simple reductions, on weekends and for paediatric procedures
  - Surgical reviews are difficult on weekends due to lack of registrar cover
  - Patient Discharge Unit will only take ambulant patients, meaning stretcher patients must remain in ED awaiting discharge transport
  - Overnight patient transport is a state wide issue causing delays to transfer and discharge and increased length of stay
- **Technology**
  - Despite being a paperless department there is no integration of ECG's onto a digital interface
- **Infrastructure**
  - Timely access to inpatient beds is required for timely transfer of care. Access to paediatric beds, critical care medicine beds and other specialties can be delayed, causing bed block in the ED
- **Staffing**
  - There has been a reduction in Registrar numbers and recruitment has been difficult despite considerable efforts to attract Registrars locally, causing risks to overnight staffing
  - Limited access to advanced trainees from SGH and St Vincent's.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Improved medical imaging services, including an MRI and a 2nd CT will deliver benefits to services beyond ED, including CCM, neurology, orthopaedics, cardiology, gastroenterology, respiratory medicine and paediatrics
- **Infrastructure solutions**
  - Progressively open and staff unfunded beds to meet future demand
  - Consider imminent opening of one extra resus bay (requires 5.5 FTE nursing) to meet current demand and meet expected increased demand with commencement of thrombolysis service at TSH
  - Provide an extra point of care high end ultrasound machine to meet demand (total 2)
- **Potential ICT solutions**
  - Tap on/ tap off sign in for EMR and a bar code scanner for patient's eMeds
  - Integrated ECG records
- **Staffing solutions**
  - Continue to seek advanced trainees for TSH
  - Increase availability of nurse practitioners and allied health for dedicated acute and fast track care. See model at Liverpool, with staff specialist oversight
  - Consider minor injuries clinic, identified by triage, run by nurse practitioner and supported by physiotherapist
  - Potential for technical assistants to work in consultation with senior medical and nursing staff
  - Consider ED Pharmacy assistant for ordering and unpacking stock for more effective use of skilled nursing time.

Endocrinology

SCOPE OF SERVICES

The Sutherland Hospital Endocrine and Diabetes service is a Level 5 role delineation service that provides inpatient and outpatient services in a range of disorders including Diabetes (Type 1 and 2), gestational diabetes, osteoporosis and metabolic disorders, pituitary and thyroid disorders.

The Diabetes Education service at Sutherland Hospital is a hosted service from St George Hospital.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Patients seen by both services are adults and paediatric patients transitioning to adult care. Paediatric patients are managed by Paediatricians, and older adults with diabetes are managed by Geriatricians
  - Drivers of demand include:
    - The high incidence of diabetes mellitus in the Sutherland Shire
    - Increasing hospitalisation rates for diabetes. Across all age groups, admission rates increase with poor glycaemic control
    - Growing and aging population
    - Patients with diabetes mellitus have significantly longer hospital admissions and higher costs of care compared with those without diabetes

- **Operational description**
  - The Sutherland Hospital Endocrine and Diabetes service provides:
    - An inpatient service on Yarrabee ward including on call service
    - Consultation service and/or conjoint care to other specialties
    - Conducts 3 out-patient clinics per week in endocrinology, gestational diabetes mellitus and diabetes in the Outpatients department on level 2
    - Diabetes Education Centre at Sutherland Hospital is a satellite service from St George, with nursing staff provided from St George hospital for outpatient appointments and inpatient consultation
  - The waiting list for outpatient appointments is increasing due to increased demand
  - Clinical networking: with SGH for diabetes education
- **Activity**
  - Outpatient activity demand has increased significantly due to:
    - The aging population is increasing demand for endocrinology services as people live longer with long term conditions
    - The complexity of patients is increasing, with more patients requiring specialised support and supervision and education, and this is expected to increase further
    - Management by primary care is not recommended at diagnosis or for ongoing care for Type 1 Diabetes
    - Increasing numbers of gestational diabetes patients being seen locally
  - Current and recent inpatient activity (see Table 3 and 4)
    - Endocrine patients currently occupy 1 -2 beds on the medical ward Yarrabee but often outlie and have extended LOS due to delays in review and delays in diabetes educator consultations/ discharge planning
- **Models of care**
  - The majority of patients are seen on an outpatient basis for assessment and follow up and referral back to GPs for long term management where appropriate
  - Prevention and anticipatory care activity is managed in the community
  - Historically, the St George and Sutherland Departments operated as a single unit however since the split, the Sutherland services has been under resourced and diabetes education does not have a full time presence at TSH
- **Staffing**
  - Nursing: Diabetes Education service nurse educators provided from St George Hospital
  - Medical: 2 Staff Specialists (0.8 FTE), 1 fractional Visiting Medical Officer (VMO), 1 JMO (0.5) and 1 BPT (0.5).
  - Allied Health: no affiliated allied health staff.

CURRENT ISSUES AND CHALLENGES

- Changing patient demographics and the rise of diabetes mellitus means that we can expect that nearly 10% of the population of the SESLHD will have diabetes in 5 years' time with Sutherland Shire having a greater than average incidence in the LHD
- Diabetes education does not have a full time presence at Sutherland and this is causing increased pressure on an already busy Endocrine Department.
- Diagnosis and treatment delays may occur due to insufficient access to diabetes education and outpatient services.

- **Constraints on activity**
  - Models of care
    - Waiting list:
      - > Current outpatient waitlist is within timeframes of requesting party
      - > Diabetes education referrals are triaged, with priority given to inpatients being discharged

- Unmet demand
  - There is no dedicated Inpatient diabetes educator / CNC that can consult patients early in their admission and co-ordinate their discharge plan
  - The lack of access to a podiatrist, dietician and educator affiliated with the Sutherland Diabetes Centre negatively impacts on the preventative care, diagnosis, and treatment of a range of problems including infections and foot and nail conditions related to diabetes
  - There is no "rapid response" clinic for discharge follow up and review of complicated/ unstable outpatients who need prompt review
  - There is a lack of local General Practitioners who confidently manage diabetic patients – particularly those with advanced renal failure which makes up 50-70% of referrals and require education
  - There is lack of access to outpatient notes by inpatient clinicians as they are not on EMR2, but on paper, in satellite storage or in clinics. More timely access to patient files could speed up clinical decisions.
  - No comprehensive management service for osteoporosis
  - No dedicated Pituitary disease outpatient clinic

- **Infrastructure**
  - Outpatient services are currently located in outpatient's area and the Warrawol building on the TSH campus. Staff would support the relocation of all outpatient services into a dedicated and centralised ambulatory care building

- **Staffing**
  - Diabetes education does not have a full time presence at Sutherland and this is causing increased pressure on an already busy Endocrine Department. The presence of a Diabetic Educator based at TSH will help to avoid/reduce the number of hospital admissions by offering comprehensive outpatient care.
  - Additional Endocrine Consultant and 0.5 FTE BPT is required to support the on call roster and meet the demands of an increasing inpatient and outpatient service. This will help secure an advanced trainee position to greatly enhance the service to meet current and future clinical demand.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - The future of Endocrinology at TSH requires a comprehensive, integrated acute inpatient service and outpatient service to target chronic and complex patients and reduce the need for presentations and admissions at TSH. This includes:
    - Improved triaging of outpatient referrals so that acute review patients can be seen more quickly from ED, GP referrals and recent discharges requiring follow up to prevent admission and/or reduce length of stay
    - Early referral to Diabetes educator prior to discharge to support early discharge
    - Diabetes education service should be quarantined for complex patients, with routine patients managed by primary care
    - The presence of a Diabetic Educator based at TSH to avoid/reduce the number of hospital admissions by offering comprehensive outpatient care
    - Advocate for patient experience to be recognised to inform service delivery
  - Potential new clinics/ services
    - An osteoporosis clinic to meet the unmet demand by the elderly population for fracture and refracture prevention. There is currently no structured care/ clinic or follow up
    - A monthly pituitary disease clinic
    - An MDT clinic for renal failure (endocrinology/renal)
    - Ongoing funding of TIIC program for diabetes educator home visits to co-ordinate ongoing care post discharge for selected patients and ensure GP follow up
    - Potential for new model where Endocrinologist and diabetes educator visit GP clinics to better manage patients in the community and help avoid admissions and readmissions (see model in place in Newcastle and Liverpool)
    - Potential for multidisciplinary care with ophthalmology
    - Introduction of a Young adult's clinic to meet the needs of a growing volume of young people with type 1 diabetes. The aim of the dedicated clinic is to provide comprehensive care, optimise glycaemic control, prevent complications, improve quality of life and reduce hospital presentations, length of stay and readmissions

Infrastructure solutions

- Provide increased capacity for all current and future outpatient endocrine services/ clinics in a central location. Staff would support the relocation of all outpatient services into a dedicated and centralised ambulatory care building
- Improved access to ambulatory care services, e.g. for infusions
- Increase funded endocrinology bed base to improve patient management, provide skilled nursing staff and staff efficiencies
- Provide integration of outpatient and inpatient care by changing all outpatient files to EMR2 (currently paper notes and a risk for service)

- **Staffing solutions**
  - Funding and recruitment of a full time Diabetic Educator with CNC skills and full time midwifery educator for GDM patients to TSH to enable full and equitable coverage of the service to TSH patients
  - Funding and recruitment of an additional consultant and additional 0.5 BPT to support on call roster and patient load
  - Increased allied health support, including dietetics, podiatry to assist with care and discharge planning
  - Admin support for diabetes education service.

ENT

SCOPE OF SERVICES

The ENT service at TSH provides a Level 4 role delineation surgical service for adults and children, caring for non-complex emergency and elective disorders of the head and neck and emergency airway assessment.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - The TSH ENT service sees adults and paediatric patients
  - Demand is driven by:
    - Population growth
    - Community expectation that non-complex services will be available in local hospital settings

- **Operational description**
  - The ENT service is networked with SGH with shared on call
  - As a networked service, complex surgery and management occurs at SGH or SCHN
  - Beds are available on the surgical ward
  - The majority of patients are day only or overnight
  - Paediatric Audiology (for children aged up to age 16) is provided by community health services on campus

- **Activity**
  - Current non-admitted activity
    - There are currently no ENT clinics at TSH, with patients accessing assessment and follow up via clinics at SGH or private rooms
  - Current and recent inpatient activity
    - The demand for local surgical care is increasing, with extensive waiting lists including for paediatric tonsillectomy (greater than one year)

- **Models of care**
  - ENT has a ward based model of inpatient care
  - Emergency patients are reviewed in ED
- **Staffing**
  - Medical: The ENT service is networked with SGH. On call services are shared and there is an advanced trainee and JMO's that work between the two hospitals.
  - Nursing: Theatre and l ward staff infrastructure
  - Allied Health: access by referral as required
- **Infrastructure location and configuration**
  - Theatres and perioperative spaces are located on Level 3
  - Inpatient care is provided on the surgical ward for adults and paediatric ward for children.

CURRENT ISSUES AND CHALLENGES

- The expectation of the local community is that more services should be managed locally and only complex ENT cases (such as head and neck surgery) should require travel to another facility
- There is a large waitlist for ENT surgery at TSH due to theatre availability and staffing constraints
- Unmet demand
  - No ENT outpatient or preadmission clinics available at TSH resulting in no avenue for appropriate follow up at TSH
  - There is no adult audiology service on campus. Hearing loss is a significant issue however adult services currently only available privately
  - Access to care for paediatrics with sleep apnoea, with waitlist greater than one year for paediatric tonsillectomy
  - Delays to surgery can result in hearing loss
  - No access to some less complex services locally such as cochlear implant, rhinology
- **Infrastructure**
  - Ageing theatres with inadequate equipment
  - There is no hospital based equipment to review emergency patients, resulting in staff having to carry their own equipment between sites
  - There is no appropriate clinical space for acute care assessment, e.g. acute airway emergency, with a risk of adverse patient outcomes
- **Staffing**
  - On call roster across 2 sites provides issues if APT alone at TSH.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Provision of ENT outpatient service would enable pre admission consultations, outpatient consultations and discharge follow up and provide an equitable service for Sutherland Shire residents
  - All but the most complex OT's can be performed at TSH if the equipment, infrastructure and staffing were available
  - Provide increased theatre time to manage demand and improve services available locally

- **Infrastructure solutions**
  - ENT outpatient service would require access to 2 clinic rooms, fitted with specialised ENT assessment equipment, with close adjacencies to operating theatres, ED and the paediatric ward. This will provide teaching opportunities for advanced trainees, JMOs and students and equity of access for local residents
  - Provide appropriate space and equipment (2 endoscopes) for acute care service
  - Provide appropriate operating equipment to allow an increase in services provided locally
- **Staffing solutions**
  - Staffing would require enhancement in line with service enhancement
  - 1.0 FTE registrar (preferably accredited)
  - 0.5 clinic nurse
  - Admin support for bookings – could be shared
  - Consider provision of audiologist at TSH or contracted service for adults.

Garrawarra Centre

SCOPE OF SERVICES

The Garrawarra Centre is NSW State funded dementia specific residential aged care facility (RACF) located at Waterfall, providing high level dementia specific care for people, regardless of age, with a primary diagnosis of dementia who exhibit challenging behaviours and require a safe and secure environment to live.

The Garrawarra Centre is recognised as an Aged Care Teaching facility and as a student placement for nursing and allied health through universities and TAFE.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Resident demographics**
  - Residents of Garrawarra have a primary diagnosis of dementia and behavioural issues, but patients may also be accepted with cognitive impairment and/ or brain injuries and mental illness who can no longer be managed in the community
  - Most of the residents originate from SESLHD or the Illawarra but referrals to the centre are received from all over Australia
  - Residents accepted require the highest level of care (Level 6 and 7 on the Brodarty Draper Low Triangle[171]
  - Demand is driven by
    - An increasing demand for care of high care dementia patients, those with cognitive impairment as a result of substance abuse, brain injury, metabolic syndrome, PTSD, forensic patients and older people with mental illness who can no longer stay at home and are not suitable for standard RACF care
    - An increasing number of patients already in private residential care facilities whose behaviours become challenging and can no longer be cared for within the model they provide
    - Lack of alternative facilities which offer comparable services.
- **Operational description**
  - Residents are housed in one of 4 x 26 bed cottages made up of single and double rooms.
  - Each cottage houses a gender specific group (1x female, 3 x male)
  - Clinical networking: TSH provides governance and aged care support.

- **Activity**
  - The centre has a high level of occupancy as residents are long term
- **Models of care**
  - The centre is a NSW state funded residential aged care facility
  - Access is via referral after ACAT assessment from either an acute care facility, geriatrician, RACF or the community, with assessment for admission criteria with a geriatrician
  - Maintenance of ADLs is provided
  - Diversional therapy programs are provided to residents
  - A mobile dental service is currently stationed on site, to avoid the need for transfer for oral health care
  - A hairdresser attends regularly
- **Staffing**
  - Nursing: A Nurse Manager oversees The Garrawarra Centre, supported by Nurse Unit Managers, Clinical Nurse Consultants, and Clinical Nurse Educators. The workforce consists of RN's, ENs, AINs and TAINs
  - Medical: Staff specialist 0.5 FTE (shared with TSH) and 3 x GP's who provide a regular service to the centre. The Geriatric Flying Squad based at TSH also services the Garrawarra Centre
  - Allied health: physiotherapy, exercise physiology and diversional therapy programs
  - Other: administrative/clerical staff, support services staff – housekeeping, food services, maintenance, gardening, security
- **Infrastructure location and configuration**
  - Residential Cottages are set in secure grounds within the larger Garrawarra Centre, which also houses administration and education buildings.

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - Models of care
    - Patients who have received an ACAT assessment and are referred to Garrawarra Centre are triaged by urgency of need and risk assessment criteria
    - All patients are long term patients, with no respite service offered
    - Many residents have failed previous RACF placements, with Specialist Mental Health Service for Older Persons (SMHSOP) units also unable to accept aggressive patients
  - Unmet demand
    - There is a growing unmet demand for the care of younger patients who require residential care for early onset dementia, behavioural issues from brain injury, mental health or substance abuse, however current infrastructure does not support their care
    - There is increasing demand for care of forensics patients, i.e. older prisoners with dementia and behavioural issues
    - There is no specialist palliative care support or social work or bereavement counselling support for families of dying patients
    - Introduction of NDIS model may also impact on future service delivery expectations and capacity
- **Potential changes in models of care**
  - Future changes to the model of care, e.g. to support an expanded demographic group of patients, would require Garrawarra Centre to enhance resources and physical building space with purpose built additions / reconstruction in line with RACF guidelines

- **Infrastructure**
  - Current facilities at Garrawarra are no longer fit for purpose or meet best practice guidelines. The 4 cottages which housed up to 30 residents (currently at 26) hold twice the number of recommended patients required in order to reduce interactions and physical conflict
  - There is insufficient space and amenities such as single rooms with ensuites, family conference space to allow for privacy and personal space, service / treatment rooms and therapy areas for physiotherapy sessions
  - Fittings and fixtures under rigorous wear and tear require constant repair and would benefit from being refit/ rebuilt in line with state-of-the art dementia high care environments

- **Staffing**
  - There is a good retention rate of nursing staff at Garrawarra. Within the Aged care stream nursing graduates rotate from TSH and Garrawarra is recognised as an Aged Care teaching facility with student placements from various universities.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - There is potential for Garrawarra to become a centre of excellence in dementia care
  - Potential new services could include
    - Palliative care and bereavement and counselling services for Garrawarra residents and their family members
    - General Practitioner on Staff (as per some larger private RACFs) to prevent delays in medical review and unnecessary transfers to acute settings
    - Access to local medical imaging

- **Infrastructure solutions**
  - Refurbish or redesign a purpose built facility to provide appropriate accommodation for existing resident numbers, and capacity to meet future demand which will meet current guidelines, enhance the patient experience and meet community expectations (see Specialist Mental Health Service for Older People model)
  - A new facility would require smaller units (accommodating up to 15 residents) with single room accommodation for residents with durable fittings and fixtures Design would need to be dementia specific, incorporating visual cues, with smaller cottages interlinked with sensory gardens and multi-sensory environments to reduce agitation and create more diversional recreation space and a more home like environment
  - Smaller spaces for communal areas need to be considered to divert behaviours
  - Rooms would need to be acoustically modified
  - There is potential to create a dementia “village“ within the existing grounds, with recognisable community spaces and enhanced sensory gardens – based on international best practice models
  - Investigate the provision of a purpose built facility to allow capacity for younger onset dementia and forensic patients who currently have limited options for care

- **Staffing solutions**
  - Enhancement of staff commensurate with increased resident numbers, with the addition of allied health therapists in the fields of dietetics, speech pathology and podiatry; and enhanced security staff
  - Enhancement of specialised staff education and rotation of staff between TSH and Garrawarra Centre.

Gastroenterology

SCOPE OF SERVICES

Sutherland Hospital provides a level 5 Gastroenterology inpatient and outpatient service. Diseases affecting the gastrointestinal tract, which includes the organs from the mouth, along the alimentary canal to the anus, are the focus of this speciality. Gastroenterologists perform a number of diagnostic and therapeutic procedures including colonoscopy, endoscopy, endoscopic retrograde cholangiopancreatography (ERCP), endoscopic ultrasound, liver biopsies, etc.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - TSH gastroenterology service sees inpatients and outpatients over 14 years of age, however services are predominantly for adults
  - Most inpatients are residents of the Sutherland Shire, however there is a growing number of out of area referrals for outpatient endoscopy due to waiting lists elsewhere
  - Increased demand is driven by
    - the growing and ageing population
    - an increase in the clinical acuity and complexity of some patients
    - the National Bowel Cancer Screening Program for those aged 50 to 74 resulting in increased referrals for investigations
    - increasing demand for outpatient treatments and infusions
    - Prevalence of some chronic conditions can also increase the incidence of gastroenterology / hepatobiliary disorders (e.g. diabetes and liver disease)
- **Operational description**
  - Inpatient services are provided on the newly opened Warada ward, shared with respiratory services
  - Outpatient services are located in the Outpatients department on Level 2, with weekly clinics including:
    - Gastroenterology Clinic
    - Preadmission Clinic Gastroenterology
    - Day Only Surgeon Clinic
  - Clinical networking and referral occurs where required with other SESLHD sites including: e.g. Calvary, Community Health, POWH, SGH, and SVHN
- **Activity**
  - Non admitted activity is at capacity, with clinic waiting lists increasing the wait time for investigations
  - There are approximately 1,500 patients that receive a planned scope annually which include outpatients and emergencies
  - An average of 15-20 gastroenterology patients are admitted to the Warada ward at any time
  - There is increased inpatient activity in recent years due to referrals for patients with abdominal pain, infectious diarrhoea, older people with chronic disease, etc.
  - The proportion of day only activity is increasing, with the overnight average length of stay showing a gradual decrease over recent years
- **Models of care**
  - Current models of care includes inpatient care, day only admissions and outpatient care
  - Infusions, e.g. for biologicals every 8 weeks for IBD and iron infusions are provided as a day only admission in the peri-op unit

- **Staffing**
  - The Gastroenterology Department consists of 4 Visiting Medical Officers (VMO's) and 1 Staff Specialist heading teams of Registrars and junior medical officers. They cover both inpatient and outpatient areas
  - There is no Administrative/clerical staff support for the medical team or the head of department. Outpatient admin support is provided from outpatients.

CURRENT ISSUES AND CHALLENGES

There is increased pressure on both inpatient and outpatient services due to changing patient demographics and emerging treatments. There is an ageing population with multiple co morbidities who require wider treatment regimens as well as younger patients with a need for biological therapy in the form of infusions to treat inflammatory bowel disease, or a collection of systemic diseases involving inflammation of the gastrointestinal tract.

- **Constraints on activity**
  - Outpatient Gastroenterology Clinic waiting times for clinic appointments routinely exceed 3 months which can lead to a delay in diagnosis and treatment. Diagnosis and treatment delays directly contribute to adverse outcomes compared to community expectation and guidelines
  - Ambulatory Infusion and minor procedure clinic delivers biological therapy infusions, blood and iron infusions and performs ascitic taps. The referral process has been noted as somewhat difficult impacting on access by patients of whom they currently see 2 per day. An adequately resourced clinic could divert patients from the Emergency Department and Inpatient Beds
  - Outpatient Endoscopy occurs in the hospitals operating theatres on _ sessions per week. Waiting times for this service often exceed clinical guidelines leading to delay in diagnosis and treatment and therefore adverse outcomes. Adequate resources – in particular for increased theatre time and a simplified referral system could resolve this issue and redirect flow back from private sector. Public recording of waiting time performance to ensure appropriate funding for the long term
  - Interventional Radiology: whilst not part of the Gastroenterology Service has marked impact on ability to safely manage critical emergencies, in particular upper GI bleeding needing angiographic embolization or trans jugular intrahepatic portosystemic stent (TIPS) for acute variceal bleeding. These patients are relatively infrequent but are unstable and would otherwise require transfer to another facility
  - Rapid access to more routine IR such as guided biopsy would expedite management and shorten stays of patients and remove need to transfer patient for procedures when not available on site
  - OT/ imaging. Image intensifier in OT was specified for orthopaedics (10-20years ago) and isn't adequate for GI procedures, leading to poorer quality images, increased procedure times and consumable utilisation. Gastroenterology would be supportive of a Hybrid OT to be installed

- **Models of care**
  - Waiting list:
    - Outpatient waiting times for clinic appointments routinely exceed 3 months
  - Unmet demand:
    - There is an unmet demand for some services e.g. for Irritable Bowel Disease (IBD)
    - Advances in technology and new treatments e.g. biologicals, which can also benefit other specialties
  - Potential changes in models of care:
    - The introduction of interventional radiology and the installation of a Hybrid theatre would expedite management of patients who require embolization and guided biopsies, shorten their LOS, improve clinical outcomes and avoid transfer to SGH

- **Technology**
  - Current paging system is inefficient
  - IT communications and Wi-Fi access could be improved, particularly for on call/weekend

- **Infrastructure**
  - Access to Outpatient clinic time restricts hospital avoidance activity
  - Access to Ambulatory care is limited and results in unnecessary admissions for infusions, etc. or longer waits
- **Staffing**
  - There is no dedicated advanced nursing or allied health staff for patient education, disease management, etc.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service Solutions**

The ideal model of care would include an enhanced outpatient and ambulatory care service with a more efficient referral system. Hospital avoidance could be enhanced by the expansion of clinics and implementation of new services, including:

  - Outpatient Gastroenterology Clinic:
    - Director would support a liver clinic combined with current clinic if service and staffing enhanced but would require referral promotion. Director would support a liver clinic combined with current clinic if service and staffing enhanced but it would require promotion for referral
  - Ambulatory Infusion and minor procedure clinic:
    - Requires enhanced resourcing and possible combining with outpatient clinics in a dedicated ambulatory care setting
  - Outpatient Endoscopy:
    - Could be improved with more adequate resources – in particular for increased theatre time and a simplified referral system
    - Public recording of waiting time performance to ensure appropriate funding for the long term
  - Interventional Radiology:
    - If services were enhanced and the installation of a Hybrid theatre operational this would assist in such procedures as embolization and guided biopsies. This would expedite management of patients, shorten their LOS, improve clinical outcomes and avoid transfer to SGH
  - Medical governance:
    - Director would support administrate assistance to complete his role more effectively and would recommend set times for inpatient ward rounds
  - Potential for new clinics/ services:
    - Additional dietician, psychologist, exercise physiologist and specialist nursing support to Outpatient Clinic for improved patient understanding and management of complex diseases and patient outcomes. This will reduce the need for ED presentations and admissions
    - Additional clinics would allow the management of IBD in outpatients and prevent the need for admission

- **Infrastructure solutions**
  - Ideal physical location for the outpatient clinic would be in a large, purpose built ambulatory care/outpatient services building
  - An increased number of consulting rooms in a new dedicated ambulatory care building would be appropriately sized, structured and resourced to assist with waitlist reduction, avoidance of Emergency and acute admissions, improve clinical outcomes and address current service deficit in relation to Liver Clinic, Inflammatory Bowel Disease Service
  - Outpatient infusions could be provided in an enhanced and well-resourced ambulatory care centre, to prevent the need for admission
  - Potential ICT solutions could include a more efficient referral system, self-service patient check ins and automated SMS appointment reminders
  - All new buildings should consider environmental solutions to reduce emissions

- **Staffing solutions**
  - Increased Nursing Resources and training for nurses, clerical staff. Improvements in booking procedure and reporting to GPs
  - Staffing for Clinical Nurse Consultant (Inflammatory Bowel Disease)
  - Access to allied health support: Dietician, psychologist, exercise physiologist (improvements in weight, exercise improve many GI diseases and psychological health).

General Practitioners

A meeting was held with General Practitioners from the Sutherland Shire inviting them to share in the planning process and contribute their views on GP involvement in service delivery, gaps and issues with services provided by the hospital and health services and key health issues for the community. New models of care and recommended improvements for integrated care were also discussed. The Health Pathways Co-ordinator also participated.

SCOPE OF SERVICES

- All of the GPs interviewed were from the Sutherland Shire and models of practice ranged from bulk billing to private billing
- All agreed they have a strong network of interpersonal relationships with other GPs and are part of a consistent group of specialists and GPs in the Shire that have practiced for many years.

WHAT IS WORKING WELL?

- Dental clinics for children are being well utilised
- Healthlink is well received and noted as secure
- Geriatric Flying Squad
- Quality of clinical handover of care – discharge information from inpatient services and especially from ED is has improved.
- The Three Bridges Community Health within the Illawong Menai area is a good resource for assisting co-ordination of care for aged care access and services.

CURRENT ISSUES AND CHALLENGES

Communication was seen to play a large role as the interface between the acute inpatient setting, sub-acute, outpatient services and GP care in the community, however most thought communication was the main area that needed improving.

- **Information and Technology**
  - The TSH website could benefit from having more detail regarding the hospital, services and new programs as a means of communication to general practitioners and the public
  - Hospital software is not compatible with software that is used in general practice making it difficult for GPs to obtain pathology, imaging or investigation results from the hospital and increasing the time it takes to make a referral
- **Feedback**
  - There is no regular forum or point of contact (such as a GP liaison) at the hospital for GPs to feedback about system issues, concerns or areas that need improving. However attendance at the clinical council does allow some feedback

- **Referrals**
  - Referral process for outpatient clinics is lengthy and differs for every specialty clinic
  - Written referrals generated by GP software packages should be accepted by all clinics
  - Where clinics require particular information, the process could be made easier if templates were accessible on the TSH website and were able to be submitted online
  - Alternatively information could be sourced via the CESPHN
- **Discharge Summaries**
  - Discharge is an important time of clinical communication to community providers and a high risk time for preventable patient harm – a proper clinical handover of care to general practice is an important part of the transition
  - Quality of summaries is improving - especially from the Emergency Department – although there is still room for improvement in content
  - Handover of care document summary in EMR2 is promised to be an improvement
- **Valued Contribution**
  - GPs felt they can actively contribute to hospital planning and would prefer to be involved at the beginning of a project for new/revised services
  - GPs' participation in service development, engagement/meetings is currently unpaid, often in their own time or requiring them to cancel patients to attend
- **Inpatient services**
  - Some GPs have experienced difficulty getting particular patient groups admitted such as people with mental health conditions and those with developmental disability
- **Outpatient services**
  - There is no engagement or consultation with GPs at the beginning of a service's development
  - There are long waitlists for some clinics – however GPs feel they can manage particular patient specialties (such as diabetes and skin cancer checks) themselves
  - Accessing Southcare is through My Aged Care. If the patient does not have a reference number they can't access services
  - There are specialties such as orthopaedics that do not have outpatient services for follow up. Review by a private specialist is the only option, which some patients cannot afford.
  - Transient Funding for some outpatient clinics (such as headspace) may only last for a short period of time (e.g. 3 years). Communication about patient's progress to GPs is often poor and patients rely on service until funding ends and then they must return to their GP's care
  - Transport to Sutherland Hospital can be difficult, lengthy and costly for patients in some areas of the Sutherland Shire which may make outpatient care difficult to access
  - There is minimal outpatient palliative care services. One registered Nurse based at Calvary is the only resource and if patients require new or adjusted medication, their GP is called upon with limited information and support available
- **Ageing population**
  - There are an increasing amount of aged care facilities being developed
  - GPs have reduced visiting patients in residential aged care facilities due to loss of funding, bureaucracy and paperwork
  - TSH RADIUS clinic model is supported, where aged care outpatients are reviewed and investigations occur within the hospital which could assist in bypassing ED/ward areas

- **Priorities for Shared Care**
  - Antenatal shared care with GP is excellent for continuity of care after baby is born e.g. 6 week check-up and ongoing care of family. Emerging hospital model appears to be managed by midwives – there is opportunity to include GPs in the model
  - Other areas that GPs can look after well in the community include diabetes, mental health, disability and hepatitis
  - Aboriginal clients – improve communication between Aboriginal services; better utilisation of Aboriginal GP and improve access of Aboriginal residents to services and programs including those in the community
- **Future Concerns**
  - NDIS success and patient implications
  - My Aged Care – accessing services for patients
  - My Health Record and privacy/ secondary use of information
  - Falling rates of breastfeeding in community
  - HealthOne – accessibility and resourcing.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - GPs want their contribution to be valued and need to be seen and heard, hence they endorse a funding scheme for GPs to work with the hospital
  - Improved communication is needed
    - Regular, organised meetings with the hospital or a hospital liaison is needed for GPs to give feedback about system issues, concerns or things that need improving
    - Consulting GPs at the planning phase of new hospital clinics and initiatives to ensure they are able contribute to keeping patients out of the ED and hospital
    - GPs would like to be contacted by inpatient doctors in order to handover care when needed and want to receiving more data from the hospital on their patients e.g. frequent presenters and readmission rates
    - More information needs to be disseminated locally about services such as The Three Bridges Community Services
  - Enhancement of the outpatient palliative care service to include a medical officer
  - Increase Outpatient services to include
    - Fracture Clinic follow up service for fractures seen in the ED including orthopaedic review and casting services
    - Children's physiotherapy and rehabilitation
    - Sleep Apnoea Clinic
    - Extended Health Pathways
    - Services for people with disability
  - Improved hospital admission process for patients who have difficult presentations e.g.: through a General Medicine specialty or through the RADIUS model
  - Improved communication between Aboriginal services to improve utilisation of Aboriginal GPs and improve access of Aboriginal residents to services and programs in the community
  - Continued support of GP Antenatal shared care, and other specialty areas including diabetes, mental health, disability and hepatitis
- **Technology solutions**
  - Improved transport to Sutherland hospital for residents
  - Improvement of the TSH website to allow
    - Better access to information for GPs and the public
    - Easier access to outpatient clinic details and templates for referrals
    - Electronic methods of clinic referral to replace faxing
  - An IT resource to co-ordinate interface between GP and hospital/community health databases
  - Utilising Healthlink to email hospital securely, send referrals and to receive return information.

HealthOne (Integrated Care)

SCOPE OF SERVICES

HealthOne NSW aims to create a stronger and more efficient primary health care system by bringing Commonwealth-funded general practice and state-funded primary and community health care services together. Other health and social care providers may also be involved in the HealthOne NSW model, for example pharmacists, public dental services, private allied health professionals, other government agencies and non-government organisations.

The five objectives of HealthOne NSW are to:

1. Prevent illness and reduce the risk and impact of disease and disability
2. Improve chronic disease management in the community
3. Reduce avoidable admissions (and unnecessary demand for hospital care)
4. Improve service access and health outcomes for disadvantaged and vulnerable groups
5. Build a sustainable model of health care delivery.

DESCRIPTION OF CURRENT SERVICE DELIVERY

HealthOne focus is on person centred care with work across a spectrum of chronic disease management and patient needs including:

- Focusing current resources on secondary prevention through early detection, intervention and self-management support.
- Continuing care directed by general practitioners for vulnerable people with chronic and complex conditions through the Integrated Care for People with Chronic Conditions program.

Programs include:

- Integrated Care for People with Chronic Conditions:
  - Care Co-ordinators support people with chronic conditions by providing:
    - care co-ordination and navigation, working with carers, GPs and care teams to ensure people follow up their care needs and care plans
    - health coaching, to help people adopt healthy behaviours to improve their chronic condition, prevent complications and reduce potentially preventable hospitalisations
    - education to better understand, manage and improve their health and chronic condition
- Bulbuwil:
  - Aboriginal Healthy Lifestyle Program for people residing within the Sutherland Shire and St George areas. Services provided at no cost:
    - Health information for chronic conditions (heart, lungs, diabetes)
    - Access to a dietitian and healthy eating programs
    - Access to physical activity groups
    - Smoking cessation
    - Diabetes information
- South East Aboriginal Health Care (SEAHC):
  - Care co-ordination for Aboriginal and Torres Strait Islander people across South Eastern Sydney with chronic, long-term health conditions – in consultation with their GP
- ComDiab:
  - Free program where people can learn about type 2 diabetes (non-insulin dependent), pre-diabetes, those at risk of developing type 2 diabetes, and how to manage their condition. Dietitian review available upon request
- Women's Health groups:
  - Free women's drop in health clinic

- Legal Aid Clinic:
  - For disadvantaged community health and / or inpatients of the Sutherland Shire
- Other programs run from the HealthOne include Shire Stroke Squad and mental health groups including the Keeping Body in Mind cooking group and an art therapy group.

CURRENT ISSUES AND CHALLENGES

- Electronic communication between district health services and primary care is a challenge.
- The relationship between HealthOne Sutherland and Sutherland Hospital could be strengthened.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- Improve the provision of electronic discharge summaries to general practitioners
- Establish an electronic services directory for district health services
- Continue to develop HealthPathways and promote the resource to primary care providers
- Continue to streamline processes for intake and access to district health services
- Improve formal communication channels between Sutherland Hospital and Integrated Care
- Maintain links between Integrated Care and Southcare, Aged Care and Mental Health Services
- Strengthen the promotion of HealthOne services
- Establish a HealthOne governance committee
- Establish processes to ensure that the programs delivered through HealthOne continue to address the needs of the local community.

Infectious Diseases

SCOPE OF SERVICE

The Infectious Diseases (ID) service provides a 24 hour Level 5 role delineation consultative service to patients at TSH. ID specialists recommend investigations, interpretation of microbiology results and prescribe treatments for patients with suspected infection or infectious diseases.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Referrals are primarily for adult patients, for a range of conditions including bone and joint infections, endocarditis, cellulitis, infections in immunocompromised patients, Sepsis Unknown Cause, Illness in return travellers
  - Patients are referred from other inpatient specialties, including critical care medicine, ED and GPs
- **Operational description**
  - Inpatient consultation service
  - On call after-hours service (shared with St George)
  - ICU rounds three times/week
  - Oversight of Antimicrobial stewardship (AMS) for TSH, including rounds (supported by Advanced trainee at St George)
  - Medical oversight of infection control and Staff Health at TSH
  - Outpatient clinic weekly

- Medical oversight of outpatient antibiotic therapy (OPAT) via infusers, provided by South care nursing staff with weekly clinic review
- Participation in supervision of medical hand-over and preparation for the FRACP exams
- Participation in Local and Area clinical governance – Infection Control, AMS, Drug and Medication safety

- **Activity**
  - Inpatient consultation activity is increasing annually, with more than 400 consults made in 2017, a 25% increase from 2016
  - Current outpatient activity is at capacity and limited by staffing restraints. There are 2 outpatient clinics per week:
    - General, with 9 patients per session
    - OPAT- for infusions, delivered from South care with medical coverage from infectious diseases and current governance from Aged Care. Maximum 7 patients on service

- **Models of care**
  - Current model of care is on a consultancy basis only, there are no dedicated infectious diseases beds
  - Consults are reviewed on day of referral
  - Hospital avoidance: An OPAT services has been recently implemented for suitable patients who require prolonged IV antibiotics. This reduces length of stay and can avoid the need for admission or ED presentation

- **Staffing**
  - Medical: Staff specialist 0.8 FTE divided between Don Packham (0.5) and Robert Stevens (0.3), assisted by a shared BPT (approx. 12 hrs per week).

CURRENT ISSUES AND CHALLENGES

- **Staffing levels**
  - Increasing workload of ID clinicians with limited access to shared BPT. This is driven by:
    - The opening of new acute and critical care medicine beds at TSH, which will continue to increase in line with the planned opening of further beds in these areas until 2026
    - More complex consultations in critically ill patients
    - Increasing complexity of medical and surgical patients referred to service
    - Endocrinology commitments dominate the shared BPT role. BPT's have expressed that the position is too demanding
    - Don Packham is entitled to 5 weeks annual leave and TESL which is not accommodated by this roster. In addition there is no ability to cover senior staff should they be absent on sick leave or for other reasons. This makes activities such as our inpatient consultation service, the infectious diseases clinic, and the home IV therapy service precarious as there is no junior staff to support these activities should the senior staff be away
    - Current staffing is insufficient to run an inpatient or after hours roster (requires at least 4 people and minimum 2.0 FTE)

- **Access to outpatients**
  - Increasing referrals to OPAT on discharge, without adequate staffing as the service expands. This raises significant patient safety concerns
  - Outpatient services consist of a small outpatient clinic with limited capacity – one clinic room only, 3hrs time allocation (maximum 9x 20 minute slots). No nursing support. Limited selection of dressings
  - No capacity for BPT participation (a training requirement)
  - Outpatients who incur problems in the community present to the Emergency Department for admission under original specialty

- **Inpatients**
  - No inpatient capacity, e.g. for returned travellers, fever without clear focus, and cellulitis, and insufficient staff capacity to support this currently. Complex Infectious diseases cases are currently admitted under the care of general medical teams resulting in suboptimal management, increased LOS and potentially adverse outcomes
  - Clinical advice after-hours is dispensed from SGH without appropriate follow-up. 0.8 FTE and limited BPT fraction means urgent clinical ID review may not always be available in hours
  - Current accreditation guidelines are met due to a networked AT coverage based at SGH. If this coverage were to change (decrease) this could jeopardise accreditation
- **AMS**
  - Integration of Audits in the AMS rounds is proposed and required to ensure compliance with standards for hospital accreditation. Increased audit activity and appropriate feedback will require additional time and resources. Effective AMS results in reduced hospital acquired infections and reduced length of stay.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Review and revise current networking with St George Hospital (includes after-hours call and AMS rounds at Sutherland by St George ID advanced trainees), In light of the separation of the two hospitals
  - Enhance the capacity of the OPAT service, acknowledging this is a proven hospital avoidance model and can be used for early discharge of suitable patients. HITH programs have been shown to be very cost effective. Additional staffing costs (i.e. BPT) would be offset by saving from a HITH model
  - Clinic availability:
    - Increased OPAT clinic time is required, in conjunction with South care nurses and BPT support, to enable closer oversight of HITH and discharged patients and allow appropriately timed ordering of ongoing therapy
    - Provide additional clinic times for general patients with additional BPT support
    - Provide relevant stock to the outpatient clinic (such as dressings and wound care)
    - Extra clinic time provides opportunity to review patients more urgently and decrease the need for ED presentations
  - Enhanced AMS activity, including regular audit of antibiotic therapy of inpatients and surgical prophylaxis is required for hospital accreditation
- **Infrastructure Solutions**
  - Consider provision of dedicated infectious diseases beds for optimal patient care and reduced length of stay, with appropriate medical support
  - Increase access to outpatient services. This could be in a new ambulatory care/ outpatient centre which would increase the potential for multidisciplinary clinics
- **Staffing solutions**
  - Increased Staff specialist FTE and additional JMO support with resourcing similar to peer group hospitals to allow adequate cover for inpatients, AMS activity and an independent after-hours roster. Proposed increase includes:
    - Staff Specialist from 0.8 to 2.0FTE
    - BPT to 1.0 FTE
    - JMO 1.0 FTE
  - Additional 1.0 FTE pharmacist for AMS
  - Establishment of a separate ID on call roster for TSH to ensure more rapid review of TSH inpatients needing ID input and improve patient safety and follow up.

Library

SCOPE OF SERVICE

Sutherland Hospital Medical Library provides the staff of Sutherland hospital with an information service that facilitates access to clinical information and electronic resources to support research, study and evidence based practice at the point of care.

The TSH Library considers itself an important collaborative place out of the ward area that staff can use to research and reflect and interact.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **User demographics**
  - The library is open to all staff members of TSH and is mostly utilised by nursing, medical and allied health staff, as well as university facilitators and students
  - Usage is increasing and there can be as many as 8 staff members using the library at any time
- **Operational description**
  - Hours of operation are Monday to Friday, 9am – 5pm
  - Medical staff can access the library 24/7 and out of hours access for other staff e.g. university facilitators can be arranged with security
  - There are 9 computers available with internet access and printing capabilities
  - The Library customer service desk is now in the main Library area
  - Services provided include:
    - Reference collection with up to date texts; journal and book collection; electronic resources e.g. CIAP, Cochrane, UpToDate, Medline, Psychinfo etc.; KOHA catalogue of all available resources across SESLHD, Illawarra Shoalhaven and St Vincent's Libraries; Elsevier clinical key database; Ebsco Cinahlplus Database (Full text nursing journal database)
    - Librarian assistance with citation database searches including choosing most relevant database for the subject, selection of appropriate MESH subject headings from the Medline thesaurus, setting search limits and combining sets of retrieved citations to refine the search
    - Helping clinicians manage research data sets
    - Provision and promotion of electronic resources / databases, reference, journal and book collections
    - Searching of the Libraries Australia Database to identify libraries that hold the requested book of journal title
    - Printer/ scanner available for Library users
  - Utilisation includes:
    - Study
    - Literature searches
    - Mandatory education by staff and students in My Health Learning System
    - University facilitators meeting with students and data entry of student assessments to university computer systems
- **Staffing**
  - There is a university qualified medical librarian present 4 days per week from 10:00 – 5:30pm to assist with use of electronic resources, data base searches and to organise individual and group information sessions where needed.

CURRENT ISSUES AND CHALLENGES

- **Changing needs of users**
  - There is a growing need for an accessible meeting room and smaller debrief room
  - The library is not staffed full time and there is no established front desk to provide a service point for any visitors to the library who need direction to facilities or resources
- More funds in the library budget is required to purchase a larger range of full text databases in line with what is offered at other teaching hospital libraries. Examples include Clinical Key for Nursing, HaPI – Health and Psychosocial Instruments Medline Complete (Full Text), Proquest Hospital, PsycTests:Psychological Tests and Measures (APA), Psychology and Behavioural Science, Nursing Reference Center Plus
- Technology in the library needs updating:
  - The library is lacking technology such as Wi-Fi and smartboards
  - University facilitators need access to their university via ROAM
  - There is no social media or means to engage/ communicate with clinicians
  - There is no meeting room and no audio-visual equipment
- Security for the library and its facilities is lacking when the librarian is not present
- There are no toilet facilities within the library or in close proximity. Visitors to the library have an expectation that there must be a toilet somewhere within the library without being directed through locked doors when they don't have swipe card access
- No collaboration with university libraries. Other Sydney teaching hospitals have received funding from their universities for combined education/library learning centre to be built onsite
- No Library intranet page at TSH
- Staffing
  - The library is staffed by one librarian 4 days per week.
  - Out of their working hours there is no staff presence for supervision of the library and its facilities and for any service needs by visitors. This is in line with other teaching hospital libraries.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Create a facility that is comparable to other teaching hospital libraries and allows improved access to resources and facilities for research and education for staff and students
  - Consider an institutional repository for all the organisation's publications. See: https://www.ands.org.au/__data/assets/pdf_file/0015/406500/research_data_librarians_flyer.pdf
  - Consider using the Library as a meeting place e.g. for Journal Clubs, staff education (use of Endnote, CIAP, etc.), GP collaboration, for local medical professionals hosting a meeting, or to promote Close the Gap initiatives
  - Provide displays of health promotion and historical details
  - The library can be a place where the general public could have a tour in an open week
  - Consider patient use of Library to improve health literacy and Patient Information e.g. for Community Mental Health. There could also be a collaboration with the Recovery College Library at St George Hospital
  - Consider application for/ accessing funding from associated universities for improved infrastructure (e.g. Library building), staffing and services

- **Infrastructure solutions**
  - Expansion of the physical space of the library to include:
    - Central service desk for Librarian
    - Reference book/journal collection
    - More databases such as Clinical Key for Nursing database
    - Meeting space for staff and students, with capacity for up to 9 nursing students and a facilitator
    - Communal area for staff interaction and sharing of information (staff wellbeing, brochures, etc.)
    - Potential for break out space for phone calls/debriefing room to allow conversations in the Library
    - Adopting a similar wellbeing library to St George that offers books for staff on self-help/ wellbeing topics
    - Provision of hot desks for visiting staff, staff without computer access or for staff who need a brief location change to do their work. This may contribute to staff retention/ wellbeing
    - "New Ways of Working: work space and cultural change in virtualizing organisations" by Sytze Kingma allows for flexibility to meet the needs of employees to create innovation. The library can be a possible breakout work area for hospital staff to work or meet in. The library can contribute to staff wellbeing and innovation by being a go-to destination for study and research
    - Access to training rooms and study rooms/spaces
    - Kitchenette facilities
    - Toilets
  - Consider co-location of other staff support services e.g. Employee Assistance Program, staff education
  - Ensure Library is in a convenient and easily accessible location for all staff, including close access to RMO's lounge for afterhours access
  - Potential ICT solutions
  - Introduction of a swipe access card reader for afterhours access and improved security
  - Provide Wi-Fi in Library
  - Provide audio-visual equipment and smartboards
  - Provide a social media presence for Library
  - Review and remove firewalls to enable online learning and access to University libraries
  - Provide database funding, e.g. for Elsevier, Allied Health and Nursing databases
  - Provide additional computers for student use
  - Provide an intranet page with links to library databases and the A to Z list of resources including Clinical Key database and Cinahl
- **Staffing solutions**
  - Consider hosting Librarians from other Libraries, e.g. from associated Universities, other teaching hospitals
  - Provide comparable Librarian staffing to other similar hospitals to provide a service point for any visitors to the Library who need direction to Library facilities or resources.

Medical Education

SCOPE OF SERVICES

The Sutherland Hospital and Sutherland Community Health Services is a teaching hospital of the UNSW for medicine and provides clinical education for first to sixth year undergraduate medical students and post graduate students.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- Undergraduate medical education is provided from the UNSW at the Sutherland Clinical Teaching Unit , an arm of the St George and Sutherland Clinical School, in demountables on the TSH campus and in many clinical settings within the hospital
- The UNSW student curriculum provided at TSH includes a broad range of exposure with an integrated care focus, including rotations to the community and GP practices, and partners with St George Hospital for some clinical exposures e.g. drug and alcohol and sexual health services
- The Sutherland Health Improvement, Referral and Education Service (SHIRES) is an innovative interdisciplinary student led clinic for people with chronic disease run by medical and allied health students on campus
- Graduate specialty registrars are provided with funding for exposures outside the hospital e.g. as a community registrar at TSH; rotation to a Private Hospital; and a rotation between TSH, SGH and Calvary to provide a variety of different exposures from different clinical services provided at each hospital
- Registrar clinics are provided by a number of specialties at TSH
    - In simulation centre is being completed in Anaesthetics, and will include:
    - Control and simulation room
    - Links to tutorial room in theatre
    - Studio level recorders
- The Sutherland Hospital Library, located on the 4th Floor, provides an information service for students, clinicians, researchers and support staff at TSH
- Staffing includes:
    - Conjoint Associate Professor from UNSW for oversight of education on TSH campus
    - Multiple other medical conjoints
    - 1.2 FTE clinical academic positions divided amongst multiple doctors
    - 0.2 FTE education co-ordinator for BPTs.

CURRENT ISSUES AND CHALLENGES

- Clinical teaching space is limited, with existing demountables overcrowded. Alternative venues, e.g. rooms at Southcare, must also be used for teaching purposes
- Access to point of care teaching space is extremely limited
- With reducing inpatient lengths of stay, exposure time to patients is restricted for students. It is thus essential to have placements in other settings outside the hospital for increased patient exposure to enhance learning
- Access to registrar clinics is limited at TSH due to lack of Clinic space and admin support
- There is little co-ordination between medical, nursing and allied health education or research or sharing of resources or information
- Indemnity cover has been identified as a barrier to students and staff training going off campus, and there is not enough support from the university for undergraduate teaching and research
- Research needs to be embodied in the culture of clinical activities.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - A strengthening of the integrated approach to clinical teaching is required, with increased exposure to community and clinic involvement, including offsite clinics e.g. VMO rooms
  - Investigate the potential for future partnerships with other community based teaching opportunities off campus, e.g. with RACFs, private hospitals
  - Infrastructure solutions
  - Provide access to increased fit for purpose education spaces, adequately equipped with Wi-Fi, audio-visual communications, etc.
  - Support readily accessible information systems (SESLHD and University)
- **Staffing solutions**
  - Ensure quarantined time is provided for clinicians to provide education
  - Ensure clerical staff are provided to support registrar clinics.

Medical Imaging Department

SCOPE OF SERVICES

The Sutherland Hospital Medical Imaging Department (MID) provides a Level 5 role delineation medical imaging service that supports patients accessing TSH services. It provides a comprehensive range of diagnostic and minor interventional services.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Patients of all ages are seen. Specialised paediatric services are referred to SCHN
  - There is an increasing clinical acuity and complexity in patients seen in recent years
  - Demand is driven by the growing and ageing population, an increased demand for Interventional Radiology; newly opened beds and ED requiring more support from MID, and increasing use of CT in diagnosis and management of patients e.g. for cancer, thrombolysis
  - Operational description
    - Imaging technologies provided include:
    - X-ray x 3
    - Ultrasound x 4 (3 dedicated rooms only)
    - CT x1
    - Digital Subtraction Angiography (DSA) suite and screening room (shared) x 1
    - OPG
    - Mobile Radiography x2
    - Mobile II x2 (Fluoroscopy / Intervention)
  - Patients requiring MRI are transferred to St George or private facilities, there is no MRI facility
  - There is no mammography provided on site

- Hours of operation:
  - CT – 24 hours
  - US – Mon-Fri 8am -6pm, thereafter on-call
  - X-ray – 24 hours
  - Out of hours available for ED and inpatients only

- **Activity**
  - Approximately 45% of activity is provided to outpatients (this includes non-admitted ED activity)
  - In 2017-2018 62,103 examinations were performed with a 12% increase in activity over the last 5 years

- **Staffing**
  - Staff:
    - Includes a multidisciplinary team of Radiologists, Radiographers, Nursing, technical assistants and administrative staff
    - 0.5 Staff Specialist with contracted Radiologist services for reporting and procedural radiology
    - On site reporting Monday – Friday 8am – 5pm. Off-site reporting out of hours and weekends between 8am and midnight with a radiologist available on call for urgent cases / reporting 24/7 Infrastructure location and configuration
  - MID is currently expanding into a refurbished space in the old ED space, on Level 2, with close adjacency to ED providing space for 2 CT systems and 4 dedicated US rooms.

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - Demand for CT is increasing with the ageing and increasingly complex health issues of the local population and one CT is not sufficient to meet demand. Second CT is planned to be operational in 2019 and allow new models of care to be introduced

- **Infrastructure constraints**
  - MID was designed in the 1980s and is no longer fit for purpose, resulting in inefficient flows and inadequate trolley bays to meet increased demand currently.
  - The department has not been redeveloped or enhanced since the 1980s. There is limited office space, storage space, changing facilities for patients and bathroom facilities for both patients and staff members
  - Current ultrasound facilities will be insufficient to meet the increasing demand with changing models of care. Currently unable to meet current obstetrics demand and only provide limited musculoskeletal work
  - Current sterilising room does not meet Health Facility Guidelines
  - There is no capability to perform advanced cardiac CT which is the current model of care
  - Currently there are insufficient spaces to manage outpatients pre and post examination/intervention
  - Recovery occurs in MID for sedation and peri-op for anaesthetics
  - Horizontal layout of hospital results in long inpatient transfer times
  - Current layout does not support expanding IT demands e.g. mobile WOWS

- **Technology**
  - Lack of MRI on site means that TSH currently sends 3 patients per day to SGH for MRI scans at a cost (nursing and ambulance) of $520,000 per annum and another estimated cost of $100,000 for private MRI providers. This process delays treatment, contributes to LOS and has higher patient safety risks. There are long waiting lists for publicly funded MRI for outpatients at centres with licenses for outpatient MRI
  - Current General X-ray rooms utilise computed radiography (old technology) and need to be upgraded/replaced due to reaching capital sensitivity and improve radiographer efficiency
  - 1 of 2 mobile X-ray units is no longer fit for purpose, has reached capital sensitivity and needs replacement

- There is a limited angiographic service at TSH due to inappropriate equipment and for patients with some acute bleeds, particularly upper and lower GI bleeds. Embolisation in MID is the preferred model of care. Currently patients are transferred to the operating theatres, which requires greater intervention and cost, or transferred to SGH.
- IT: current cabling is below recommended specification resulting in slow and unreliable network connections which is problematic for highly IT dependent department. This is a risk e.g. for thrombolysis which needs a fast connection for workstation image workups. Servers for RIS and PACS are at POWH and the thin slice archive for CT is at SGH. Reporting workstations require fast, stable and robust connectivity

- **Staffing**
  - Currently MID is short 3 FTE radiographers.
  - Current FTE Technical Assistants numbers does not support service demands with rostering above FTE regularly occurring to meet service demands.
  - Limited nursing resources to support imaging services afterhours. Current staffing levels limits ability to meet nursing levels for sedation and the post patient care supervision required.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - A second CT scanner is urgently required to manage volume of work and downtime of existing machine and allow the introduction of the thrombolysis service and to perform cardiac CTs
  - Conversion and installation of full field digital general X-ray rooms to meet capital sensitivity requirements and improve radiographer efficiency by an estimated 50%
  - Increase ultrasound facilities from 4 to 6 rooms to accommodate demand, with a further 2 US machines
  - Provide a MRI machine on site at TSH to reduce delays in diagnosis, treatment and discharge; reduce length of stay; and enhance patient safety and satisfaction and provide care locally
  - Replacement of existing Mobile X-ray machine a wireless DR System to increase timeliness of films to ED and critical care areas which impact on the ETP targets
  - Provide Improved Angiography / interventional services in MID to avoid interventions in operating theatre or the risks of transferring unstable patients to SGH
  - Installation of a hybrid operating room in the operating precinct to support vascular surgery and improved imaging opportunities for gastroenterology services
  - Increase ultrasound facilities from 4 to 6 rooms to accommodate demand, with a further 2 US machines and transducers
  - Provide increased inpatient holding area to support patient flow into clinical rooms and recovery bays in MID

- **Infrastructure solutions**
  - MID should have close adjacency with ED and critical care, with a potential for a satellite service within / adjacent to theatres
  - Department design need to allow space for expansion for new technologies
  - Adequate support space needs to be considered, e.g. for recovery, reporting, equipment storage, US sterilising area, drug storage, reception and waiting areas, bathrooms (patient and staff) and office space
  - Allocated space within ED, critical care, theatres and wards to support parking of imaging equipment and access to IT systems to facilitate image processing and distribution in a timely manner
  - Ideal physical adjacencies (see Table 5)
  - Improved ICT solutions with wireless connectivity across the organisation
  - Need to redesign MID department to improve patient flow, facilities, enhance current equipment and incorporate increased space for trolley bays, CT, MRI and DSA
  - Need to consider separate flows for outpatients and inpatients in department design

- **Staffing solutions**
  - Enhanced MID staff for increased US, CT services across all disciplines – i.e. technical assistants, nursing, clerical, radiographic and medical
  - 1.5 FTE Nursing required to increase nursing support on the weekends to midnight, to enhance flow within the entire department
  - 2.5 FTE of Technical Assistants
  - Additional radiology support ensuring 2 radiologists on site M-F in hours with improved availability and access to radiologists or trainees out of hours to improve imaging support, protocolling and contrast administration.

Medical Workforce

SCOPE OF SERVICES

Medical Workforce Services provide a range of services to support the TSH medical workforce, including support for consultants (Staff Specialists and VMOs), junior medical officers (JMOs) (registrars, resident medical officers and interns), and locum medical staff.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- The medical Workforce Service staff work as a collaborative team and meet all compliance and policy requirements
- Services provided include:
  - Recruitment processes
  - Medical rostering
  - Payroll services
  - Orientation of new staff
  - Education support
  - Governance
  - Performance management
  - Compliance with police requests and death certificates
  - Medical liaison within the hospital
  - Complaints management
  - ClinConnect for medical students
  - Managing compliance with mandatory training
  - Workforce planning
  - Staff wellbeing

- **Operational description**
  - Services are provided on Level 4 from a variety of offices to over 150 consultants and 120 JMOs at any time, with 9 changeovers per year of JMOs on rotation
  - JMO quarters are located on Level 4, with 6 rooms and limited kitchen, bathroom and communal lounge facilities
  - Shared Consultant offices are located on Level 4
  - Education is ongoing for JMOs and is provided by a co-ordinated program with St George to avoid duplication. This is provided in the TSH Auditorium or by videoconference with St George in the Boardroom. Each department runs their own education program

- **Staffing**
  - Director of Clinical Services
  - Senior Medical Officer Co-ordinator 0.8 FTE
  - Junior Medical Officer Manager 0.6 FTE
  - Registrar Manager 0.6 FTE
  - Payroll Administrative Officer1.2 FTE
  - Medical Administration Assistant 0.6 FTE
  - Director of Prevocational Education and Training (DPET).

CURRENT ISSUES AND CHALLENGES

- **Services**
  - Outpatient services are unco-ordinated and inadequate. Outpatient clinics are a training requirement for JMOs
  - Insufficient diagnostic imaging services on campus
  - Current funded bed base is at capacity
- **Technology**
  - Computers are ageing across the campus and need replacement
  - With the introduction of eMR2 there is a need to move to tablets
  - The transition of bulk recruitment of JMOs to new system may prove difficult
  - Mandatory training: HETI Online does not recognise completion of training at other sites, which is an issue for rotating doctors and VMOs that work across sites. Also mandatory training completed by medical students prior to their appointment is not recognised once they are registered
  - Staff Health documents are also recorded locally and not transferable to other sites, which is an unnecessary repetition of paper work for rotating staff moving between facilities
  - ClinConnect information does not transfer between sites
  - There are 4 systems for recruitment of Doctors, with no cohesive reporting
  - General recruitment of JMOs is cumbersome
- **Infrastructure**
  - The physical configuration of the medical workforce unit and JMO quarters is inadequate
  - Current office space for workforce services is not fit for purpose, poorly configured and inadequate in size
  - There is no meeting room available for handover or education purposes. There is no private space for the JMO Manager or DPET to have confidential meetings for medical staff under pressure, performance reviews, and doctors in difficulty etc.
  - Medical staff Payroll Office is not co-located with Medical workforce offices
  - There is inadequate storage for medical workforce services
  - JMO quarters are in urgent need of refurbishment to provide suitable amenities for staff. There are currently 6 rooms which does not provide capacity for locums who require accommodation
  - There is minimal access to office space for TSH Consultants, with many sharing rooms or having no office space available
  - There is limited office space available for training registrars as required by the Colleges for accreditation purposes

- **Staffing**
  - Recruitment of the registrar level medical workforce is a nationwide issue. This is particularly evident for the Emergency, ICU, Obstetrics and Gynaecology and Psychiatry workforce
  - There is a lack of Administrative support for Consultants.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Need for more diagnostic services identified (CT, MRI, Nuclear Medicine, etc.)
  - Incorporate Pathology service into main building to improve links to hospital services
  - Provide organisational support and infrastructure for translational research on campus
- **Infrastructure solutions**
  - Medical Workforce
    - Co-locate all medical workforce services with TSH Executive to foster relationships and collaboration. This could include moving District Services located on Level 4 elsewhere to allow a co-ordinated TSH Executive and Medical Workforce service and a cohesive area for staff
    - Provide a co-located meeting room for medical staff handover, training and confidential meetings, etc.
    - Improved office spaces for JMO Manager and DPET
    - Increase capacity/ refurbish JMO quarters in alignment with guidelines to improve staff amenities, comfort and wellbeing and provide an increased number of rooms to cater for locums / on call staff
    - Increase office space available for consultants and registrars in training, in line with guidelines
    - Provide meeting space for private/confidential meetings
  - Hospital
    - Increase bed base to meet future demand and improve ward configuration and efficiencies to allow new models of care to be implemented
    - Provide research laboratories (clinical trials are undertaken at TSH within existing resources and staff time)
    - Improve educational facilities for JMOs: require dedicated teaching spaces (point of care and larger groups) and Simulation Lab
    - Consolidate outpatient services for efficiencies and increase capacity to provide more services – supported Ambulatory Care/Outpatient precinct but identified the need for links/adjacencies to hospital building for inpatients who use ambulatory care and staff working across both areas
- **Technology solutions**
  - Replace ageing computers across the campus
  - Supply tablets for doctors with the introduction of eMR2
  - Simplify/standardise recruitment and mandatory training processes across sites
- **Staffing solutions**
  - Provide increased administrative support to Consultants
  - Data managers required for research.

Mental Health Service

SCOPE OF SERVICE

The Mental Health service at Sutherland Hospital provides a Level 5 role delineation service for adults, Level 4 service for child and youth and Level 4 service for older person's mental health, for the assessment, diagnosis, monitoring and management of people with mental illness in a range of inpatient, outpatient and community settings.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - TSH inpatient units accept patients over 17 years of age
  - Child and adolescent, adult and older adult ambulatory (community) services are provided on hospital campus and in the community
  - Most clients are residents of the Sutherland Shire
  - Demand is driven by population growth and the increasing prevalence of mental health issues and diagnoses including psychosis affective disorders, anxiety disorders and substance use disorders. There are also changing patterns of disease, multi-morbidity and lack of adherence to treatment
  - Increasing cohort of intellectual disability and autism spectrum patients with behavioural issues that present to ED
- **Operational description**
  - Service provided at TSH includes:
    - 28 Acute beds in the adult inpatient unit accessible via the Emergency Department or direct admission
    - 20 adult Rehabilitation beds to promote recovery and prevent relapse of mental illness
    - Acute Care Service 24 hours a day servicing presentations to the Emergency Department and Community Assessments
    - Triage service for assessment of mental health problems
    - Ambulatory (outpatient) / community based services include 12 shared clinic rooms for adults, youth, and older adult within the mental health footprint and an additional 4 shared clinic rooms for child and adolescent service (CAMHS) at Caringbah Community Health Centre on the TSH campus
    - Home visits are also provided
  - Clinical networking: occurs across SESLHD for all Mental Health admitted patients however the following specialties require transfer due to no on site specialty beds
    - Older Adult Mental Health transfer to SGH specialty unit
  - Child and Adolescent Mental Health transfer to SCH or Shellharbour (state wide service) when beds are available and when accepted by the Unit (this is not usually at point of presentation,) and there is still a need to accommodate a degree of pathology within TSH in collaboration with paediatrics (other than for EDs)
- **Activity**
  - Current and recent inpatient activity
    - Both the inpatient units (Acute and Rehabilitation) have high occupancy rates
    - Recent increase in the length of stay for clients waiting for NDIS approval and placements for supported accommodation
- **Models of care**
  - Current models of care include inpatient Acute and Rehabilitation beds as well as Ambulatory (outpatient) and community facing services for child / adolescent / youth, adult and older adult patients in the community. Consistent features of the ambulatory / community model of care include: Multi-disciplinary community teams provide "packages" of care to clients in a recovery oriented, strengths based service model. In addition a range of group programs operate to support clients, families and carers

- **Staffing**
  - Staff:
    - Nursing: 90 FTE
    - Medical: 17 FTE
    - Allied Health: 52 FTE
    - Other: technical assistants, administrative/clerical staff, etc.: 24 FTE

- **Infrastructure location and configuration**
  - Inpatient Acute and Rehabilitation units are located on level 1 of TSH
  - Ambulatory (outpatient) services for youth, adult and older adults are located within the Mental Health Service footprint on level 1 of TSH
  - Child and Adolescent Mental Health Services (ambulatory/community) are located at Caringbah Community Health Centre on campus.

CURRENT ISSUES AND CHALLENGES

- The increase in mental health diagnoses results in increasing presentations, admissions and demand for inpatient beds. Changing patient demographics also means that patients are more complex, may have developmental and behavioural issues as well as social challenges

- **Constraints on activity**
  - Impact of NDIS – Inpatient areas have identified an increased LOS for patients since the introduction of the NDIS. Delays to discharge are occurring waiting for application and funding approvals and placement where supported accommodation is needed.
  - Unmet demand at TSH includes
    - Lack of CT and MRI services requiring highly co-ordinated and difficult transfers of patients
    - Lack of Psychiatric Emergency Care (PECC) or acute assessment beds at TSH
    - Lack of a behavioural assessment unit –where further diagnostic clarification can occur away from the ED
    - Lack of Older Adult and Child and Adolescent Mental Health beds (currently networked and require patients to transfer out of their local area)
    - No perinatal beds for mother and baby if mother is unwell
    - Requirement for closer integration with the general hospital for adolescent and adult eating disorder patients/ clients

- **Potential changes in models of care**
  - There are no immediate plans to change the networking arrangements for acute Mental Health beds throughout SESLHD

- **Infrastructure**
  - Inpatient areas are noted to be physically outdated
    - There is a lack of physical outdoor space for patients in the acute inpatient unit and for those in seclusion
    - There is no dedicated room for consultation on the medical wards for liaison psychiatry
    - There is inadequate office space for staff and interview rooms for clients/staff
  - Outpatient
    - Increased provision of ambulatory (outpatient) group meeting rooms for education/ skills training and meetings are required
    - Outpatient gym area – currently sharing with inpatient rehab unit.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - The future of Mental Health at TSH requires a continued comprehensive, integrated acute inpatient service as well as facilities and resources to provide assertive community care to target chronic and complex patients and reduce the need for ED presentations and admissions
  - Mental Health clinicians have identified that an increased footprint for acute Mental Health is needed which includes enhanced outdoor areas, meeting rooms and offices
  - Staff would support the relocation and integration of their ambulatory (outpatient) services into a dedicated ambulatory care building as long as there was a designated waiting area for child and adolescent patients/clients and their families
  - Potential for new clinics/ services
    - PECC/ acute assessment
    - Behavioural observation unit with pathways from ED to a general medical unit model
    - An integrated Eating disorder service including inpatient beds and psychiatric Liaison consultation that would enhance the inpatient service of TSH mental health and relieve some of the demand on the ED
- **Infrastructure solutions**
  - A purpose built and easily accessible ambulatory care building with separate services/ wait areas for child and adolescent patients/clients and their families would provide increased capacity for ambulatory (outpatient) Mental Health Services and reduce demand on acute inpatient and ED services
  - Provision of additional CT and MRI services to avoid difficult patient transfers for all specialties in TSH including Mental Health patients
  - Enhanced rehab gym space or access to outpatient rehab gym
  - Access to education and group rooms in ambulatory (outpatient) community settings
  - Potential for a short stay unit on a medical ward for assessment of Mental Health patients who do not fit the EDSSU criteria
- **Staffing solutions**
  - Staffing should be enhanced in line with any service enhancement.

Needle and Syringe Program

SCOPE OF SERVICES

Kirketon Road Centre (KRC), located in Kings Cross, provides a comprehensive range of health services including outreach services. KRC primarily targets 'at risk' young people, sex workers, and people who inject drugs. KRC has operational responsibility for the delivery of Needle and Syringe distribution across the entire geographical area of SESLHD.

Currently, KRC provides a drop in space and service at Sutherland for people who inject drugs. The service has generated significant trust within the community, translating to improved health outcomes.

Reduction of needle re-use by 25% is currently a service measure set by the NSW Ministry of Health as part of the implementation of the NSW HIV, Hepatitis C and Hepatitis B strategies. NSW Health has a target eliminating Hep C as a public health issue by 2028 – Needle and Syringe programs are a key to accessing population to achieve that goal.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - People who inject drugs, all ages and genders.
  - There are two main cohorts of clients: i) illicit drug users and ii) performance and image enhancing drug users (an increasing cohort)
  - The equipment needs of each cohort are different.

- **Operational description**
  - Delivery of sterile equipment throughout the area
  - Drop in space for people who inject
  - Testing for Hep B and HIV
  - Hub for referrals to treatment services in area (no clinical staff onsite)
  - Monthly Hep B Clinic
  - Information about blood borne conditions
  - Overdose prevention and reversal training
  - Recovery support groups
  - Outreach services
  - Significant amount of community work and consultation e.g.
    - Local pharmacy – support on fit pack scheme and to deliver appropriate needle and syringe exchange
    - Youth services
    - TAFE
    - Lead agency for Local Drug Action Team application (funded responding to local issues on drug use) with police, council, youth services, youth D&A worker
  - Automatic dispensing machine at Sutherland Hospital – requires 24 hour access to site.

- **Staffing**
  - 3FTE located in temporary buildings Hut D.

CURRENT ISSUES AND CHALLENGES

- Privacy for clients. Need venue where people can enter and leave without contact with general public and staff – important that clients can be anonymous
- Stigma and discrimination faced by clients from staff at hospital and general public.
- Recently installed a privacy screen due to redevelopment of ED – client numbers had dropped off due to visibility from ED and have picked up since screens in place.
- Ability to stop at the front door, get what they want and leave - current location is ideal for this and privacy
- Access is a major component of where to locate NSP: the slightest barrier will put people off – they need to get there easily, discrete service, not questioned
- Access to general healthcare; clinic space. (Previously run a primary care clinic aligned with methadone clinic – affected by relocation)
- Security and cleaning staff to be trained to clean up any after-hours disposal
- Because of the presence of NSP there is constant training and support to local community to reduce risk, prompt attention to hotline calls, returned equipment, community sharps bin located on site available for all community sharps waste including medical
- Many clients are not allowed in GP practices, so don't go to the GP.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- The NSW Government is committed to reducing the sharing of injecting equipment among people who inject drugs by 25% by 2020 and eliminating Hep C as a public health issue by 2028
- The Needle and Syringe Program (NSP) is an evidence based public health program that aims to prevent the transmission of blood borne viruses such as HIV and Hepatitis C amongst People who Inject Drugs (PWID)

- **Service solutions**
  - HealthOne Aboriginal Program – being able to access medical staff, kitchen (to help clients with healthy eating), and sharing resources with HealthOne.
  - Broader educative opportunities for clients and community
  - Greater opportunity for Hub style service – engagement with other services to keep people well
  - Suitable headquarters from TSH always be required. Strategic focus on how we link and support services within the Sutherland catchment – health and non-health – over the next 10 years

- **Infrastructure solutions**
  - Building currently is not in a permanent structure, not purpose built
  - Requires adjacencies to closely related services but with different entrance – easily navigate from Sexual Health, Mental Health, access to D&A assessment.
  - Structural plan should be easily accessible; ground floor; shopfront distribution place which is discreet
  - Clinic space (x1) and waiting area
  - Office space, storeroom for equipment, vehicular access for outreach and mobile work

- **Staffing solutions**
  - 1-2 NSP Workers; focus on external NSP development role
  - Health promotion officer.
  - D&A services re-invigorated at TSH to generate a sustainable primary health nurse clinic.

Neurology

SCOPE OF SERVICE

The Neurology Department provides a Level 5 role delineation inpatient service, consultative Neurology service to the other departments in the hospital, a Neurophysiology service and outpatient services, for the management of disorders of the brain, nerve and muscle.

Disorders include cerebrovascular disease (stroke, TIA), epilepsy, headache, motor neurone disease, multiple sclerosis and other immunological conditions, Parkinson's disease and other movement disorders, neuromuscular and vestibular conditions.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Adult patients of all ages are seen, with vascular brain related issues being mostly older age groups
  - Demand is driven by:
    - The growing and ageing population
    - New services introduced and increased medical staffing
- **Operational description**
  - 8 beds on Gunyah ward on Level 2 (shared with oncology and medical patients), including a 4 bed Category A Acute Stroke Unit (ASU) that provides telemetry monitoring
  - A procedure room is located on Gunyah for procedures not requiring anaesthetic, including lumbar punctures (maybe moving to PTU soon)
  - Weekly outpatient clinics are held by the 3 staff specialists and one VMO in outpatients on Level 2 and a monthly Neurorehabilitation clinic
  - Inpatient and outpatient EEG service, located near medical imaging
  - Nerve conduction studies/EMG- for inpatients at patient's bedside, for outpatients in clinics – 2 /week. Machine is housed in EEG room as no other place
  - We have equipment for evoked potentials but no room to do this in, this cannot be moved once calibrated and hence is not a mobile service
  - Weekly MDT meeting on ward in addition to ward handover meetings and safety huddles
  - Weekly academic meeting
  - Radiology and neurophysiology meetings and discussions
  - The Stroke Support group meets in HealthOne on campus
- **Activity**
  - Non-admitted activity: Demand is increasing annually but limited by availability of clinic rooms. Most neurology patients are chronic and require follow up
  - Waiting list for Neurology clinic is 4 months, currently urgent patients are seen by double booking
  - Inpatient activity has been increasing annually and the ward has over 100% occupancy, with substantial numbers of outliers who are dispersed throughout the hospital

- **Models of care**
  - Most patients are admitted via ED
  - Multidisciplinary assessment and acute management is provided on the ward, with transfer to rehabilitation for ongoing care when required or STACS for home based short term care
  - Currently the ambulance matrix takes all potential stroke patients to St George Hospital, however this will change with the introduction of a thrombolysis service at TSH in 2019, after the introduction of a second CT. 131 acute stroke patients from the Sutherland Shire were seen at SGH in 2016/17. This is predicted to rise with commencement of a 24 hour stroke call for ambulance patients

- **Staffing**
  - Nursing: Stroke and Neurology CNC
  - Medical: 1.9 FTE staff specialists, 3 VMOs; 2 Basic Physician Trainees, 1 JMO
  - Allied Health: Access to physiotherapy, occupational therapy, speech pathology and social work staff
  - 2 EEG technicians.

CURRENT ISSUES AND CHALLENGES

- **Services**
  - No dedicated Neurology ward, with 8 designated neurology and ASU beds always at more than 100% occupancy, with outliers spread around the hospital, (largely in Yarrabee which can provide necessary telemetry)
  - With the implementation of thrombolysis (potentially 5 patients per week) the current ASU will not be able to meet demand
  - Due to lack of Neurology beds, patients awaiting admission from ED invariably breach ETP
  - Lack of acute stroke thrombolysis service on site, with patients currently transferred to St George, resulting in inequity of access for local residents and loss of activity NWAU for TSH
  - No in reach rehabilitation team available to commence early rehabilitation
  - Current OT and PT numbers inadequate to manage work load with no means to accommodate future demand. All patients suitable for any therapy need inpatient rehabilitation, with long delays made worse by recent loss of rehab beds and lack of ART
  - There is no access to gym/treatment space for therapists on the ward to provide more than basic rehabilitation, with patients treated at bedside in available space. This puts pressure on access to rehabilitation beds and results in delays to discharge
  - No access to ambulatory care unit , which causes difficulties for the management of patients requiring IV immunoglobulin, steroids and advanced MS therapies who would be better managed by an ambulatory model of care and avoid admission
  - No access to outpatient rehabilitation at TSH. This results in longer lengths of stay. Patients requiring ongoing rehab access services at Rose Cottage at St George Hospital if they can provide own transport. STACS provides short 12 weeks home based care for eligible patients

- **Technology**
  - EEG machine is old (2006) and not portable- this causes excessive delays while attending to patients in ICU, ED and other wards and physical strain on the technicians who have to move heavy equipment. There is activity to justify a second machine to allow a dedicated inpatient and outpatient service in addition to setting up prolonged recordings with better service and income generation capacity
  - EMG clinics are run out of medical outpatients and the machine and supplies have to be transferred with risk of damage to the machine
  - No onsite access to MRI: access is limited to 3 per day at St George Hospital or to private services, which results in delay to diagnosis, avoidable admissions, increased lengths of stay and safety risks in transfers. In addition, some patients are too unwell for transfer, but still require MRI imaging for diagnosis and further management

- **Infrastructure**
  - The bed base allocation of 8 beds including ASU is inadequate for current activity and anticipated growth, particularly after the proposed introduction of the thrombolysis service in 2019
  - There is no Neurophysiology laboratory at TSH and no functional safe and effective space to house neurophysiology equipment. There is also no waiting area/patient reception for EEG and patients wait in medical imaging. Techs have to answer phone calls which is disruptive for EEG recording. Room is isolated and not well suited to handling an emergency
  - Insufficient ambulatory care and outpatient access to meet current and future demand and allow new general and MDT outpatient clinics or subspecialty neurology clinics

- **Staffing**
  - Allied health staff are currently stretched, with no enhancement for outliers, and have to prioritise patients. There is evidence for early allied health intervention providing improved patient outcomes and reduced length of stay
  - There is no dedicated administrative support, including for Neurophysiology services which currently relies on the technicians, outpatient staff and the common administrative pool
  - EEG service is currently 4 days a week and we need to enhance this to 5 working days
  - Neurophysiology technicians have limited time to report and do non patient related activities which is part of their job- e.g. stock, maintenance, research
  - Extra JMO support required.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Development of a Neurology service with standalone Neurology ward including 8 bedded acute stroke unit with monitoring , 24/7 acute stroke services, fully equipped neurophysiology department and laboratory, subspecialty interests and dedicated nursing and allied health staff, similar to those available at comparable hospitals
  - Provision of a 24/7 acute stroke thrombolysis service for at TSH, to provide local treatment and avoid the need for transfer to St George Hospital
  - Provision of outpatient rehabilitation services on campus for follow up of discharged patients and to allow earlier discharge
  - Potential for new clinics:
    - The implementation of a rapid access clinic for TIA and headache for rapid investigations to prevent ED presentation and admission. Could be part of general clinics or separate registrar clinic list with triaged referral from GP, other clinics or ED and decision to admit made by clinic
    - Parkinson's Clinic, in association with integrated community based nursing and allied health care
    - Neuro-ophthalmology clinic, a multidisciplinary clinic, currently only available at POWH with long wait. A consultant is available to do this and there is access to equipment
    - Multiple Sclerosis clinic, including CNC support, with access to ambulatory care space for infusions and access to outpatient rehabilitation
    - Potential for other movement disorders and neuromuscular clinics in the future, e.g. sub speciality clinics in Neuro ophthalmology, MS and Movement disorders

- **Technology solutions**
  - Provision of a second EEG machine to allow prolonged EEG testing and enhanced access to services
  - Provision of a second NCS/EMG machine to allow neurophysiology fellowship training
  - Increase telemetry equipment for monitoring existing and future patients in 8 bedded acute stroke unit
  - Provision of MRI on site to allow urgent investigations to expedite diagnosis, improve patient safety, allow shorter length of stay and avoid some admissions. Needs to be a primary focus for the hospital

- **Infrastructure solutions**
  - Development of a dedicated neurology precinct, including:
    - Standalone Neurology ward with Increased inpatient bed base and a larger acute stroke unit- minimum of 6
    - Therapy area to provide early intervention and rehabilitation, including small gym and storage area for equipment and a sound proof room for voice therapy
    - A neurophysiology laboratory with appropriate space for equipment, patients and staff, reception desk preferably co-located with Neurology ward, with access for inpatients and outpatients. This would allow a 5 day EEG service to provide an enhanced service to the community (5-6 patients per day), reduce wear on equipment from moving it constantly and make better use of consultant and technician time
    - Access to group room for education and support groups
    - Doctors room on ward
  - Improved access and space in Ambulatory care/Outpatients to allow:
    - Introduction of new outpatient and community based services to reduce ED presentations to ED
    - Access to ambulatory care unit for Neurology patients to have lumbar punctures, receive IV immunoglobulin, steroids and advanced MS and immunological therapies in a co-ordinated and safe manner and avoid admission

- **Staffing solutions**
  - Improved administrative support to the department ; dedicated secretary
  - Training opportunities for:
    - Advanced trainee position
    - Neurophysiology fellowship
  - At least 2 more consultants to run a 24/7 stroke thrombolysis roster
  - Provide 7 day dedicated allied health, including additional speech pathology and social work support for early intervention and expedition of discharge. Allied Health staff projections for a 24 bed base including 8 acute stroke unit beds include:
    - 2.5 OT and 2.5 PT would meet recommended ratios of 1 therapist for every 4 acute stroke patient and recommended therapy session times and cover weekend sessions
    - Speech pathology
    - Dietitian at least 0.5 FTE with consideration of enhancement to allow weekend service
  - Improve access to speech pathology and other allied health in the community
  - When thrombolysis service commences, will need access to neuropsychiatry and clinical psychiatry (40% of stroke patients develop depression after stroke). This is also an immediate need now.

NSW Health Pathology – Sutherland Laboratory

SCOPE OF SERVICES

- The NSW Health Pathology Laboratory at Sutherland Hospital provides a Role Delineation Level six pathology service to Sutherland Hospital as a part of the state-wide laboratory network of NSW Health Pathology. The laboratory is a NATA accredited category B laboratory that provides a 24 hour / 7 days week service
- Pathology testing performed on site includes Biochemistry, Haematology, Blood Bank and Immunology. A frozen section and FNA service is provided by staff from the St George Laboratory attending on site. Testing not performed on site inclusive of Microbiology, Anatomical Pathology and Cytology specimens are referred to laboratories at St. George, Randwick and other laboratories within NSW Health Pathology. Pathology specimens are transported between laboratories by NSW Health Pathology couriers and supplemented by taxis for urgent samples
- Clinical Consultations for all specialities are available using a mix of on-site and on-call arrangements 24 hours / 7 days per week, including public holidays.
- NSW Health Pathology supports education and research, in collaboration with South Eastern Sydney Local Health District (SESLHD), along with providing analytical support for clinical trials undertaken by pharmaceutical companies, diagnostic companies, government departments and other organisations as well as clinicians and others undertaking research within the LHD and affiliated universities.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Pathology Collection Services**
  - Pathology collections services are provided for inpatients of Sutherland Hospital along with a Pathology Collection Centre that supports on site hospital clinics collections as well as outpatient collections. There is also a home collection service to support SESLHD patients. The on-site Pathology Collection Centre is located in the NSW Health Pathology Building across the road from the new Emergency Department
  - Inpatient ward collections are performed seven days a week, including public holidays, commencing at 6am until 10am, often extending to 12pm
  - The outpatient collection rooms are open 7:30am – 4:00pm Monday – Friday and closed on weekends and public holidays. This outpatient collection service supports hospital clinics including oncology, haematology, endocrinology, liver and renal clinics in providing patient results prior to attending clinics or following their clinic visit. The Collection Centre also provides collection for all other outpatients as required
  - The home collection service is offered to patients who may be less mobile or being cared for at home and may need tests to be performed prior to attending their clinic or receiving their treatment. This service is growing in demand especially with an ageing population. Home collection is offered Monday – Friday commencing at 7:30am

- **Diagnostic Testing Services**
  - High throughput testing in Biochemistry and Haematology (including routine coagulation) comprises the greatest volume of work by specimen numbers with results delivered within an hour from receipt for most episodes
  - Specialised coagulation testing is referred to the nearby NSWHP St George Laboratory for the diagnosis and clinical management of specific blood disorders including those related to clotting factor deficiencies
  - The Blood Bank service is responsible for the provision of blood and blood products to patients requiring replacement transfusions and other therapies
  - Morphology (Haematology) services are generally provided from the St George campus although on site morphology can be performed on site for urgent and / or critical results when required
  - Microbiology services have been provided by the St George Laboratory since 1997. Virology and Serology testing are performed centrally at Randwick for economies of scale and enhanced testing capacity
  - Anatomical Pathology specimen processing and reporting is provided from the St George Hospital. However a frozen section and FNA service is provided on site as requested to support the anatomical pathology service at Sutherland Hospital. Anatomical Pathologists attend multiple Multi-Disciplinary Team meetings that contribute to the ongoing patient management within SESLHD. It is an important source of material for the NSW Tissue Biobank
  - The Sutherland Laboratory is a Centre for Immunology which specialises in a wide range of immunology testing for samples referred from all SESLHD sites and the Illawarra Shoalhaven LHD
  - The genetic testing service at Randwick offers a wide range of tests with a short turnaround as part of the NSW HP Genetic Testing service. Specimens from Sutherland Hospital are sent to the Randwick Laboratory for testing and reporting
  - The Bone Marrow Transplant Service is a collaboration between the SESLHD and the St George Pathology laboratory (NSWHP). This service is integral to the Oncology services provided to patients within the area

- **Point of Care Testing (PoCT)**
  - PoCT devices enable pathology testing within Clinical Departments such as Emergency Departments (ED), Intensive Care Units and other acute / critical areas of the hospital as required. At Sutherland Hospital, NSWHP has a Blood Gas Analyser in ED that provides immediate access to for blood gases, lactate, haemoglobin and electrolyte results. PoCT devices do not replace routine laboratory services but provide immediate access to critical results to support acutely ill patients. Blood gas analysers and other PoCT devices are supported and managed by NSW Health Pathology staff in collaboration with the staff from the specific clinical departments to ensure the necessary quality control of testing. Provision of PoCT at Sutherland Hospital should be aligned to the current NSWHP Point of Care Testing Strategic Plan (2016-2018) and related policies

- **GeneXpert testing** was successfully introduced in June 2017 for rapid diagnosis of the influenza (Flu A and B) and Respiratory Syncytial Virus (RSV). This service is provided 24 hours / 7 days per week, typically during winter, via the NSWHP laboratory at the nearby St. George Hospital

- **Operational Description**
  - The NSWHP laboratory at Sutherland Hospital is located in a single level building that was opened in 1958. The laboratory was expanded more than 20 years ago to accommodate the Centre for Immunology service for SESLHD. The Pathology Laboratory and Collection Centre are co-located and are situated directly across the internal road from the new ED
  - Workloads have increased by the number of specimens received, complexity of tests requested and the clinical need for rapid reporting to support clinical decision making and improving the patient journey. NSWHP has addressed these pressures by extending laboratory hours, acquiring new technology and additional staff
  - Pathology at Sutherland Hospital provides services locally and predominately within SESLHD. It operates within the administrative framework of NSW Health Pathology as do all NSW public hospital laboratories, which has generated savings to NSW Health of over $100 million in the last 5 years. While there is now a single administration, NSW Health Pathology supports the local needs of the LHDs through regular meetings with Local Health District executives and traditional clinical interactions

- **Models of care**
  - Pathology at Sutherland Hospital delivers services locally as well as participating in networks between closely located laboratories. NSWHP uses a hub-and-spoke model to ensure clinical services have appropriate and timely access to routine and newer pathology technology to support quality patient care
  - Service deliveries have been adapted to new and emerging technologies to reduce results turnaround times, improve testing accuracy and provide economical solutions to support clinical requirements. This is a perpetual process

- **Staffing**
  - The Operations Manager for NSW Health Pathology at Sutherland and St George Hospitals is responsible for delivery of the pathology service delivered to the southern sector of SESLHD. Policy in service delivery is set and adapted to local needs through local liaison, business case submissions to NSW Health Pathology and agreed changes to Service Level Agreements
  - The main core pathology testing laboratory consisting of Specimen, Reception, Biochemistry, Haematology and Blood Bank is currently staffed by 3.5 Senior Hospital Scientists and a number of Hospital Scientists, Technical Officers and Technical Assistants to cover the 24/7 service
  - The Sutherland Centre for Immunology for the SESLHD is supported by specialist staffing which includes an Immunopathologist and 3.5 Senior Hospital Scientists along with other immunology laboratory staff
  - There are Clinical Directors for each major laboratory stream, including Anatomical Pathology, Chemical Pathology, Haematology, Microbiology and Immunology, that provide clinical supervision and support the pathology services at Sutherland Hospital from St. George Hospital
  - The Local Pathology Director, based at St. George Hospital is a role subsumed within the duties of one of the specialist Clinical Directors, with overall supervision of these services and acts as a point of contact for each SESLHD facility
  - Additional pathologists are available for consultation for each specialty from either the NSW Health Pathology Randwick laboratory at Prince of Wales Hospital or the St George Hospital laboratory
  - Each specialty stream has highly qualified and experienced hospital scientists and technical officers who are responsible for the day to day running of the laboratory
  - A Nurse Unit Manager is responsible for the collection service who is supported by technical assistants that perform phlebotomy services.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - The increasing presence in ambulatory and community based care to prevent or shorten hospital admission means an increase in the pathology activity for ambulatory services and specialist outpatient clinics. This change in patient service delivery and patient monitoring will add further to pathology testing.
  - The aging and growing population will create on growing demands on pathology services into the future

- **Current facilities and demand**
  - The pathology laboratory at Sutherland Hospital is divided into two areas. The first area is the main core pathology testing laboratory consisting of Specimen Reception, Haematology, Biochemistry and Blood Bank. The second area is the Centre for Immunology which provides Immunology services for the SESLHD
  - The current core laboratory is fragmented which hinders efficient specimen workflow, staff exchange and impedes effective communication within the laboratory as some core departments are located in different isolated rooms. Ideally, these core departments would be located in the one open plan laboratory in line with contemporary laboratory designs
  - The Immunology laboratory is also split into separate rooms although the result turnaround times and workflow issues are not as time critical as the core pathology laboratory. There is sufficient space to accommodate the needs for the existing immunology testing profiles
  - In 2017/18 financial year, approximately 34% of all tests ordered were sourced from the Emergency Department and inpatient wards, approximately 21% from outpatients and approximately 8% from ICU/HDU. This activity does not include the tests performed on PoCT device located in the ED
  - Demand for pathology tests ordered has maintained a steady growth of 6.3% from 2015/16 to 2017/18
  - The Pathology Reception area is secure and provides sufficient space for pathology reception and collection staff to perform their patient reception and collection duties
  - The Collection Centre waiting room has 10 chairs and is at capacity at peak periods during busy days with some patients having to wait outside the building
  - There are two collection rooms in the collection centre although gaining access to the second collection room is awkward. Patients and staff gain access to the second collection room by walking through the first collection room – this has the potential to impact on patient privacy and safety
  - The pathology unit also has an administrative area that houses a number of managerial and pathologist offices along with a conference room to support Multi-Disciplinary Team meetings and teleconferences
  - There is also a pathology results Call Centre that provides a direct link to pathology results for LHD staff throughout the SESLHD. This centre is opened from 7.30 to 6pm weekdays and supported by six workstations.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - The service would be greatly enhanced by inclusion of the collection centre in an Ambulatory Care Precinct. This would allow for a more centralized point of access for outpatients and would provide improved amenities and comfort for patients and in particular for pregnant patients completing their 2 hour glucose tolerance test
  - This would allow for:
    - Improved single point access for the patients as the current location of the collection service is disconnected from the main area of the hospital. A collection centre located in a combined ambulatory care precinct will improve patient access, particulary for elderly and less ambulant patients, and eliminate the inconvience of having to attend different ambulatory services spread throughout the campus
    - Proximity to other services would be in keeping with the aims of the Ambulatory and Outpatient Services enabling:
    - Greater collaboration between the clinical areas
    - A centralised information management and technology system to promote information sharing between clinicians and GPs
    - Efficiencies in administrative processes
    - Efficiencies in sharing amentities such as waiting areas and bathroom facilities
  - Further consideration and consultation is needed on the LHD preferred model of Immunology and the impact this might have on the space requirements for the Immunology Centre. Opportunity exists to align with the NSWHP Immunology Clinical Stream and a state wide immunology service model

- **Infrastructure solutions**
  - A new pathology collection centre in a combined ambulatory care precinct, which would include other outpatient clinics and services, will provide a more integrated, centralized and convenient model of care for patients. The development of a centralized ambulatory setting delivers an opportunity to improve and streamline services while reducing duplication of amenities and waiting areas
  - The collection services would need to maintain close functional links with the laboratory which would be maintained via an upgrade of the pneumatic tube system to include RFID technology so patient samples are not delayed due to difficulty of locating pneumatic tube specimen canisters spread throughout the facility. The collection centre will also provide adequate space for collection consumables and ward collection trolleys that service inpatients collections. This storage area will need access to data points and charging facilities for future data capabilities included in trolleys
  - Additional collection rooms will be required to accommodate the increasing workload of clinic and outpatient collections. The collection rooms will be enhanced meet appropriate guidelines and compliance to support patient privacy and safety needs
  - A refurbished or new, open plan, contemporary designed laboratory would improve laboratory workflow and improve patient result turnaround times while reducing space inefficiencies of the current laboratory design. The laboratory will be positioned in the acute areas of the hospital to provide direct access, including for massive transfusion and Point of Care Testing support, to these areas
  - Adequate provision for space to accommodate any pre-analytical technologies which will enable the samples to be receipted and processed with minimal human intervention
  - A centrally located wet and dry storage areas and reagent storage would also be required
  - The increase demand in testing activity requires adequate space for the unpacking and receipt of samples as well as packing of any samples required to be referred off-site. Adequate courier parking must be provided to facilitate seamless exchange of specimens and ensure that external couriers, including the Australian Red Cross Blood Service, maintain ease of blood deliveries
  - Staff amenities will also need to maintained to support the 24/7 pathology service. Staff will require access to toilets, lockers and a staff room easily accessible from the lab to support out of hours operations
  - Education and training: a dual staff meeting / staff training room with video conferencing and digital morphology is required for meetings, including Multi-Disciplinary Team meetings, and training sessions
  - Increasing provision for PoCT access throughout the acute areas of the hospital such as ICU, Theatres, Maternity, including Special Care Nursery, and Ambulatory Care, will provide direct access to critical patient results. Remote release Blood Fridge / Smart Fridge maybe also be required to provide direct access to blood products although this will be subject to the distance from theatres to the laboratory
  - An upgraded Pneumatic Tube System with independent lines, to ensure continuity of service during downtimes, and RFID technology will improve delivery of specimens and reduce times wasted searching or waiting for pneumatic tube canisters

- **Staffing solutions**
  - New technologies and automation will enable the increased workflow to become more streamlined with less human intervention
  - Digital technologies will include the use of digital morphology to capture, store and transfer images within NSW Health Pathology to provide support for routine morphology services along with real time access to specialist consultation and opinion when required. This remote access also helps provide support during times of unforeseen staff shortages
  - Current staffing is adequate but is dependent on the demand and range of pathology testing profiles.

Nuclear Medicine Service

SCOPE OF SERVICES

The nuclear medicine service at TSH is a level 5 role delineation service provided by an external service that is currently under tender.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Services are provided for adult inpatients
  - Complex patients (e.g. brain and parathyroid) are referred to St George Hospital (SGH) Nuclear Medicine department
  - Demand is driven by the growing and ageing population, with increasing referrals from oncology and for people with complex comorbidities
- **Operational description**
  - Referrals are received from TSH specialists
  - Hours of operation are Monday to Friday with an after-hours on call roster
  - Specialists rotate between St George, St George Private and Sutherland Hospitals
  - Local private services are provided at Miranda and across the road from TSH, with most patients bulk billed
- **Activity**
  - 4-5 patients are seen per day currently
  - Models of care
  - Services provided include a Gamma camera
  - Bone Mineral Density is performed privately or at SGH
  - Radiopharmaceuticals and therapy for TSH patients are done at SGH
- **Staffing**
  - The service is currently out for tender.

CURRENT ISSUES AND CHALLENGES

- The current camera is at end of life and requires replacement with a new SPECT CT
- Reports are not part of PACS and therefore not integrated
- Bookings and reports are external to TSH, with reports currently on paper. Planning to get onto eMR and scan reports in next 3 months
- Future technology will require larger rooms than those available in the existing footprint
- **Infrastructure**
  - The current room is not large enough for SPECT-CT and Stress Lab
  - Room requires shielding for radiation around camera
- **Staffing**
  - There is currently no admin support.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - It is suggested THS has its own Department with own camera/s, Stress Lab and radio pharmacy and budget for disposables, staff and radio pharmacy
- **Infrastructure solutions**
  - SPECT CT for inpatient services. A second camera would only be required if outpatient services implemented
  - Fit for purpose rooms with radiation shielding
  - Ideal physical adjacency is co-location with medical Imaging to share bookings, admin, nursing support, etc.
  - Potential ICT solutions include linking to PACS and eMR
- **Staffing solutions**
  - Provide admin and nursing support
  - Formalise medical staff engagement.

Nursing and Midwifery Executive

SCOPE OF SERVICE

The Nursing and Midwifery executive of TSH comprises of the Director of Nursing and Midwifery Services, Deputy Director of Nursing and Midwifery Services and other specialty area Nurse and Midwifery Managers who communicate between departments, co-ordinate continuing development and education for the nursing workforce and oversee patient care delivery.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **What is working well for Nursing and Midwifery at TSH**
  - Future NUM/MUM's program
  - TPP program
  - Open and transparent recruitment
  - Well-co-ordinated and timely succession planning
  - Well supported opportunities for nurses and midwives relieving in higher duties
  - Good retention of staff who enter TPP and ECCY programs
  - Increased undergraduate numbers, with students from a variety of universities including Wollongong, UTS, Notre Dame and Western Sydney
  - Positive feedback from university nursing and midwifery students following placements and open nights
  - Good culture – leadership and management meeting resulting in leading together with common goals and allows information sharing
- **Innovation**
  - CNC projects are encouraged and supported, e.g. TIIC programs
  - Nursing and Midwifery study leave is encouraged and approved e.g.: for conference attendance
  - Feedback from nursing and midwifery engagement surveys is received and responded to
  - Engagement with nursing and midwifery staff at monthly "town hall meeting" which opens floor and provides forum to listen, receive honest feedback, provide ideas, provide solutions and action where required
  - Leadership and management meetings provide a forum for information sharing and establishment of goals

- **Models of care**
  - PEEP - person centred care program, a locally developed hybrid of the essentials of care and productive ward models
  - Nurse Practitioners
    - Highly skilled and valued positions that are well accepted by medical profession
    - Work well in Emergency and community settings.

CURRENT ISSUES AND CHALLENGES

- **Nursing and Midwifery Workforce/ staffing**
  - Changing workforce demographics means there is an ageing nursing and midwifery population
  - There is a current shortage of skilled nursing and midwifery workforce that is predicted to worsen in the future
  - TSH is not alone with workforce issues however there is recruitment competition with tertiary referral hospitals/ larger facilities
  - There is ongoing difficulty recruiting and attracting a skilled nursing and midwifery workforce particularly in specialty areas such as operating theatres, critical care and maternity
  - Cannot sustain like for like replacement of registered nurses and midwives which is an industrial risk
- **Unmet demand**
  - There is a lack of senior clinical support for the nursing and midwifery workforce. Many CNE's employed to cover 4 days per week (business hours) and 5 days per week (after hours) and enhancement not possible with current resourcing
  - Lack of other 24/7 support services which require enhancement including additional AHNM's, clinical support and corporate services (cleaners, orderlies and pharmacy)
  - There is limited resource at TSH to ensure all clinical business rules held by SGH remain viable for TSH
  - Improved integration of care with General Practitioners is particularly important in Midwifery and Aged Care
  - There is currently no dedicated support for nursing and midwifery research at TSH
- **Technology**
  - E – Health/ technology implementation has not received adequate support. There is a need for a nursing and midwifery informatics role to oversee and support.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Future support mechanisms for the nursing and midwifery workforce could potentially include:
    - Increased clinical nurse and midwifery educator support
    - Increased clinical support particularly after hours
    - Increased administrative / ward clerk support
    - Ensuring clinical business rules held by SGH remain district wide / viable for TSH to avoid variation
    - Team nursing, looking at other models of care on every ward e.g.: ward assistants, AIN's
  - Outpatients:
    - Opportunities for increased involvement in clinics e.g. midwifery led clinics, wound clinic, chronic asthma, increase number of outreach clinics
    - Review of Diabetes Education Service (currently hosted from SGH)
    - Establishment of outpatient Manager role

- Future opportunity for research:
  - Recruitment of a professional research position to lead and support nursing and midwifery research at TSH
  - Allocated time and resources for CNC/CMC's to contribute, be involved and meet growing interest in research

- **Staffing solutions**
  - Recruitment and retention
    - Focus on universities and new graduate placements
  - New models of care
    - Future model could include roles complementary to nursing that would have to be industry approved and accepted district wide such as
      - > Ward assistants / technicians to perform non nursing duties (such as stocking), anaesthetics technicians
      - > Auxiliary nurses to perform personal care on patients
    - Increased roles for Nurse /Midwife Practitioners e.g. in respiratory, palliative care, surgery, midwifery, paediatrics
    - Nurse Manager ACU and outpatient areas.

Obstetrics and Gynaecology

SCOPE OF SERVICE

The Sutherland Hospital provides a role delineation Level 4 Gynaecology Service, Level 4 Maternity Service, Level 3 Neonatal service in both an inpatient and outpatient setting, providing excellence in women's health, through the development of best practice models and practices across maternity and gynaecology services.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Most patients are from the Sutherland LGA, with some inflows from Helensburgh, St George and Bankstown areas

- **Operational description**
  - Current inpatient service includes:
    - 5 birthing beds (4 labouring beds and 1 x assessment)
    - 15 maternity beds (with capacity to surge to 18)
    - 4 x Special Care Nursery beds (with space for up to 8)
    - 10 paediatric beds (with capacity to surge to 18)
  - The outpatient service includes:
    - 6 x antenatal rooms
    - 6 x Antenatal assessment unit chairs (located in birthing unit)
  - Clinical networking: occurs with SGH and RHW. The obstetrics service is a level 4 (low risk) service and all patients outside the scope of the service capability are referred to St George Hospital (SGH or Royal Hospital for Women (RHW)

- **Activity**
  - Current non-admitted activity
    - Outpatient gynaecological clinic operating Monday to Friday
    - Antenatal clinic operating Monday to Friday
    - Antenatal assessment unit (AAU) operating Monday-Friday
    - Midwifery Support Service (MSP) operating Monday-Sunday

- Current and recent inpatient activity
  - The number of births at TSH has remained steady, with between 1200 and 1300 per year over the last 10 years. This is in line with NSW birth rates. TSH is the only Maternity Hospital within the District that has shown increased birth rates
  - There are currently 2 x Operating Theatre sessions dedicated to the service per week with extra cases on an emergency list. Consultants would prefer a designated 3rd list so that additional cases were not on an emergency list
  - Twin deliveries at TSH are currently only by elective Caesarean section. There is approximately 5 done per year and they have implications on resources including capacity in Special Care Nursery

- **Models of care**
  - Midwifery Group Practice (MGP) – a continuity model of care that is led by a group of 5 midwives who caseload women throughout pregnancy, labour and the postnatal period. This model will commence in September
  - Student-led MGP – as above but led by students and supervised by Registered Midwives
  - Standard care – women are seen by midwives or doctors and/or other appropriate health professionals throughout pregnancy, labour and birth. Care is provided by core staff and continuity is not an option
  - GP Shared Care – low risk women receive the majority of their care at the local GP surgery. The GP is accredited to provide antenatal care. The women are booked into the hospital and have hospital visits at booking, 28-30 and 36 weeks
  - Pregnancy Centreing – women receive group antenatal care with 2 midwives. There is continuity in the antenatal period but standard care in labour and postnatally

- **Staffing**
  - Nursing: Midwifery and Nursing Manager, Midwifery Unit Manager x 2, Clinical Midwifery Specialists, Clinical Midwifery Consultants, Midwifery Educator (8 hours per week), RN's, ENs, AIN, AIM
  - Medical: Head of Department Obstetrics and Gynaecology, Staff Specialist, VMOs, Career Medical officers, Registrars, Resident Medical Officers
  - Allied Health: Physiotherapists, Dieticians, Occupational Therapists, Social Workers and specialty specific scientist, technicians and researchers (only Social Workers are specific to Women's and Children's Health)
  - Other: Clinical Support officer, Ward Clerk, administrative/clerical staff, etc.

- **Infrastructure location and configuration**
  - Outpatient clinics are located on Level 2
  - Delivery Suite, Maternity Ward and Special Care Nursery located on level 3
  - Operating theatres on Level 3
  - Co-location of inpatient and outpatient services is well received
  - Women's health is considered a wellness model and having well, pregnant women mixing with unwell / potentially infectious patients in a general outpatient area is not recommended. A risk assessment was completed in June 2018 and this option was seen as of high risk to pregnant women.

CURRENT ISSUES AND CHALLENGES

- **Services**
  - Changes to Australian cervical screening guidelines, management of early pregnancy problems, and surgical treatment of gynaecological disease mean a gap between current practice and best practice
  - New guidelines for cervical screening (as of 1 December 2017) mean that more colposcopies will be needed requiring more outpatient clinic bookings and possibly the development of a standalone clinic
  - As endometriosis is a current government priority, and access to advanced gynae-endoscopy is current gold standard, there will be a need in the near future to perform more inpatient procedures requiring increased OT time

- **Unmet demand**
  - There is unmet demand in outpatient areas of Early Pregnancy Assessment Service (EPAS) and Chemical Use in Pregnancy (CUPS)
    - There is no EPAS at TSH. All pregnant women reviewed by GPs or in ED deemed to have a threatened or complicated pregnancy issue are currently referred to the SGH clinic
    - CUPS is under-resourced at TSH with no inpatient capacity
  - The Perinatal and Infant Mental Health Service (PIMHS) is underfunded and needs additional financial and staffing resources. Both SGH and RHW have resources in the form of Clinical Nurse Consultants Perinatal Mental Health. TSH cannot currently provide the recommended care and follow-up to high risk women and families
- **Technology**
  - Present IT is time consuming and impedes service delivery. An IT software package that makes bookings easy and integrates well with other hospital software would be ideal
  - The current telephone booking system for birthing is based at SGH. Staff would prefer bookings to be taken locally and consider options for an online booking system similar to RHW. Additional administrative support would be required for this
  - Ongoing maintenance is required for equipment, e.g. ultrasound, colposcopy, laparoscopic equipment
  - Infrastructure
  - Insufficient capacity in special care nursery (SCN). The SCN currently cares for a maximum of 4 neonates over 34 weeks gestation needing low flow oxygen as per the neonatal capabilities framework. There is physical capacity for up to 6-8 neonates
  - If the SCN service were enhanced, some pregnancies considered high risk (which are currently referred to SGH or RHW) could be managed at TSH
  - There is a lack of office space – service requires an additional 2 offices for inpatient and outpatient use. Currently office space is used for clinics
  - There is a lack of administrative support across the service requiring 1.0 FTE in outpatients and 1.0FTE for inpatient services
  - Equipment for the service is becoming outdated and will soon require replacement This includes ultrasound and CTG monitors as well as OT equipment
  - The move towards disposable equipment has not been well received as it is considered by senior staff to be a patient safety issue and inferior to equipment that can be sterilized, for example disposable episiotomy scissors and suturing kits
- **Staffing**
  - Enhanced medical, midwifery, nursing, social work and administrative support is required to meet future inpatient and outpatient demand
  - A recent benchmarking exercise noted that Sutherland has fewer Consultant level Obstetrics and Gynaecology (O&G) staff compared to peer hospitals in Sydney
  - Administrative support across the service requires enhancing – there is currently no administrative support in the Birthing Unit – this is not in line with other level 4 facilities
  - Recruitment of skilled, senior nursing staff is required before the service can consider expansion of the SCN
  - Unmet demand in EPAS and PIMHS cannot be resolved without enhancement of staff
  - A colposcopy clinic would require staff specialist, admin and nursing support.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

Services need to be optimised to meet current and future demand as well as best practice

- **Service solutions**
  - The development of an outpatient early pregnancy/acute gynaecological service will remove all but the most unwell women from ED and ensure timely access to outpatient obstetrics and gynaecological services that are imperative for women of the Sutherland Shire
    - An Early Pregnancy Assessment Service (EPAS) is required at TSH to accommodate local area review of threatened or complicated pregnancy issues. This service would be in the form of a 3 day a week outpatient clinic/ service running in the early morning prior to other O&G activity Enhancement to service including nursing, medical and allied staff and OT time for D&C's would be required. Equipment and physical space already exists
  - Provide access to increased planned theatre time to improve access for:
    - caesarean births
    - meet Increased demand for gynae-endoscopy procedures for those needing Endometriosis screening
    - meet current and future demand for EPAs, with additional midwifery staffing for support
  - Improve links with child and family health and paediatrics to facilitate integrated care
  - Enhanced funding and resources for the PIMHS including a dedicated Clinical Midwife Consultant to co-ordinate the service and a social worker as engagement and follow up is particularly important in this group
  - Increased outpatient colposcopies and possibly development of a clinic to meet predicted demand due to changes to the cervical screening guidelines
  - Future options for antenatal GP shared care include a midwife working alongside GPs
  - Full allocation of midwifery staff as calculated by the Ministry of Health workforce tool BirthRate Plus
- **Infrastructure solutions**
  - Clinics require close adjacencies to ED, theatres, delivery suite and wards
  - Wellness model for outpatient services requires separate clinic space and waiting area from general clinics
  - Due to the nature of obstetric cover and short response times required, staff are satisfied with current location of inpatient and outpatient services
  - Provide access to group room for education
  - Special Care Nursery to increase to 8 funded cots. This will allow the support of care to babies who are over 34 weeks and require CPAP/high flow O2. It will also reduce pressure on tertiary settings by increasing RHW and St George repatriation of local babies. There will also be increased capacity for low risk twins to be delivered at TSH. Increasing capacity will require enhanced nursing and educational support for Paediatric services
  - Provide dedicated office space
- **Staffing solutions**
  - To meet the future needs and strategic solutions of the service, staffing enhancement would include:
    - Administrative: additional 2.0 FTE to cover inpatient and outpatient areas
    - Clinical Midwifery Consultant FTE
    - After-hours educational support for Maternity Services to allow the recruitment of increased numbers of student midwives
    - Recruitment of skilled, senior nursing staff and allied health including social work support for expansion of the PIMHS and the development of an EPAS, and potential expansion of SCN
    - 0.3 Staff Specialist enhancement for colposcopy, EPAS, and new models of care, admin and nursing support.

Ophthalmology

SCOPE OF SERVICE

The Sutherland Hospital Ophthalmology service provides assessment and treatment of eye disease, currently limited to: cataracts, diabetic retinopathy, emergency presentations and inpatient consultations.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Patients of all age groups are seen, however most patients are in older age groups
  - Demand is driven by:
    - the growing and ageing population
    - increasing comorbidity with eye implications, e.g. diabetes
    - strong community expectation that routine eye services be provided locally
    - increased difficulty accessing larger public ophthalmology services in the LHD (SSEH, POWH)
- **Operational description**
  - Service provision includes
    - Outpatient management of routine cases of two of the most common causes of vision loss in our community: cataracts, diabetic retinopathy
    - Complex care is provided at SSEH or POWH
    - Elective eye surgery for routine procedures (predominantly cataract surgery)
    - Diabetic retinopathy assessment service
    - Management of eye emergencies via ED
    - Consultation to other TSH departments, predominantly for neurology, paediatrics, geriatrics and ICU
- **Activity**
  - Current non-admitted activity
    - Demand is increasing for local routine care of vision loss
    - Surgical patients require initial visit, preadmission visit and 3 surgical follow ups
  - Current and recent inpatient activity
    - Demand for cataract surgery is increasing with waitlist of 12 months+
    - Most patients are day only, with a small proportion overnight
- **Models of care**
  - Cataract patients are referred by local Ophthalmologists
  - The Diabetic Retinopathy Screening service is a collaborative service with the Centre for Eye Health (CFEH) and provides eye screening and treatment for diabetic patients. Referrals are triaged and uncomplicated patients seen by CFEH. Diabetic retinopathy is the most common cause of blindness in the working age population
  - Fluorescein angiography and retinal laser equipment available in clinics, awaiting implementation of service
- **Staffing**
  - Nursing and allied health infrastructure within inpatient areas only, not currently in outpatient clinic
  - Medical: VMO + 0.5 FTE Registrar shared with POWH
- **Infrastructure location and configuration**
  - Outpatient services held in Outpatient department on level 2, with preadmission clinics held on Level 3 adjacent to theatres.

CURRENT ISSUES AND CHALLENGES

- Although comprehensive ophthalmology services currently exist at other facilities within the LHD (POW, SSEH), travel to these centres represents a relative barrier to care, particularly for older patients with low vision who represent a large proportion of the patient cohort

- **Constraints on activity**
  - Waiting list:
    - Currently 12 month wait for cataract surgery at TSH
    - Best practice is to provide timely surgery for visually significant cataract and to minimise the time between first and second eye surgery if bilateral. TSH requires first eye to be corrected before 2nd OT can be booked. There are increased risks of falls for people with long waits both for first and second eye surgery
  - Unmet demand
    - No fluorescein angiography or retinal laser procedures able to be performed despite appropriate equipment being acquired due to administrative requirements and lack of nursing support in clinics. Currently referring patients to other hospitals causing a delay in treatment and long waits
    - There is no subspecialist expertise in paediatric and neurology outpatient services
    - No macular degeneration or glaucoma service available at TSH. Equipment is available and staff have expertise but no clinic time or staff to facilitate
    - No intravitreal injection service available at TSH – represents standard of care for common types of macular degeneration and diabetic retinopathy

- **Technology**
  - Phaco machine used to perform cataract surgery is ageing and in need of replacement

- **Infrastructure**
  - Insufficient clinic and waiting room space to address current limitations of service and increase throughput to meet local demand
  - Lack of access to sufficient dedicated surgical trolleys for ophthalmology patients which limits efficiency of surgical lists

- **Staffing**
  - There is no Orthoptist on site, so service throughput is limited.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Improve outpatient clinic staffing (medical, nursing, orthoptist) to allow implementation of all routine services and reduce delays to assessment and treatment including fluorescein angiography, retinal laser procedures, macular degeneration and glaucoma treatment
  - Create a collaborative care service with CFEH for glaucoma, similar to diabetic retinopathy collaborative care service now active; to meet significant demand and provide early intervention to prevent blindness
  - Add subspecialist cover for paediatric ophthalmology and neuro-ophthalmology outpatient services in response to demand
  - Increase surgery sessions – to meet increased demand
  - Increase access to surgical beds for ophthalmology
  - Increase registrar FTE and consultant-supervised clinics at TSH to meet the requirements of College training post accreditation

- **Infrastructure solutions**
  - 4 clinic rooms for VMOs and registrar, orthoptist and consulting room for CFEH with adjacent waiting area/admin space, additional rooms to house imaging and laser equipment
  - Clinic location should ideally be within hospital footprint with adjacencies to theatre and ED to allow safe inpatient transfer and rapid emergency consults
  - Clinic rooms cannot be shared due to need for specialised equipment e.g. visual field, laser and imaging. Laser room requires shielding
  - Procedure room for minor procedures
  - Replace ageing surgical equipment – including new phaco machine

- **Staffing solutions**
  - Recruitment of a 0.8FTE orthoptist. A dedicated orthoptist is an essential component of outpatient eye clinics and will improve clinic workflow and reduce clinic wait times for new appointments. Funding is available and may be withdrawn if not utilised
  - Recruit additional VMOs including appropriate subspecialist cover (paediatric ophthalmology, glaucoma, neuro-ophthalmology) to meet demand and support trainee supervision
  - Increase registrar FTE to support management of increased surgical and clinic workload
  - Provide clinic nursing support
  - Provide additional administrative support for clinics.

Oral Health

SCOPE OF SERVICE

Public dental services are available for all children (0-17 years) and eligible adults who live within the boundaries of South Eastern Sydney Local Health District. The range of dental services provided includes general dental services, dental education and oral health promotion services for both children and adults.

Within the Sutherland Shire, SESLHD Oral Health services are provided at:

- Sutherland Hospital Outpatients Department (6 chairs for adults and children)
- Currently all dental services provided from Menai child dental clinic (Tharawal Public School) have been relocated to The Sutherland Hospital due to clinic closure in October 2018.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - People eligible to access public oral health services include:
    - All children
    - Adults meeting the eligibility criteria as mandated by Eligibility of Persons for Public Oral Health care in NSW Policy Directive PD2017_027 [xxv]
  - Children eligible for Tax Benefit A have access to private dental care via the Child Dental Benefit Schedule (CDBS)
  - CDBS funds can also be used at public dental clinics and claimed through Medicare. All revenue raised from the CDBS is used to improve patient care

[xxv] Adults must have one or more of the following cards: Commonwealth Seniors Health Card; Health Card; Pensioner Concession Card. All persons must have a valid Medicare Card.

- The major factors driving demand for public oral health activity are:
  - Adults who are not privately insured requiring dental care
  - The growing and ageing population
  - Recent funding under the National Partnership Agreement to treat more adult public dental patients (available until March 2019) to assist with adult dental waiting lists [xxvi]

- **Operational description**
  - The majority of registrations and referrals are accepted though a centralised intake system
  - SESLHD activity is recorded in a fully electronic dental record Titanium Solutions to improve efficiency and reporting
  - Services provided include community, inpatient in reach services and domiciliary visits. Apart from general dental assessment and treatment, services include:
    - A mobile van which treats residents of residential aged care facilities and is currently based at Garrawarra Centre
    - A pilot program with Mental Health has been established for Clozapine patients
    - A Maxillofacial Dental clinic is held at TSH fortnightly and GA services are provided by the Max Fax Specialist via referral from Dental officers
  - Partnerships have been established with Mental Health, Antenatal, ED, and an in reach service is available to the wards when required
  - Patients requiring a general anaesthetic are referred to Sydney Dental Hospital for treatment
  - Sutherland Hospital dental clinic uses the TSH CSSD service

- **Activity**
  - activity has been increasing due to:
    - Recent promotion of services to children
    - Recent funding initiatives to reduce waiting lists
    - Most clinics see 12-13 patients per day with an average time of approx. 40 minutes

- **Models of care**
  - All clients are triaged according to the Priority Oral Health Program and Waiting List Management policy. Most are placed on waiting lists with recommended benchmark waiting times.
  - Routinely SMS appointment confirmations and appointment letters are sent to assist with optimisation of clinic activity. Approximately 5% of scheduled appointments still fail to attend, mostly children

- **Staffing**
  - Clinical / front line:
    - Dentists
    - Dental/Oral Health Therapists
    - Dental Assistants
    - Receptionists
  - Administration and Support
    - Patient Flow Officer
    - OHFFSS Officers
    - Stores and Accounts Officers
    - Courier / Handyman
  - Management
    - Director
    - Lead Dental Officer
    - Lead Oral Health Therapist
    - Lead Dental Assistant
    - Information Manager
    - Quality Manager
    - Programs Manager.

[xxvi] NPA funding is utilised through additional in-house service provision, though increased use of private / public partnerships under the Oral Health fee for Service Scheme (OHFFSS) and through partnership arrangements with Sydney Local health District and St Vincent's Hospital Local Health network

CURRENT ISSUES AND CHALLENGES

- **Changes in patient demographics**
  - It is expected the ageing and growing population will continue to increase the demand for oral health services into the future
- **Constraints on activity**
  - Inequitable access. The Sutherland Shire has lengthy waiting lists for adult services, with fewer chairs available to adult residents in the St George and Sutherland shires than to adults in the northern half of SESLHD who are serviced via Sydney Dental Hospital. This results in inequity in access as these clients wait longer for their treatment compared to residents living in northern SESLHD and many other LHDs.
  - Unmet demand: It is likely there is significant unmet demand for oral health services in some pockets of the catchment, e.g. the Engadine area, particularly for services for children
  - School based clinic at Menai: School based dental clinics are not an effective means of providing services to children and adolescents (NSW Oral Health Capital Strategy 2011-2021), in addition they are not available to treat adults. Changes to the model of care means that parents must now be present with children, so there is no longer a need for school based clinics. As a result in October 2018 Menai child dental clinic services were relocated to the Sutherland Hospital Dental Clinic, Outpatients Department
  - SESLHD oral health services currently relies heavily on the Oral Health Fee for Service Scheme (where eligible patients are issued with a voucher to receive care from a registered private dental provider). This service delivery model is more costly than in-house service provision and therefore not ideal for the future
- **Staffing**
  - Oral Health therapists are now also qualified to treat adults. Oral health therapists working in facilities dedicated for children are restricted in their scope of practice to treating children and have limited opportunity to build professional relationships with dental officers. The service is also restricted in providing a family orientated service
  - Attracting dental assistants to temporarily funded positions is difficult. This can impact patient care
- **Infrastructure**
  - Lack of in house dental facilities: The clinic at Sutherland Hospital is the only clinic in the Sutherland Shire providing publicly funded oral health services to children and eligible adults.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service Solutions**
  - Prioritise the consolidation and transition of the school clinic into larger multidisciplinary dental clinics to maximise service efficiencies and economies of scale and reduce the reliance on the OHFFSS
    - Due to the closure of the school based service at Menai, fully commission the new 6th chair at TSH (currently used only for assessments) to treat both children and adults
  - To reduce inequity of access, establish new services for adults and children in areas of need in the western half of the Sutherland Shire, including at:
    - Engadine Community Health Service (2 chairs part time)
    - Menai Community Health Centre (2 chairs part time) which will also support the Narrangy- Booris Aboriginal Child and Family Health service
  - Continue to utilise the Mobile Dental Clinic for priority populations such as residential aged care clients who may be unable to access mainstream services

- **Infrastructure solutions**
  - Relocating existing services from Menai to TSH outpatients will create improved access for adults and children with the capacity to grow specialist skill sets for staff, improve economies of scale, provide enhanced opportunities for student placements and onsite access to sterilising and radiology services
  - If an Ambulatory Care Centre is built as part of the next redevelopment, Oral Health Services could be suitably housed in purpose built facilities, with improved links to other outpatient services to provide equity f access to suitable patients
  - Consideration would need to be given to the transport of instruments for sterilisation and proximity to CSSD and Radiology
  - Refurbishment of the Engadine and Menai Community Centres would be required to accommodate new oral health services and staff

- **Staffing solutions**
  - An expanded multidisciplinary hub and spoke model incorporating dental clinics in community health centres will support professional collegiality, staffing efficiencies and enable the expansion of the scope of practice of oral health therapists.
  - Additional staffing FTE required to deliver new services will be offset against reduced reliance on the OHFFSS.

Orthopaedics

SCOPE OF SERVICE

Orthopaedics at TSH is a level 5 delineation service networked with SGH. The service provides elective joint surgery for people living in the SGH and TSH catchment as well as orthopaedic care for non-complex trauma and emergency cases.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Service sees patients of all ages however the majority are elderly
  - Demand is driven by an ageing population with multiple co morbidities

- **Operational description**
  - Service performs all elective orthopaedic joint cases for TSH and SGH as well as an increasing emergency caseload for TSH which will soon require additional Operating Theatre sessions
  - Referrals are received from GPs and consultants' rooms
  - Orthopaedics is a single department across SGH and TSH. This is considered a model that is working well for the service it provides

- **Activity**
  - Outpatient
    - Orthopaedic department has 2 outpatient clinics and preadmission clinics at TSH:
      - > An orthopaedic clinic for elective case review has recently commenced and is being utilised well but may get busier the more GPs are notified of it
      - > A wound clinic
    - Waitlist referrals for elective OT are taken from the LHD and all over the state
    - Orthopaedic waitlists are currently manageable however delays are forecast unless the service (including staff and operating theatres) is enhanced
    - There is no fracture clinic. All urgent fracture referrals see orthopaedic specialists in their rooms – referral is via GP or ED and will bulk bill if required. Running a fracture clinic is not supported by evidence

- Inpatient:
  - 20% of all surgery performed at TSH is orthopaedics
  - 50% of orthopaedic throughput is off the elective wait list
  - Orthopaedic inpatients occupy 18/20 beds on Jara ward – There are often up to 4 outliers on other surgical wards which impedes their management and increases their length of stay.
  - Current LOS for elective cases can be up to 4-5 days whereas international standard care indicates discharging within 24-48 hours for joint replacement
  - Elective orthopaedics are not provided at SGH

- **Models of care**
  - For elective lists, a high volume surgical model is used and will benefit from 2 new high volume Operating Theatres proposed to be built in the future
  - Current models of rapid discharge following elective surgery could be improved if the Advanced Recovery Orthopaedic Program (AROP) was introduced at TSH. This guideline is currently being practiced at POWH and is a model of enhanced recovery for patients who meet specified criteria when having elective surgery to reduce morbidity, mortality and convalescence. Multidisciplinary collaboration improves patient outcomes and reduces length of stay which creates capacity and improves surgical waitlist times
  - Orthopaedic model of care is becoming more specialised (foot, hand, elbow, shoulder, hip, knee)

- **Staffing**
  - Nursing: Current Theatre FTE is 37.85 (70% full-time) Theatre nursing staff, PACU 12.01 (25% full-time), Operations Assistant's 9.97 (95% full-time)
  - Medical: 10 VMOs and 2 locums plus 6 JMOS
  - Allied Health: Physiotherapy service has recently increased to include weekend Occupational Therapy service has increased temporarily.

CURRENT ISSUES AND CHALLENGES

- **Clinical networking arrangements**
  - Since the elective joint service began there has been an increase from 50 to 400 joints surgeries performed yearly

- **Changing patient demographics**
  - Demand is driven by an ageing population with multiple co morbidities

- **Constraints on activity**
  - Unmet demand
    - There is no Orthogeriatric service at TSH. There have been attempts to create and replicate the service at SGH i.e. joint admission under orthopaedics and aged care for all orthopaedic patients over 75 but has to date been unsuccessful. At TSH orthopaedics hands over care to geriatrics once patients are past their acute surgical phase
    - There is no orthopaedic CNC to support orthopaedic model of care development
    - Orthopaedic VMO subspecialist is required (foot and ankle) to fill gap in service and replace recently retired surgeon. Appointment is pending approval.
    - There is no hand service at TSH – all hand surgery was previously performed at TSH but is now sent to Sydney Hospital. TSH needs to be able to service locals for simple issues and refer to Sydney Hospital for more complex issues. Private patients are able to access hand surgery in the local private facilities electively, which raises equity issues
    - There is no early discharge planning model. AROP cannot be supported without appropriate resources and a multidisciplinary approach

- Discharge delays occur when patients require rehabilitation
  - > In area patients are bed blocked as there are long delays to acquire an inpatient rehabilitation bed at TSH
  - > out of area patients are not accepted into the Inpatient rehabilitation unit so must stay on the orthopaedic ward until discharge
  - > private facilities (for those with funding) are often bed blocked
  - > this unmet demand could be addressed by increased funding and re-opening of rehabilitation beds as well as better pre op planning for out of area elective patients to return to their local district/area of care for rehabilitation

- **Technology**
  - Forecast is for a change in practice from general orthopaedics to sub specialty which will change the equipment and infrastructure used
  - Current technology is good however equipment is old – arthroscopic tower being used is 14 years old
- **Infrastructure**
  - There are not enough theatres to allow for independent Operating Theatre (OT) lists for orthopaedics, ortho-trauma and emergency hence general trauma and emergency lists are often used for these causing delays in access to operating theatres for cases that need to be assigned to them
  - Operating theatres are too small, require refurbishment and equipment is old and in need of repair or replacement
- **Staffing**
  - Orthopaedic service requires a
    - Orthopaedic CNC
    - VMO to be appointed to replace one who recently retired.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Orthogeriatric service particularly for patients with a fractured Neck of Femur (NOF)
  - Increase inpatient rehabilitation bed base to improve post-operative patient outcomes and decrease LOS on acute wards
  - Access to a hydrotherapy pool for patients receiving rehabilitation
  - Reinstatement of simple emergency hand surgery at TSH following review in ED. Decision can be made as to the complexity of the injury/ OT required and whether to operate at TSH or send to Sydney Hospital
  - Redevelopment/ building of new operating theatres to allow dedicated high volume, trauma, emergency and orthopaedic operating rooms
  - Creation of an early discharge model for elective joint patients or adoption of AROP at TSH
  - relocation of all outpatient services/ clinics into a dedicated and centralised ambulatory care building
- **Infrastructure solutions**
  - New operating theatres and theatre equipment with designated high volume , orthopaedic, emergency and trauma theatres
- **Staffing solutions**
  - Funding and appointment of an
    - Orthopaedic CNC to contribute to research and assist in data collection for studies and trials
    - Physiotherapist to meet demand of recently increased service
    - Orthopaedic VMO subspecialist is required (foot and ankle) to fill gap in service and replace recently retired surgeon
    - Geriatric registrar for Orthogeriatric patients.

Paediatric Service

SCOPE OF SERVICE

The Paediatric service at Sutherland Hospital provides a role delineation Level 4 Paediatric Medicine and Level 3 Paediatric Surgery service in a tiered network linked to Sydney Children's Hospital. It provides a Level 3 Special Care nursery in a Neonatal tiered network with tertiary links to Royal Hospital for Women.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Patients are accepted from 34 weeks gestation to 18 years of age
  - The majority of patients are from the Sutherland Shire
  - Demand is driven by:
    - population growth
    - Increasing complexity and acuity of children accepted by the service, including those returned for care from tertiary referral services and complex, developmental and behavioural patients and families with social challenges
- **Operational description**
  - The Children's Ward has 10 funded beds with capacity for 18 beds
  - The Special Care Nursery (SCN) is a 4 bedded unit with capacity for 6 beds that cares for neonates from 34 weeks gestation
  - Children's Acute Review Service (CARS) is an ambulatory service based on the paediatric ward which provides an acute review service 5 days/ week with experienced CNC and paediatric registrar / staff specialist. Allows for ED avoidance, decreased admissions, decreased length of stay, improved access for GP's and improved care for chronic and complex patients in conjunction with SCH
  - Paediatric outpatient clinics are located in the outpatients department on level 2 and are held 4 days/ week
  - Clinical networking of TSH services occurs with SCH, RHW and SGH
  - Midwife support program supports early discharge and keeping babies well at home
- **Activity**
  - Current non-admitted activity
    - There has been a significant increase in outpatient clinic referrals
    - Outpatients are presenting with more complex issues and higher acuity requiring increased services and ongoing intense follow up and management
  - Increased referrals with developmental and behavioural problems which need longer appointment times and multi-disciplinary care
  - Current and recent inpatient activity (see Table 3 and 4)
    - The paediatric ward demand often exceeds capacity and is often required to surge into unfunded bed spaces or transfer patients to SGH
    - Special care nursery is often at capacity and is increasingly required to care for local babies repatriated from RHW special care nursery for ongoing care
- **Models of care**
  - Referrals are received from ED, GPs and a variety of other children's services and are triaged for urgency
  - Inpatient care includes emergency, direct admission and planned surgical patients
  - CARS provides an acute review service 5 days/ week in conjunction with SCH with experienced CNC and paediatric registrar / staff specialist, which allows for ED avoidance, decreased admissions, decreased length of stay, improved access for GP's and improved care for chronic and complex patients

- **Staffing**
  - Medical:
    - 2.1 FTE Staff Specialist Paediatrician
    - 4 x VMO Paediatrician
    - 1 Resident
    - 5 x Registrar's
  - Nursing:
    - 1.0FTE NUM2
    - 0.42FTE CNE
    - 12.51FTE RN's
    - FTE CSO
  - Allied Health: Access to
    - inpatient paediatric skilled social worker
    - inpatient paediatric skilled dietician
    - outpatient physiotherapist
    - outpatient dietician
    - outpatient speech pathologist
  - Limited access to
    - non paediatric skilled physiotherapist
    - outpatient occupational therapist
  - No access to
    - inpatient speech pathologist (including feeding)
    - inpatient occupational therapist
    - outpatient social worker

- **Infrastructure location and configuration**
  - The SCU is co-located with the paediatric ward. CARS share space on the paediatric ward
  - Paediatric Outpatient clinics are located in the outpatients department on level 2.

CURRENT ISSUES AND CHALLENGES

- Growing numbers of babies and children are being cared for with more complex conditions, including developmental disability and behavioural issues and families with social challenges. This requires more time and specialised staff resources and training
- Higher acuity babies are being managed in the SCN and children on higher amounts of oxygen are being managed locally, with medical and nursing care implications. The current SCN cares for maximum 4 pts patients over 34 weeks gestation needing low flow oxygen as per the neonatal capabilities framework. There is physical capacity for up to 6 patients and tertiary hospitals are asking TSH to provide care to babies who are over 32 weeks and require CPAP
- If there is an Increase in numbers of higher risk pregnancies being managed by TSH Obstetrics, there will be higher numbers of 32 week babies requiring extended and skilled care

- **Constraints on activity**
  - Models of care
    - Waiting list for the Outpatient clinic is currently 2-3 months and stable with the recent expansion of outpatient clinic services and staffing. It has previously been more than 6 months at which time referrals were closed to new referrals in order to catch up
    - CARS provides a proven hospital avoidance model for long term and chronic patients and could be expanded if space were available, including physical beds and a multidisciplinary meeting room and procedure room

- Unmet demand
  - Pharmacy support:
    - > Some medications can't be made at TSH (including syrups) and medication treatment for complex/ chronic patients can't be dispensed meaning families have to travel to SCH or WCH or access privately
    - > Children requiring fortnightly infusions have to travel to SCHN as there is no pharmacy support for this service at TSH
  - There is no paediatric physiotherapy service at TSH and there is difficulty accessing other specialty physiotherapists to provide care in the community
  - There is currently no publicly funded paediatric sleep service between Nowra and SCH. There is potential to combine with the Respiratory service for equitable access to their facilities
  - NSW Eating Disorder Service Plan 2013 – 2018 has mandated that all local hospitals are able to manage paediatric and adolescent eating disorder locally. Eating disorders are currently seen through ambulatory care, with no funding attached. Requires a MDT outpatient service and inpatient beds
  - There is no formal service for paediatric EEG's to be completed and reported on at TSH. Currently patients are sent to SGH
  - There is no access to paediatric short stay beds to reduce time in ED

- **Infrastructure**
  - There is a lack of physical space to enhance outpatient services in the outpatient department resulting in long wait list times for patients
  - Increasing activity will require an enhancement in funded beds and SCN cots

- **Staffing**
  - TSH paediatric service is currently lacking access to physiotherapy and pharmacy services to sufficiently provide inpatient and outpatient needs
  - Any future enhancement of capacity (bed/ clinic spaces) or services would require enhancement to medical/ nursing and allied staffing and their education/ skills set.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Future Paediatric care at TSH requires a comprehensive, integrated acute inpatient and outpatient service as well as good links to community based services to target chronic and complex patients and reduce the need for ED presentations and admissions. This includes
    - Enhancement of special care nursery beds. This would require additional equipment, support in education and enhancement of nursing/ medical and allied health staffing and skills
    - Quarantining 4 newly funded beds on paediatric ward for the introduction of a Paediatric SSU (including medical and nursing support) for assessment and management prior to decision to admit or discharge, with a designated pathway from ED and inclusion/exclusion criteria, which will reduce the LOS of patients in the ED. Would also include allergy testing service
    - Improved access to community based speech pathology and occupational therapy
    - Providing enhanced management of eating disorders with 2 funded beds for a growing cohort of paediatric eating disorder patients who have an extended length of stay (3-4 weeks) and require intensive nursing (1:1) support. Currently these patients are seen as outpatients. Care needs to be multidisciplinary and requires nursing, Mental Health, social work and dietician support. It is expected this program will generate increased presentations to CARS and outpatient clinics requiring medical staff, CNC, dietician and physiotherapist

- Enhanced/ new Paediatric clinic services including for:
  - > Paediatric EEG (currently sent to SGH)
  - > Allergy testing (requires nursing support for skin prick testing)
  - > Management of babies of mothers with substance abuse
  - > Sleep service (now go to SCH with one year wait list)
  - > MRI service (all patients have to be transferred to SGH or SCH)
  - > Increased integration with community based services e.g. management of jaundice at home by community nursing with Bili blankets, access to services for NDIS patients

- **Infrastructure solutions**
  - Provide increased capacity for CARS service (within the bed base in the ward area) and the inclusion of a multipurpose room within this space and access to procedure room
  - Increase funded capacity to 6 beds for Special Care Nursery (including suitably trained nursing staff and additional JMO support). May need specialised equipment such as Hi-Flow
  - Provide increased capacity for outpatient clinic area, may be within a purpose built ambulatory care building with separate services / wait areas for paediatric patients and their families. Rooms need to be large enough for MDT clinics
  - Provision of an equipment pool and storage for consumables such as dressings, tubes, etc. and equipment for families who would otherwise need to source from SCH
  - Provide space (can be shared) for education and group activity

- **Staffing solutions**
  - Staffing and staff education/ skills would need to be enhanced in line with service enhancement
  - Increased access to allied health support including pharmacy, physiotherapy, speech pathology and social work
  - Scope for nurse practitioner support in ambulatory care and ED.

Palliative Care

SCOPE OF SERVICES

Specialist palliative care services to the residents of the Sutherland Shire are provided by Calvary Health Care Kogarah (CHCK). The aim of the service is to help patients to achieve their goals and improve their quality of life.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Adults who have palliative care needs for conditions which include:
    - Cancer
    - Chronic diseases including respiratory, cardiac, renal, diabetes, dementia
    - Neurodegenerative disorders
  - Young adult and paediatric patients are managed in partnership with Sydney Children's Hospital
  - Most patients are cancer related, however the demand for non cancer related palliative care is growing
  - All patients over 16 are eligible for care, however most patients are aged 65 and over and have a number of comorbidities

- The main drivers of demand include:
  - The growing and ageing population
  - People living longer with chronic disease
  - Increased demand for people to return home with complex issues
  - Increased use of treatments that are prolonging life
  - The introduction of Patient Reported Outcomes Measures is expected to increase demand, e.g. from earlier referral for pain management.

- **Operational description**
  - CHCK Palliative Care service provides a role delineation Level 6 networked service with St George and Sutherland Hospitals
  - All community based palliative care to the southern half of SESLHD is provided by the Calvary Community Palliative Care team (CPCT)
  - CPCT provides a 7 day service and 24 hour after hours telephone advice and on call crisis service (with criteria for home visits after hours)
  - A consultative medical and nursing palliative care service is provided to patients at Sutherland Hospital, with referral to inpatient or community palliative care services as required, and nursing advice provided to outpatient clinics
  - Services provided at CHCK available to Sutherland Shire residents include:
    - 32 inpatient beds
    - Motor Neurone Disease Service with care provided from Palliative care and Rehabilitation, with own social worker and CNC, and medical support
    - Ambulatory care allied health services
    - Multi-disciplinary CPCT, including in reach to RACFs
    - Ambulatory palliative care services are provided 5 days per week on site in the Palliative care gymnasium
  - It is noted that some palliative care activity at TSH is provided by other medical specialties e.g. Geriatrics and not referred to CHCK clinicians

- **Activity**
  - Community based palliative care activity is increasing with current services at capacity
  - In the previous 6 years the number of referrals have increased from approximately 700 to 1000 with referrals from TSH ranging from 120-166 referrals per year or on average 12 referrals per month. Predictably, SGH (34%) have the highest proportion of referrals followed by TSH (14%). Other referral sources include GPs, Specialists, RACFs, other public and private hospitals, community, family and self-referrals
  - The average number of patients seen by CPCT has ranged from 273 to 302 patients per month with a significant increase evident in 2018/19 and service events has ranged from 1,066 to 1,099 per month
  - Ambulatory palliative care rehabilitation activity has potential for growth if resources (staff and infrastructure) were available
  - Approximately 44% of total palliative care inpatient activity at CHCK is provided to residents of the Sutherland Shire, with most residents accessing CHCK using private health insurance at 56%
  - Ambulatory palliative care rehabilitation activity has potential for growth if resources (staff and infrastructure) were available
  - Beds at CHCK are able to be flexed up and down with rehabilitation to meet demand
  - Inpatient throughput has increased in recent years, with the average length of stay decreasing from 17 to 14 days, reflecting the changed model of care to increased community management for as long as possible, with admission for episodes of short term management as required. This includes short admissions for end of life care for people who have experienced their main episode of care in the community

- **Models of care**
  - There is no waiting list, however referrals for community and inpatient palliative care are triaged on a needs basis, with community patients a priority for admission over hospital based patients. Patients are discharged and readmitted to the service (community and inpatient) as care needs change
  - Most people choose to be cared for at home for as long as possible, however the desire to die at home changes over time and most people choose to die in the Palliative Care Unit secondary to lack of available care in place (home or RACF). There is a need to increase community services for RACF in reach and home services over the months and weeks before death
  - Models to reduce the need for an acute admission or ED presentation and provide appropriate care in the right setting include:
    - Ambulance Palliative Care plans, where RACF or community dwelling patients under palliative care are transferred directly to CHCK, bypassing ED; or contact with CPCT is made to manage patient at home to prevent admission. These plans need to be completed prior to discharge from the acute or sub-acute setting
    - End of Life Plans to prevent acute activity
    - Direct admission to CHCK by the CPCT to avoid acute admission
    - In reach to RACFs in southern SESLHD to support capacity building in palliative care of RACF staff to provide care in place and avoid transfer, and to provide specialist palliative care support when required, integrated with the GFS model
  - A palliative care rehabilitation service for inpatients and outpatients, including patients with MND, is available to maintain functional capacity and improve quality of life for those receiving palliative care, with daily group exercise sessions in the gym and hydrotherapy pool
  - Home care support is provided in collaboration with Hammond Care and St Vincent's Health Service

- **Staffing for Sutherland (Current)**
  - Palliative Care Medical Specialist Consultation service: 0.2 FTE (2 sessions/week). Recruitment is underway for additional medical staff following recent enhancement of funding from the LHD, which will result in 0.6 FTE medical staff at TSH
  - I FTE CNC (currently acting)
  - 0.6 FTE CNS (from STG)
  - 8.5 FTE nursing staff in community team for both STG and Sutherland areas
  - CPCT: 7 day service (nursing only), including nurses, physiotherapists, medical specialists, social workers, occupational therapists, also pastoral care workers and volunteers who cover the Sutherland and St George areas, including 2 nurse practitioners, with 1 for Sutherland Shire and 1 for STG area, both who support community based services and RACFs. Allied health work M-F
  - Pastoral Care team provided at CHCK
  - Bereavement Support Staff and Counselling provided at CHCK
  - A large Palliative Care Volunteer workforce, many of whom work in the community to support carers

- **Infrastructure location and configuration**
  - All specialist palliative care inpatient and ambulatory services and CPCT offices are based on the CHCK campus.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - The population is ageing and living longer with chronic disease, with a resultant increase in palliative care needs for non- cancer patients. Increasingly these patients will require short term episodes of care, with earlier identification for the need for palliative care to improve quality of life
  - Improved survival for oncology patients with ongoing needs
  - Increasing demand for palliative care in RACFs (60 RACFs in southern SESLHD are currently covered by service). There is a need for 2 more NPs for this service

- **Constraints on activity**
  - The Sutherland Shire is a large geographical area to cover for the CPCT and current staffing levels are not meeting the needs of the community
  - Community based palliative care services are keeping people at home for as long as possible to avoid acute and subacute admission, however this model is at capacity with current staffing levels
  - There is a lack of GPs who have palliative care expertise and limited community services available, resulting in increased burden on carers and carer stress
  - There is growing demand for palliative care in the last 3 months of life, requiring access to prompt service which is currently not available to all within existing resources
  - There is currently no Palliative Care outpatient clinic at TSH
  - There is little access to home care services for people under 65 who are not eligible for NDIS
  - Psycho-social and mental health components of palliative care is increasingly evident and requires support, along with helping families to have realistic expectations
  - Carer support and grief management is under resourced, with no Activity Based Funding support for bereavement counselling
  - There are inadequate government funded 48 hour care packages available for people in the last stages of life
- **Infrastructure**
  - Ambulatory services are at capacity in available space, despite expansion
  - There is limited access to respite beds or step down beds for patients waiting for RACF, or not requiring specialist palliative care services but are type changed to palliative care as are no longer having active treatment, etc.
- **Staffing**
  - Recruitment of experienced palliative care medical and nursing staff is difficult (Australia has 50% less palliative care consultants than it needs)
  - Workforce planning e.g. with registrar workforce is 18 months in advance of supply
  - Recently retired CNC was very experienced, with enhanced knowledge and skills
  - Having a social worker and additional nursing FTE on the palliative care team in the acute care setting would assist in engaging with patients and families in difficult conversations and also supporting staff to have these conversations
  - All services provided are contingent on adequate staffing, with current changes in models of care to provide efficiencies and manage more throughput made within existing staffing levels
  - Previously some roles ran across both SGH and TSH. The devolution of management to each site has meant TSH has had some staffing constraints
  - There is no administration support at TSH or SGH for palliative care.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Enhanced Nurse Practitioner led palliative care in reach service to the community and RACFs with a review of the model of care to identify the most appropriate makeup of the team increased social work support to avoid ED presentations and better manage residents in situ
  - Enhanced community based palliative care team support, including increased allied health (physiotherapy, occupational therapy, social work) to meet the rising demand from patients wishing to be cared for at home for as long as possible. This needs to be a 24 hour a day 7 day a week service.
  - Upskilling of RACF staff via in reach CPCT
  - Re-establish palliative care outpatient service at TSH

- Investigate potential for shared care clinics at TSH with other specialties, e.g. respiratory, cardiology, renal
- Investigate opportunities for community based clinics – satellite services - run by nurse practitioners, e.g. in existing community health centres in the Sutherland Shire e.g. Engadine, Menai
- Continue capacity building of Southcare staff in GFS, etc.
- Foster the capacity building of interested local GPs and practice nurses, e.g. as part of health care homes model or model used in Northern Sydney
- Investigate opportunities to partner with the CESPHN
- Enhance pathways for direct admission to CHCK to avoid ED presentations and unnecessary acute admissions with:
  - Pathways for known patients from ED
  - Increased use of Ambulance Palliative Care Plans
  - Increased implementation of advanced care planning
  - GP referral for lower acuity patients
- Engagement with medical specialty teams (e.g. aged care, renal, respiratory, cardiology) to develop subacute pathways to admission to CHCK and earlier identification of palliative care needs
- Enhance palliative care rehabilitation ambulatory services to improve quality of life and maintain functional independence for as long as possible
- Build capacity of TSH staff to a) plan with patients and families where the prognosis is likely death within 12 months and b) transition to end of life care and referral to palliative care services for 'difficult conversations"
- Potential for survivorship service run by Cancer services to be established in the future at TSH

- **Infrastructure solutions**
  - Address subacute capacity issues at TSH, including access to dedicated palliative care or step down beds for patients at end of life not requiring transfer to CHCK for specialist care or too unwell for transfer. Currently patients type changed to Palliative Care occupy the equivalent of 6 beds worth of activity and this is projected to double by 2031
  - Investigate opportunities to expand subacute bed base at CHCK

- **Technology solutions**
  - A centralised referral system and database for palliative care for inpatient and community services would improve access and referral for services
  - Pathways to fast track admission from ED to CHCK of known patients and prevent acute admission at TSH, e.g. with eMR alerts, CHCK admission criteria
  - eMR flags for advanced care plans and ambulance palliative care plans, with links to palliative care service

- **Staffing solutions**
  - Recent funding has been received from the NSW Ministry of Health for LHD wide positions until July 2021 in:
    - Social worker or Psychologist position (1.0 FTE) to provide bereavement support, psychosocial and connected care in the end of life and palliative care period for patients and their families
    - Aboriginal Health Worker position (0.5 FTE) to improve access to palliative care services for Aboriginal communities through an increase in staff resources; develop knowledge and capacity in existing communities which are locally relevant; and create collaborative partnerships between the LHD and the local Aboriginal communities to improve access to palliative care services for Aboriginal communities
  - Increased staffing for community and ambulatory models (nursing, allied health, counselling and social work) to reduce length of stay, prevent/delay readmission and improve quality of life
  - Enhanced specialist medical staffing to support TSH inpatients and medical clinics
  - CMO to support inpatients and community based services in the Sutherland Shire
  - Investigate opportunities for rotations from oncology or GP registrars to palliative care
  - Increased access/links to Liaison Psychology and Psychiatry support at TSH
  - Investigate potential outsourcing of home care services for overnight nursing care.

Pastoral Care Service

SCOPE OF SERVICES

Sutherland Hospital Pastoral Care service is made up of volunteer Chaplains who are managed by the TSH volunteer service. To be accredited, volunteer Chaplains are required to participate in a 40 hour course, have a reference from their minister, followed by an interview and are then on 3 month probation.

Chaplains visit patients and their families at the bedside for the purpose of offering or providing pastoral care. Patients may also be referred in order to attend to the immediate spiritual and religious needs of themselves and their families. Chaplains can provide appropriate rites and rituals, for example, for those suffering from serious illness or injury, or where a death has occurred or is anticipated.

DESCRIPTION OF CURRENT SERVICE DELIVERY

NSW Health recognises that patients, their families and staff in public hospitals and healthcare institutions have a basic right to spiritual care and to access Chaplaincy and Pastoral Care Services.

Service delivery is based on the memorandum of understanding between NSW Health and the Civil Chaplaincies Advisory Committee (CCAC) and that everyone in NSW has the right to:

- Holistic care including pastoral care
- Chaplaincy and pastoral care services being offered to all patients, however patients can decline the services of a chaplain

- **Activity**
  - Chaplain's at TSH visit all patients on their assigned ward
- **Operational description**
  - In addition to regular services, referrals are mostly received from nursing and medical staff for patients who they think will benefit from pastoral care
  - Services provided include:
    - Pastoral care which includes listening, support and spiritual care
    - Providing information about their service to hospital staff at orientation days
    - Providing information to staff and the general public during pastoral care week
  - As per the memorandum of understanding there is a designated "sacred space" which is the chapel, built by Rotary. It includes a multifaith room, a meeting/education room, available for all patients, families and visitors and staff to access
  - Regular professional development days are held for all volunteers
- **Models of care**
  - Good listening is fundamental to good pastoral care
  - Pastoral care has a spiritual care focus that can be unique for the individual. This may be within the framework of guiding, healing, nurturing, reconciliation, sustaining and liberation.
  - Chaplains support each other, and are encouraged to debrief and bring case studies to discussion to learn from experiences and avoid burn out
- **Staffing**
  - The service currently includes 9 accredited volunteer Protestant Chaplains who provide a daily service Monday to Friday, with volunteers assigned to a ward; Catholic volunteers; and other faiths on call including Greek Orthodox, Islamic, Buddhist and Jewish.

CURRENT ISSUES AND CHALLENGES

- There is currently no funding source for volunteers. Information Brochures are printed by the hospital and the Bible Society provides grants for bibles, but scripture cards are purchased by Chaplains themselves

- **Infrastructure**
  - The Chapel is in need of urgent maintenance works to ensure structural integrity. Services such as those held at Christmas, Easter and Anzac Day can no longer be held there
  - Facilities within the chapel also require updating to include a washroom for the Muslim population and air conditioning
  - Chaplains have no computer access on campus

- **Staffing**
  - Funding is needed for a paid chaplain. Their role would include being the head of the Chaplaincy team, providing support to volunteer chaplains, raising the profile of pastoral care in the hospital and local churches and the recruitment of more volunteers.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Expansion of the Chaplain Service to cover more wards and more time on each ward. Weekend support could also be a possibility, but is limited by the availability of support for volunteer Chaplains

- **Infrastructure solutions**
  - The Chapel requires review by an engineer to determine structural integrity and safe occupancy. Following this, repairs/ redesign or rebuilding of the chapel is needed to make it a safe and functional space
  - Refurbishment to provide a suitable washing area for Muslim users of the multifaith area
  - Office space or refurbishment of the chapel meeting room to function as an office space with a computer for correspondence
  - Air conditioning supplied for the improved comfort of those using the Chapel

- **Staffing solutions**
  - Recruitment of a full time paid Chaplain
  - Increased numbers of volunteer Champlain's to cover every ward at least 1 day per week
  - Administrative support for the service.

Pharmacy

SCOPE OF SERVICE

The Sutherland Hospital Pharmacy Department provides a level 5 role delineation service which oversees medication management throughout the hospital. It consists of a clinical as well as supply service to all clinical areas in the hospital. The department is a stakeholder involved in ensuring compliance with National Standards 4 accreditation processes.

The service is located on Level 2 of the hospital, with ease of access to all services.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Services are provided to patients of all ages
- **Operational description**
  - The supply service consists of drug procurement, distribution and dispensing of pharmaceuticals
  - The clinical service consists of medication chart review, patient education, identification of drug interactions, adverse drug reaction reporting, drug information, medication reconciliation, pharmacist interventions and any appropriate alternative recommendations
  - Each ward has an IMPREST list for regularly used pharmaceuticals, with other lower usage drugs ordered through Pharmacy
  - There is no outpatient dispensing service and community based Pharmacy services are managed by Southcare
  - The department provides a service Monday to Friday
- **Models of care**
  - Each clinical ward area is allocated a clinical pharmacist to provide the above clinical activities in accordance to Society of Hospital Pharmacists of Australia (SHPA) guidelines and standards
  - The department has two pharmacy clinical specialities- a 1.5FTE Oncology pharmacist and 0.25FTE Antimicrobial Stewardship (AMS) pharmacist
  - Pharmacy technicians provide drug distribution and IMPREST lines
  - eMeds were introduced at TSH in 2017
- **Staffing**
  - 16 FTE including pharmacists which includes DOP and DDOP, Pharmacy technicians and Pharmacy Intern.

CURRENT ISSUES AND CHALLENGES

- **Increasing demand**
  - Increasing population growth and increased incidence of chronic disease resulting in increased hospital and ED activity
  - Provision of new clinical services, including new ward beds, larger ED, outpatient clinics and ambulatory care
  - Mandated medication reconciliation, which is largely performed by Pharmacy and is mandatory to meet NS4 requirements
  - Antimicrobial stewardship (AMS) responsibilities to meet National Standard 3 accreditation

- **Constraints on activity**
  - There is limited capacity for participation in clinical trials
  - There is no staffing capacity for outpatient Pharmacy services
  - There is no provision for a pharmacist in ED
  - Current staff establishment does not support a weekend service for a 7 day/week service. Neither does it support a 7 day rotating roster
  - There is no provision for a Medication Safety Pharmacist to help in ensuring compliance with NS4 requirements for accreditation
  - As AMS services grow and the second version of Standard 3 is mandated, the organisation will not be in a position to comply and provide the mandated KPIs of this standard.
  - Currently the department has only 2FTE pharmacy technicians to undertake drug distribution as well as dispensing. Drug distribution is the priority and any time leftover is given to the dispensary to free up pharmacists for clinical ward activities
  - There is limited time available for wards with some wards not allocated a dedicated Pharmacist
  - There is no annual leave/sick leave cover which means some wards cannot be serviced daily
  - Opportunities for research and education are limited
  - Vendor managed inventory has resulted in a greater need for deliveries and storage
  - Nursing homes require 3 days' supply of all medications on discharge, not just new medications
- **Technology**
  - The introduction of eMeds in 2017 has changed practice and resulted in an increase in dispensing. Pharmacists are now rostered on to deal more immediately with ward requests. It has also resulted in increased time required for checking for accuracy
- **Infrastructure**
  - The current location of Pharmacy is central with ease of access to all clinical areas, however the footprint has no room for expansion, with insufficient storage space currently for:
    - VMI deliveries
    - General storage
    - Extra refrigerators required
- **Staffing**
  - Despite increasing demand for Pharmacy services, there has not been an enhancement to staffing levels since 2013. According to SHPA pharmacy staffing levels, current TSH Pharmacy is inadequately staffed. Current pharmacist FTE is 10.68FTE which includes the Director and Deputy Director positions at 2FTE. According to SHPA guidelines on Pharmacist staffing levels required for provision of safe clinical pharmacy services is 16.45FTE clinical pharmacists only
  - Inadequate staffing prevents uptake of medication reconciliation, a mandatory requirement under National Standard 4 as well as medication chart reviews to pick up any prescribing errors and near misses which avoid potential medication incidents. Medication misadventure is a major risk to patient care, safety and ultimately outcomes and contributes to increases in patient length of stay
  - AMS services have expanded to a point whereby the AMS pharmacist is spending greater than the original allocated 0.25FTE allocated. An enhancement is needed.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Provide an improved management structure with regrading for senior positions to assist with management, education and provide opportunities for education and professional development
  - Provide capacity for a weekend service (4 hours Saturday and Sunday) for provision of complex discharge prescriptions to facilitate weekend discharge for patients that would otherwise have remained as inpatients, urgent/ new/changed inpatient medications and miscellaneous urgent S8 orders.
  - Promote discharge planning of Pharmacy requirements, with potential promotion of P.B.S scripts for discharge for some patients (as in after-hours discharge)
- **Infrastructure solutions**
  - Explore potential for expansion of Department footprint. Any relocation would need to consider proximity to ED, OT and wards
  - Ensure adequate space for storage and new staff
  - Explore potential for satellite outpatients department if new ambulatory care centre/outpatient centre is built
  - Consider future implementation of AMDU (with staff recruitment for management)
- **Staffing solutions**
  - Ensure adequate staffing levels according to SHPA guidelines
  - Provide a permanent allocated pharmacist in the Emergency Department (currently on trial) to improve prescribing and increase uptake of medication reconciliation
  - Allow staff enhancement for a weekend service to facilitate weekend discharges and urgent medicines lines
  - Provide an additional enhancement to AMS pharmacist FTE to sustain the increase in ID/AMS demand for clinical pharmacy services (reporting, surveys, ordering, supply and monitoring
  - Provide a Medication Safety Pharmacist to enable preparation for compliance with National Standard 4 (NS4) accreditation
  - Increase in pharmacy technicians to aid in the dispensary and enable pharmacists more time on ward for clinical activities
  - Additional pharmacy staff commensurate with increased workload when new ward areas are developed and opened.

Practice and Workforce Capability Service

SCOPE OF SERVICES

The Practice and Workforce Capability Service (P&WCS) provides a shared service across both St George and Sutherland Hospitals to support the ongoing educational development of nursing, medical and allied health staff.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- The service co-ordinates a range of support services at TSH, including:
  - Assisting and enabling Clinical Nurse Educators, including a community of practice group for ward based CNEs
  - Transitioning Nurses support program, a one year support program for new graduate RNs
  - ClinConnect program for undergraduate students
  - DETECT program for allied health staff and AINs
  - DETECT program for medical and nursing staff
  - Nursing orientation and mandatory training
  - Partnering with ODL for corporate orientation
  - Nursing orientation includes Probe, Alert, Challenge, Emergency (PACE) and Basic Life Support training extended to Allied Health and ward persons
  - Basic Life Support assessments for community based teams and smaller teams (not ward based)
  - Train the trainer for Basic Life Support
  - Advanced Life Support training (run across both sites)
  - Run workshops including cannulation, venepuncture, CVAD
  - Enhance: a facility wide education program for capacity building of staff on a variety of topics
  - PEEP program (person centred care): provides workshops and facilitate program at TSH Monitor learning needs and gaps in knowledge and support development of or develop appropriate educational programs
  - Staff support with reflective supervision.
  - Support clinical supervision at point of care

- **Models of care**
  - P&WCS staff work collaboratively across both sites, however have dedicated portfolios at each site
  - The service works to strengthen a culture of team work, support for each other, engagement, value of staff and staff retention

- **Staffing**
  - 3 FTE Nurse Educators at TSH and 1 FTE after-hours clinical nurse educator provides support for transitioning nurses and medical staff
  - I FTE admin support
  - Staff from St George provide part time specialised services at TSH
    - PeeP NE 1 day per week
    - CNE safety and risk 1 day per week
    - NM 2 days per week

- **Infrastructure location and configuration**
  - Offices and teaching rooms are located on Level 2, co-located with TSH Auditorium, which is used for group learning
  - A Computer room for training is provided with 11 chairs.

CURRENT ISSUES AND CHALLENGES

- Meeting the needs of relatively junior staff (RN, CNE and NUMs) with current staffing is difficult.
- Garrawarra currently manages own education service, however this may become more integrated with TSH in the future

- **Staffing**
  - Computer training – Program capacity is limited by availability of computer training spaces – currently restricted to 11
  - No community based CNE or outpatient educator –Increasing demands on all services
  - Increasing requirements for mandatory training
- **Infrastructure**
  - Training rooms are too small and limit throughput
  - The Auditorium is often unavailable for education due to other users and too small for current and future needs
- **Technology**
  - Available computers are aging and insufficient for the number of staff requiring computer training e.g. eMR and eMeds
  - Projectors are ageing.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Review current models of education to become more proactive and focused on safety, person centred care and staff wellbeing
  - Integrate siloed services so that all staff have access to education support
  - Consider including a rotation to the community for second year nursing graduates to enhance integration with hospital services and give exposure for future recruitment in a growing area of demand
  - Consider establishment of Advanced Life Support training at TSH in future if SIM centre established at TSH, with accredited instructors and appropriate resources and staffing capacity. This would help attract staff to TSH
- **Infrastructure solutions**
  - Provide dedicated SIM centre at TSH – potentially shared with ED and ICU
  - Provide increased office space for education staff – may be open plan for space efficiency
  - Provide a second large education space (auditorium or training room) for up to 100 people to meet demand
  - Provide a computer room and computers for 30, managed by 2 trainers. Could be shared by other disciplines e.g. for HETI online training
  - Provision of a 'quiet room" for privacy in the support of distressed staff, counselling, etc.
  - Increase equipment available e.g. mannequins for life support training
  - Current location is easily accessible for staff but inadequate. Staff happy for co-location in new outpatient building with expanded facilities

- **Technology soloutions**
  - Investment in contemporary education/training software
  - Video equipment to allow videoing of simulations and education sessions for use by after-hours staff
  - Infrastructure to set up a SharePoint site as a single point of access for educational material
  - Replacement of ageing data projectors
  - ICT support for educators in use of new technologies and programs
  - More upgraded computers (15 laptops)

- **Staffing solutions**
  - Increased NE FTE staff:
    - 1 FTE to work across campus
    - 1 FTE in Aged Care to support increased bed base
    - 1 FTE to support outpatients/ambulatory care centre
    - 0.5 FTE CNE after hours to cover every day.

Rapid Assessment, Diagnosis and Intervention Unit Sutherland

SCOPE OF SERVICES

The Rapid Assessment, Diagnosis and Intervention Unit Sutherland (RADIUS) has been established as an alternate pathway for patients presenting with general medical problems and multiple comorbidities (in order to avoid the Emergency Department wherever possible).

RADIUS is intended to provide rapid, responsive care to help people avoid or reduce the time they spend in hospital through better co-ordination with community services.

RADIUS is a community-facing unit within the Sutherland Hospital for complex medical patients (who are not critically unwell), to receive rapid assessment and intervention, prior to supported discharge back into the community.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - ≥ 16 years of age
  - Clinically stable
  - Requires rapid assessment, diagnosis and intervention
  - May have an undifferentiated presentation requiring medical assessment and treatment

- **Operational description**
  - The RADIUS is a community-facing unit within The Sutherland Hospital for undifferentiated, complex medical patients, who are not critically unwell, to receive rapid assessment and intervention prior to supported discharge back into the community or admission for further treatment.
  - The provisional RADIUS model currently operates from 0930 to 1800, Monday to Friday.
  - Funding for RADIUS has come from the MoH and will go until June 2019
  - There are three primary referral pathways for the RADIUS- the TSH Emergency Department (ED), General Practitioners (GPs) and the Southcare Outreach Service (SOS)
  - Patients do not require a diagnosis prior to acceptance or transfer to the unit and receive a rapid medical assessment on arrival and priority access to imaging
  - Patients may have a history of chronic and/or complex condition(s) and/or multiple co morbidities

- **Activity**
  - In the first 2 months RADIUS has seen 247 inpatients and 64 outpatients
  - Of these 182 were discharged home with a follow up appointments in the RADIUS clinic as necessary and 36 others were discharged home with SOS follow up in the community
  - 20 patients were admitted to the ward area under a physician
- **Models of care**
  - Governance of Radius is under Southcare
  - Patients are reviewed by a RADIUS Consultant who determines the goals of treatment and criteria for discharge. Patients can be considered for discharge once the treatment goals are achieved and they fulfil the set criteria
- **Staffing**
  - Nursing: Nurse Manager, Nurse Unit Manager, 3 x Registered Nurses
  - Medical: Director and Staff specialists
  - Allied Health: Physiotherapists, Dieticians, Occupational Therapists, Social Workers are utilised on a referral basis
  - Administrative/clerical staff
  - Cleaner/Porter
- **Infrastructure location and configuration**
  - The provisional service includes:
    - An 8 bed / chair day-only unit located directly above the Emergency Department on level 3 of The Sutherland Hospital
    - An outpatient clinic.

CURRENT ISSUES AND CHALLENGES

- **Constraints on activity**
  - Unmet demand
  - The RADIUS model would benefit from extending hours and days of service to include weekends and afterhours. This would assist to
    - Capture a larger cohort of patients
    - Assist flow in the Emergency Department, particularly between 1500 and 2200
    - Have more time to process patients
    - Improve flexibility in discharge times for patients moving out of the unit to either home of a ward area
- **Potential for new clinics/ services**
  - A General Medical Stream at TSH would provide the ability for a direct medical admission from RADIUS under that specialty. This could potentially decrease a patient's time spent in the Emergency Department and their overall LOS
  - Currently Allied health is used on a referral base only. If RADIUS were to recruit their own allied health personnel the service and it's patients would benefit greatly through rapid access to allied services in particular Physiotherapy
- **Infrastructure**
  - Current location is a ward environment with clinical facilities and areas for consultation and examination of patients
  - Clinic is held in same area which allows patients to return to a familiar environment
  - For the future, critical physical adjacencies would be maintaining quick access to the Emergency Department and imaging/ pathology services to ensure timely transfer of patients from ED to RADIUS and quick access to medical imagine for diagnostic imaging.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - The RADIUS model would benefit from extending hours and days of service to include weekends and afterhours
  - Introduction of General Medicine specialty in 2019
  - Ongoing funding past June 2019
- **Staffing solutions**
  - Staffing enhancement of Allied Health - particularly physiotherapy
  - Additional SOS packages (currently only 6 per week) increased activity will require additional capacity for SOS to ensure patients are provided with a supported, safe discharge home.

Rehabilitation

SCOPE OF SERVICE

Rehabilitation at TSH is a 7 day per week ward based and consultative service that provides multidisciplinary rehabilitation support to people aged 16 years and older assessed as suitable for rehabilitation. The primary treatment goal is to improve the functional status of patients who have suffered significant illness or injury and who have the capacity to make decisions about things that affect their daily life.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Most patients are older, with an average age of 84, and have recent impairment of functional ability due to illness or injury, including:
    - fracture, stroke and other neurological conditions, amputation, frailty, deconditioning and general debility following prolonged illness or associated with comorbid conditions such as degenerative neurological or musculoskeletal disease, vascular disease, diabetes, renal failure, etc.
  - Demand is driven by:
    - Population growth and ageing
    - The clinical acuity and complexity of patients has increased due to people living longer with multiple comorbidities and long term disability that require ongoing management
    - People are delaying RACF placement and cared for longer at home, with more frequent admissions and longer lengths of stay required to prepare them for and maintain them at home
    - Declining rates of private insurance means some activity will return to the public system, particularly for orthopaedic rehabilitation
- **Operational description**
  - Rehabilitation services include:
    - 21 bed inpatient ward on Killara ward, with an adjacent rehabilitation gymnasium shared with Cardiac and Pulmonary rehabilitation groups
    - Some aged care rehabilitation patients remain under the care of Geriatricians
    - Outpatient clinics:
      - Medical specialist clinic, held in outpatients
      - Allied health – OT and Speech Pathology clinics, held in Allied health treatment room
      - Amputee Clinic, held in Southcare building

- Southcare (not managed by Rehabilitation Services) provides:
  - Short term community rehabilitation services (4-6 visits) to people aged 65 and over who and are housebound; for falls assessment; and post joint replacement (excludes neurology patients and people requiring x 2 assistance)
  - Sutherland Transitional Aged Care Service (STACS) for people 65 and over discharged from hospital for ongoing multidisciplinary slow stream rehabilitation up to 3 months, including post stroke management and younger neurology patients where there is rehabilitation physician input (n.b. patients under 65 are no longer accepted for STACS services due to Commonwealth funding guidelines)

- **Clinical networking**
  - SGH currently provides acute management of all potential stroke patients taken by ambulance from the Sutherland Shire and provides inpatient and day hospital follow up at Rose Cottage if required for ongoing rehabilitation
  - Rose cottage also accepts referrals for patients that are discharged from TSH
  - Currently only medically stable privately insured residents of the Sutherland Shire are accepted for inpatient rehabilitation at Calvary Health Care Kogarah (CHCK)
  - Patients are referred to Motor Neurone Disease and Parkinson's Disease clinics at CHCK
    - Role delineation: Level 4
    - Activity
  - Non- admitted medical and allied health activity is at capacity. There is no Physiotherapy rehabilitation outpatient service
  - Inpatient beds are at capacity, with 3-4 people waiting for a rehab bed at any time
  - Rehabilitation bed numbers have been reduced in recent years due to:
    - Significant reductions in length of stay
    - Reduction in joint replacement rehabilitation admissions due to a changed model of care

- **Models of care**
  - There is currently no dedicated multidisciplinary outpatient or Day Hospital service
  - There is no rehabilitation in-reach service
  - Access to community services for rehabilitation is limited to patients who are housebound and frail aged, with goals that can be addressed within 4-6 visits

- **Staffing**
  - Includes a multidisciplinary team of rehabilitation Specialists and registrars, specialist rehabilitation nursing and access to allied health staff including physiotherapists, occupational therapists, speech pathologists, allied health assistants, social workers, psychologists

- **Infrastructure location and configuration**
  - Killara ward and rehabilitation gymnasium are located on level one of TSH, adjacent to Killara Aged Care ward
  - Limited Outpatients services are provided at a variety of locations (Outpatients, Allied Health, Southcare)
  - Community services are provided from Southcare for frail aged, housebound patients and transitional aged care services (STACS) post discharge.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - Growing ageing population with increasing complexity requiring rehabilitation
  - Imminent introduction of Thrombolysis service at TSH, which will change the ambulance matrix to bring all potential stroke patients from the Sutherland Shire to TSH ED rather than St George ED. This will have an impact on ED, Stroke Unit and rehabilitation services and create an increased demand for day hospital/outpatient services
- **Constraints on activity**
  - Waiting list:
    - 3-4 months for a medical appointment
    - 3-4 patients at any time for inpatient rehabilitation with 1–2 day wait, longer for inter hospital transfers
    - Most patients attend their appointments or give notice of cancellation
  - Unmet demand
    - There is increasing demand for longer term support options to maintain frail patients at home. The current transitional care services are not suitable or available for all patients
    - Rehabilitation readmissions, particularly for frail aged admissions, could be avoided with the introduction of an Outpatient/Day Hospital model and enhanced allied health services
    - Outpatient services for:
      - Stroke and stroke-like illness
      - Parkinson's Disease
      - Falls prevention for frail elderly
      - Constrained Induced Movement Therapy (upper limb rehabilitation)
      - Cognitive rehabilitation
      - Prehabilitation to prevent frailty or post-op deconditioning
      - Specialist Spasticity management clinic (currently at SGH due to lack of resources at TSH)
  - Acute management in ED for preventable hospitalisation of the elderly post some fractures e.g. humerus or pubic rami, who could be discharged with rapidly accessed allied health home support, e.g. via RADIIUS and SOS services
  - Opportunities for multidisciplinary clinics are limited by lack of infrastructure
- **Infrastructure**
  - Inpatient beds are at capacity and will not meet projected future demand
  - The gymnasium space, which is currently shared with cardiac and respiratory rehabilitation, has no space for multidisciplinary outpatients, and is too small to meet future demand
  - Outpatient services are dispersed and limited in capacity, with many gaps in available services and limited ability for multidisciplinary clinics
  - The Southcare building does not meet building requirements for disabled access, and is therefore not suitable for future provision of clinics, aged care and/or rehab services
  - For the future, critical physical adjacencies include a gymnasium co-located with the inpatient wards, large enough to support outpatient/day hospital activity and multidisciplinary clinics that are currently located in allied health and Southcare, to create a Rehabilitation Precinct
- **Staffing**
  - There is currently no funding available to initiate the in reach (ART) model of care or for further access to allied health clinics to meet gaps in services.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Potential new clinics/ services:
    - Implementation of the ACI recommended in- reach service (acute rehab team: ART) is a well-established model at other hospitals and has good cost benefit data. This would target cardiac and respiratory and oncology patients to prevent deconditioning and avoid the need for transfer to the Rehab ward and/or reduce length of stay
    - Implementation of a multi-disciplinary Day Only/Outpatient service post discharge to support earlier discharge and to avoid re-admission for ongoing management of stroke, other neurological conditions, orthopaedics, frailty, etc. This is a well-established model recommended by the ACI, and would require additional infrastructure, equipment and staffing. This model would:
      - > Reduce length of stay for suitable patients and improve throughput on ward
      - > Reduce wait for rehab beds to improve whole of hospital flow
      - > Provide enhanced services to meet the current gap in follow up care for rehabilitation patients who are not suitable for community based services, in particular for stroke patients who have no access to publically funded outpatient care in the Sutherland Shire
      - > Allow the introduction of new clinics to meet gaps in services e.g. Constrained Induced Movement Therapy (upper limb therapy post stroke), Parkinson's Disease groups
      - > Provide further access to falls prevention programs, particularly for frail aged who are not suitable for Stepping On programs
      - > Reduce the waiting list for St George Outpatient rehabilitation services
      - > Reduce the inequity of access for Sutherland Shire residents to local outpatient rehabilitation services, particularly for those without transport who cannot access services at SGH
      - > Avoid the waits for ACAT assessments and STACS where we could manage to discharge the patient with services and Day Rehab
  - Increased access to medical clinics to reduce waiting list
  - Introduction of a Specialist Spasticity management clinic, including admin, procedure area for sedation, occupational therapy support for non-medical management and co-ordination of ordering and managing toxin stock and refrigerator
  - Develop community carer support and education programs to assist families in maintaining patients at home.
  - Improve links with Southcare rehabilitation services to provide integrated community based rehabilitation services

- **Infrastructure solutions**
  - Development of a Rehabilitation Precinct with co-located inpatient and multi-disciplinary Day Only/Outpatient services to provide a one stop shop for rehabilitation services. This would bring together rehabilitation clinics currently located in allied health and Southcare to support multidisciplinary interventions and integrated, patient centred care and service the current gaps in Outpatient services. This would include:
    - an increased inpatient bed base
    - a large, well equipped gymnasium space shared with inpatients and cardiac and respiratory rehab groups
    - allied health therapy rooms
    - space for group activity/education
    - associated reception and administration area

- **Staffing solutions**
  - ART: Allied health staffing– 7 day a week cover, including physiotherapy, occupational therapy and social work each day
  - Day Rehab and community service – 5 day a week cover, including physiotherapy, occupational therapy, speech pathology, therapy aides, social work, and psychology and admin support officer.

Renal Medicine

SCOPE OF SERVICE

The Renal Medicine department is a level 4 role delineation service that is run from St George Hospital. The TSH renal service provides inpatient and outpatient care to adults with kidney disease as well as long term monitoring and management of renal failure in the local community.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Services are provided to adults who are mostly older and who often have multiple co morbidities
  - Most patients are residents of the Sutherland Shire
- **Operational description**
  - Referrals to the outpatient clinic are received from General Practitioners and from the ward areas following discharge
  - Services provided include:
    - Inpatient care - ward based, aligned to a Cooinda ward
    - Consultancy service - reviewing inpatients from other teams on a referral basis
    - Outpatient clinic operates weekly for review of new presentations of kidney disease, disease progression management and current patients experiencing acute hypertension or renal infection
    - Supportive care clinic weekly for patients with end stage renal disease
    - Satellite haemodialysis unit - 12 chair unit providing a haemodialysis service running 2 sessions per day / 6 days per week
  - Clinical networking is with St George Hospital. All referrals for home dialysis training (for both peritoneal dialysis and Haemodialysis) are referred to SGH and inpatients who require peritoneal or haemodialysis throughout their inpatient stay are transferred to SGH. A Renal Options (pre-dialysis) clinic is also provided at St George
- **Activity**
  - Inpatient activity is stable with an average 4 – 6 inpatients at any time, however requests for inpatient consultations are increasing from other specialties
  - There is currently a 3 – 4 month wait for an initial outpatient consultation
- **Models of care**
  - Inpatient care and medical cover is provided 24/7
  - Inpatient haemodialysis and peritoneal dialysis are performed at SGH. Patients that require these are transferred to SGH where there is infrastructure, education and skilled staff to perform these. This presently works well, however demand for services at TSH may increase in the future. CVVHD is available in the TSH critical care unit but not as a replacement for haemodialysis
  - Outpatient Haemodialysis occurs at the satellite unit based on the TSH campus and accommodates 12 patients per session, or 48 patients per week. The unit is nearing capacity, however a new satellite unit at SGH will be opening soon and may accommodate some St George residents who currently attend at TSH creating capacity
  - Supportive care model focuses on symptom management rather than dialysis for those patients who have end stage renal failure and/ or who choose this as an option of care

- **Staffing**
  - Nursing: The haemodialysis satellite unit staffing consists of a NUM + 10FTE RN's
  - Medical: The renal department is run from SGH. All renal consultants have admitting rights however 0.6 FTE staff specialist is allocated to TSH and receives all admissions in hours. The afterhours is shared amongst all renal consultants and patients admitted after hours are handed back over during the day. This is supported by 0.5 Registrar and 0.5 Resident, shared with Haematology
  - Allied Health: 0.3 FTE dietician shared amongst clinic / dialysis and inpatient areas plus access to a social worker.

CURRENT ISSUES AND CHALLENGES

- Changing patient demographics: There is an older demographic of patients receiving dialysis who have multiple co morbidities. Patients are presenting for initial consultations with more advanced chronic kidney disease and requiring more timely interventions
- More clinic time and workforce is required to reduce the current waitlist
- Inpatients tend to be scattered throughout the hospital inpatient units rather than on their designated ward Cooinda
- Inpatients requiring haemodialysis and peritoneal dialysis are transferred to SGH for their care, even those admitted under a different specialty. This is considered the ideal model of care delivery at present because SGH has the infrastructure, education and skilled staff to perform these. However sourcing a bed at SGH is often difficult and patients are usually unhappy to be transferred out of their local area

- **Infrastructure**
  - The need for haemodialysis is predicted to grow, increasing the demand on satellite units and potentially driving the need for a future expansion of the current unit
  - The current unit is 10 years old and was designed for 12 Haemodialysis chairs with no capacity to expand. Future considerations would be relocation and the NUM and Staff Specialist are supportive of being included in a purpose built outpatient centre
  - Future unit would need to consider infection control issues and capacity to isolate patients who have MRO's and other infectious issues
  - There are currently only 7 designated parking spots for dialysis patients and this can often be insufficient
  - A comfortable environment in which to receive haemodialysis is important to patients, as they spend many hours, multiple times a week there. Air-conditioning and television rate highly amongst comfort measures

- **Staffing**
  - A full time registrar and resident dedicated to the renal service (not shared) is needed
  - An educator for the dialysis satellite unit is needed to provide support and education to patients who receive dialysis. Currently patients have to go to SGH for training
  - Administrative staff is lacking. 1.0 FTE is employed to the satellite unit and also covers the outpatient clinic and has no leave relief.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - An increase in outpatient clinic sessions is needed to accommodate new and chronic patients and reduce current waiting times
  - Future expansion of the satellite service by increasing the amount of dialysis chairs (NUM recommends 15 chairs is ideal size unit)
  - Consider allocated renal inpatient beds on medical ward to enable a skilled workforce of health professionals to care for them
  - Provide renal specific education to nursing staff aligned with renal beds

- **Infrastructure solutions**
  - The TSH renal service would be supportive of outpatient activity and satellite haemodialysis occupying space in a dedicated ambulatory care outpatients building located on the TSH campus
- **Staffing solutions**
  - Increase medical and nursing staff to support inpatient and outpatient activity. A full time advanced trainee, resident and nurse educator is required
  - Provide additional administrative support to the outpatient clinic and satellite unit.

Research

SCOPE OF SERVICE

Research is conducted across the TSH campus by medical, nursing and allied health staff in recognition that a research based approach to clinical care encompasses cycles of continuous improvement or translational research activities that provide best practice and reduced unwarranted clinical variations. As part of SESLHD, staff at TSH are members of the Sydney Partnership for Health, Education, Research and Enterprise (SPHERE) to enable collaborative research.

DESCRIPTION OF CURRENT SERVICE DELIVERY

Research is undertaken in a number of locations on campus, principally by individual disciplines, on an ad hoc case by case basis. There are opportunities to better centralise support and develop academic oversight. Opportunities also exist in promoting and developing the Workforce capacity to embrace research related activities. Resource allocation is available via various pathways, for example funding for research is provided by the St George and Sutherland Medical Research Fund and TIIC programs from SESLHD; also state funding bodies for Translational Research Grants; and National bodies such as NHMRC, etc.

CURRENT ISSUES AND CHALLENGES

- Research hubs or environments or laboratories on campus are not fit for purpose
- There is no direct research support available on campus for medicine, nursing or allied health, e.g. for biostatistics, ethics or grant funding applications
- There is no clinical trials capacity other than what clinicians achieve within their own resources and time
- There is no research access to health information systems; data and technical support for research is currently non-existent
- Historically medical staff have been VMOs and there has not previously been a culture of research at TSH
- TSH does not currently have an independent medical research identity

- **Staffing**
  - 1.2 FTE University appointed Academic staff, allocated for education, not Research.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Establish links for wider collaborative research with other research organisations, universities, hospital campuses and other community partners. TSH has an untapped patient base for translational research and excellent relationships with the community and local GPs

- Consider the creation of a TSH Research Institute, in conjunction with SPHERE partners and/or other affiliated or independent academic institutes linking academics and clinicians to provide knowledge transfer, scholarships and fellowships, improved health and clinical pathways, reduce unwanted clinical variation, better utilisation of health information and data analytics and support for Leading Better Value Health Care programs. Similar examples include the Ingham Institute at Liverpool and the Kolling Institute at Royal North Shore Hospital which have undergone major capital works and redevelopment.
- In keeping with the Research Strategy 2017-2022 develop new partnerships beyond traditional links with research, e.g. University of Wollongong, MRI or Industry partnerships, to stimulate wider opportunities for research funding and collaboration
- Build upon existing ICT links with Illawarra Shoalhaven LHD for data sharing
- Recognise that Improvement and Innovation can draw upon cycles of continuous improvement sponsored by iiHUB and Quality and Safety units housed at TSH. Explore synergies between safety and quality, improvement and innovation and translational research possibly linked to the futuristic ambitions of any proposed Research Institute on site
- Consider focusing translational research on chronic disease entities and comorbidities including key SPHERE areas of interest e.g. community and chronic disease care (including ageing), respiratory and sleep disorders, Aboriginal health, musculoskeletal, obesity, etc. with high clinical representation in the demographic served by TSH
- Capitalise on existing linkages between the Universities of Newcastle, NSW and Wollongong for translational research activity
- Explore potential collaborative research with St George Microbiome Research Unit
- Build collaborative research programs, e.g. for melanoma with RNSH
- Ensure TSH staff are involved on site in collaborative research projects to build a research culture, e.g. in linked projects with other hospitals
- Consider TSH becoming a Research Centre of Excellence for: Aged Care; Integrated Care; and community based models of care, with research focused on keeping people well and cared for in the community and avoiding the need for hospitalisation. Cardiology should also be considered for collaborative research due to its large number of services and links to the Eastern Heart Clinic
- Investigate funding opportunities from local community sources to support this plan
- Develop strategies to maintain the focus of UNSW for TSH and SGH research and education with the pending redevelopment of Randwick campus

- **Infrastructure solutions**
  - Create a purpose built Research Institute on campus in a prominent location to establish the critical space/mass/identity for research to thrive on campus (consider assistance of community based funding)
  - Ensure support is provided for research e.g. for Biostatistics, ethics and grant funding applications. This could potentially be provided through partnerships with Universities, CESPHN, privates, etc. This is particularly important to enable junior researchers
  - Consider co-location of research and education facilities as part of a new ambulatory care precinct, including clinical skills Labs for education
  - Provide research precincts, laboratories, venues, hubs, networks and alliances on campus in an integrated and collaborative environment. Virtual and physical It is noted that most research at TSH will require dry labs and appropriate office space
  - Ensure any external funding is quarantined for research and research infrastructure
  - At present SESLHD Research Ethics and Governance is available to TSH on an ad hoc basis. Consider a reverse metric with physical relocation of SESLHD Research Office (Ethics and Governance) to TSH to complete a spectrum of safety and quality, improvement and innovation, workforce development and research support with area wide capacity supervised from a TSH hub as is currently the case for improvement and innovation. Aligned with the Research Strategy 2017-2022, innovation and research will be supported at each SESLHD facility in a co-ordinated and collaborative partnership.
  - Consider co-location of iiHUB and Safety and Quality Units for collaborative research for improved patient care and outcomes

- **Staffing solutions**
  - TSH requires greater academic leadership: Create a senior academic appointment dedicated to research to provide leadership and governance and stimulate a research culture at TSH in a chosen field of excellence shared by many and open to all. This could potentially be a shared research and education university appointment, with opportunities for innovation in teaching at TSH; or a shared Research academic and clinical specialty role, e.g. an Aged Care academic
  - Create a Research Co-ordinator role that can provide support to multiple departments
  - Support research by TSH staff with quarantined time.

Respiratory and Sleep Medicine

SCOPE OF SERVICES

The Respiratory and Sleep Medicine Service at Sutherland Hospital provides a Level 5 role delineation service for the diagnosis and treatment of patients with complex pulmonary conditions including chronic obstructive pulmonary disease (COPD), severe asthma, respiratory failure, interstitial lung disease (ILD) and sleep disorders. Services include inpatients, Sleep Study Lab, Interventional Bronchology, Lung Function Lab, Outpatients and community based care.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Patients 16 years and older are seen, however most patients are elderly, who have a higher prevalence of chronic respiratory illnesses including ILD, COPD and lung cancers
  - Most patients are from the Sutherland Shire, with residents of the Northern Illawarra also accessing services due to long waiting lists at Wollongong
  - Demand is driven by:
    - A growing and ageing population
    - Sutherland Shire has one of the highest rates of chronic respiratory failure
    - Sutherland Shire has high rates of Asthma and COPD

- **Operational description**
  - Warada ward consists of 28 inpatient beds (with flex to 32) shared between Respiratory and Gastroenterology patients.
  - Warada has four high flow nasal oxygen humidifiers, available to use in patients with acute severe hypoxic respiratory failure without other organ failure (all other patients have to be managed in ICU/HDU)
  - Warada has three Bi-level NIV machines (ResMed Stellar 150), available to use in patients with acute severe hypoxic respiratory failure without other organ failure and not for escalation to invasive ventilation (all other patients have to be managed in ICU/HDU)
  - Respiratory Co-ordinated Care Program (RCCP) provides home based care for recently discharged patients and an admission avoidance maintenance program for patients with a chronic respiratory condition to avoid ED presentation and admission
  - Respiratory Lung Function Laboratory which performs mostly outpatient lung function testing, skin allergen testing and functional assessments (i.e. 6 min walk testing, exercise oximetry, FeNO). Currently being relocated into former ED space
  - 3 dedicated Interventional Bronchology theatre lists per month available for outpatient and inpatient bronchoscopy, Endobronchial Ultrasound Guided Transbronchial Biopsies (EBUS-TBNA), Medical Pleuroscopy and Bronchial Thermoplasty
  - Weekly outpatient clinics for General Respiratory Medicine, Chronic Respiratory Failure and General Sleep Medicine, with 2 consultants per session, located in Outpatients on Level 2

- Monthly outpatient clinics for Severe Asthma, ILD/pulmonary hypertension Clinic
- Privately operated and owned Sleep Laboratory for public and private patients, located on Level 2 adjacent to CCU, with 3 monitored single rooms

- **Activity**
  - Non-admitted activity is increasing, but is restricted by available access to clinic rooms and ambulatory care services
  - There are waiting lists of 4-6 weeks, but this will increase later this year with the cessation of a privately funded shared service with Hurstville Private Hospital
  - Sleep Lab referrals mostly come from private rooms, with majority of patients requiring complex sleep studies referred to St George Hospital
  - Inpatient activity has been trending up annually
  - RCCP activity is increasing, currently managing 170 patients (acute and chronic)

- **Models of care**
  - RCCP assists people with advanced lung disease to live optimally at home for as long as possible and avoid hospitalisation or reduce length of stay when hospitalised. The program was initially networked with St George, however is now managed locally with reduced medical and senior nursing support
  - Pulmonary rehabilitation and the Heart and Lung community based service are provided from South care, and not part of Respiratory and Sleep Medicine Service

- **Staffing**
  - Medical: Six Medical Staff Specialists (2.7 FTE), two Honorary Medical Officers, three registrars and two interns
  - Clinical Nurse Educator at 1 FTE who provides support five days per week, shared between respiratory and gastroenterology
  - Allied Health: 1 FTE ward Physiotherapist
  - RCCP: 2.6 FTE Nursing Staff and 0.55 FTE Physiotherapist, 1 FTE admin.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - Increasing presentations, admissions and disease complexity due to:
    - The increasing effects of smoking related lung diseases e.g. asthma, COPD, interstitial lung diseases and lung cancers
    - Sutherland Shire has a large aged population, with high prevalence of cardiovascular and respiratory diseases, and increasing prevalence of chronic respiratory failure
    - Sleep disorders are increasing in prevalence, with the biggest risk factors being age and obesity, resulting in more patients with sleep disordered breathing conditions such as Obstructive Sleep Apnea, Central Sleep Apnea and Obesity Hypoventilation Syndrome, and is associated with other comorbid conditions such as diabetes mellitus, cardiovascular disorders, and chronic respiratory failure.
    - Increased numbers of respiratory infection (e.g. influenza)
    - Increased prevalence of other medical illnesses and their associated respiratory complications (e.g. heart failure / rheumatological diseases and pulmonary hypertension, neurological / neuromuscular diseases and respiratory failure, novel cancer treatments and interstitial lung diseases)
    - New treatment paradigms and new pharmacological treatments for various diseases (e.g. cancer, rheumatological diseases) also increases respiratory complications / side effects, or require comprehensive respiratory investigations (e.g. lung function, TB exclusion)

- **Constraints on activity**
  - Inpatients:
    - There are no dedicated Close Observation Unit beds on the ward. Currently Warada can manage up to 3 acute hypercapnic respiratory failure patients requiring non-invasive ventilation (i.e. bi-level PAP) but not for escalation to invasive ventilation. This places increased demand on ICU/HDU and reduced patient flow through ED, especially during winter, as many acute respiratory failure patients cannot be managed on Warada
    - Lack of an ambulatory care centre results in unnecessary overnight admission of patients for potentially day-only procedures (e.g. thoracocentesis, indwelling pleural catheters insertion)
    - The current privately operated Sleep Lab at TSH is not suitable for respiratory failure patients, who are referred to SGH, which has an extended waiting list (6 months). Delays in treatment may result in increased cardiovascular complications, especially in those with AF, obesity and difficult to treat hypertension. Patient's eligible for ENABLE funding pathway for CPAP/Bi-level PAP also require at least 2 nights of sleep investigation, thus further negatively impacting their healthcare
  - Outpatient clinics:
    - Access to clinics is restricted due to available clinic space, resulting in long waiting lists
    - New clinics cannot be introduced, resulting in patients having poor access for treatment of Asthma, smoking cessation services and multidisciplinary clinics for metabolic disorders and ILD
    - There is a lack of an asthma educator and smoking cessation service
    - Urgent community referrals are unnecessarily diverted to the ED
    - Delays associated with the commencement of treatment can potentially impact a patient's quality of life and disease progression resulting in increased hospital admissions and ED presentations
  - RCCP:
    - The demand for service is increasing, with increasing complexity of patients, however with the introduction of a locally managed RCCP model, there is no dedicated medical oversight and support, which was provided previously when networked with SGH. Senior nursing positions have also been lost. This has resulted in 2 patients per week presenting to ED in winter

- **Infrastructure**
  - Lack of access to operating rooms creates delays to investigations
  - Lack of access to Outpatient clinic space creates waiting lists and inability to introduce new services that may prevent ED presentation or admission
  - Lack of access to procedure rooms/ambulatory care centre means some patients are unnecessarily admitted overnight.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - The future Respiratory and Sleep Medicine service needs to have a comprehensive integrated acute inpatient service, as well as an outward facing community based service to target chronic respiratory diseases and reduce the need for ED presentation or admission. This includes:
    - Increased access to operating room sessions (increasing to 2 per week) to allow greater equity of access to Sutherland Shire residents and reverse some flows to private hospitals
    - Creation of a Close Observation Unit model within the existing bed base for acute respiratory failure patients requiring non-invasive ventilation, with dedicated equipment, skilled staff and adequate staff to patient ratio (1:3 nursing). This will reduce length of stay for respiratory failure patients in ED and relieve demand on critical care beds, resulting in improved access to critical care beds when required

- Provide a publicly funded outpatient sleep medicine clinic and laboratory (current service at TSH is privately contracted) for respiratory failure and other complex patients, in collaboration with paediatrics in order to:
  - > Help improve management of complex patients and reduce admissions for patients with acute/chronic respiratory failure
  - > Improve access for Sutherland Shire residents and avoid lengthy wait lists at SGH
  - > Provide teaching and training opportunities for advanced trainee accreditation

- Creation of an Ambulatory Care Centre for day-only procedures e.g. pleural procedures such as pleural drains, pleural tap; infusions; injections of biologicals for new moderate-severe asthma treatments, with suitable nursing and admin support
- Providing medical governance for the RCCP to support rapid medical assessments and medical home visits if required, similar to the GFS model, to avoid the need for ED presentation and keep people as well as possible at home
- Increase access to outpatient clinics to :
  - Improve access to general respiratory, sleep and respiratory failure clinics
  - Improve the management of severe Asthma in adults with the creation of a multi-disciplinary Asthma clinic to meet increasing local demand and prevent ED presentation and admission. The ideal model would include support from Asthma educator, CNC, Pharmacist, Respiratory Scientist, administration and other allied health support as required
  - Introduce new integrated and community based multidisciplinary models of care, e.g. smoking cessation service (with D&A, psychiatry and O&G integrated with CESPHN and GPs), dyspnoea service (with cardiology, palliative care, aged care), pulmonary hypertension service (with cardiology, rheumatology, aged care), ILD clinic (with Rheumatology, palliative care and Cardiology), and metabolic clinic with endocrinology

- **Infrastructure solutions**
  - Provide a dedicated respiratory ward, including a Close Observation Unit with 3 beds (capable of flexing to 6 in times of need) within existing bed base to reduce demands on critical care beds, fully equipped with Bi-PAP and Hi flow
  - Ideally the Sleep Lab and Lung Function Lab should be co-located within the hospital footprint
  - Outpatient clinics could be located in a centralised Ambulatory care centre, allowing increased access to clinic rooms and admin support, and further opportunities for multidisciplinary care
  - Provision of an Ambulatory Care Unit to allow day only respiratory procedures and avoid overnight admission
  - Increased access to theatre time for Interventional Bronchology in an expanded operating precinct

- **Staffing solutions**
  - Increased staffing commensurate with increased service requirements, including:
    - Enhanced staffing for RCCP to ensure adequate medical, nursing and allied health support, including budget for 0.5FTE staff specialist and 1FTE FRACP trainee based with RCCP and 1.0 FTE extra physiotherapist and 2.0 FTE extra RN
    - COU: enhancement of nursing staff to ensure adequate nurse-patient ratio (1:3) and nursing skills set (1.0 FTE CNC)
    - Extra 0.5 FTE physiotherapist to respiratory inpatient ward (Warada) to meet increased demand
    - New clinics: admin and nursing support, multi-disciplinary staff
    - Sleep Lab: 1x sleep technician per night of sleep diagnostic study (each night can study up to 3 patients), and dedicated 1.0FTE sleep medicine staff specialist.

Surgical Services

SCOPE OF SERVICES

Surgical services at TSH encompass a broad range of surgical interventions both emergency and planned with services delivered to both inpatients and outpatients. The current operating suite comprises 6 operating rooms and associated perioperative infrastructure, including CSSD.

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Patient demographics**
  - Surgical services are provided for adults and children
  - The growing population has increased demand
  - There has been an increase in the clinical acuity and complexity of some patients
- **Operational description**
  - Currently the operating rooms for emergency and planned surgery are combined with only limited capacity to separate complex planned surgery from surgery suited to HVSSS, resulting in some planned surgery being cancelled
  - There is currently an option for 23 hour admission
  - Surgical services provided include:
    - Anaesthesia
    - Breast and Endocrine Surgery
    - Colorectal Surgery
    - Endoscopy
    - ENT
    - General Surgery
    - Gynaecology
    - Maxillofacial/Dental Surgery
    - Obstetrics
    - Ophthalmology
    - Orthopaedics
    - Paediatric surgery
    - Upper GI
    - Urology
    - Vascular
  - Elective surgical lists are held Monday to Friday
  - Discharge occurs from the perioperative unit or an inpatient unit
  - Approximately 50% of surgeons work across both SGH and TSH
  - Outpatient clinics
    - Preadmission clinics for planned surgery are triaged, with some preadmission done over the phone. Almost 5,000 occasions of service were recorded for face to face preadmission
    - Surgical follow up occurs in private rooms

- **Activity**
  - Inpatient surgical activity has been increasing with day only / short stay surgery growing at a faster rate (AAGR 1.6%) than multiple night separations (AAGR 1.5%)
  - In 2016/17 TSH had just over 7,800 surgical procedural cases, just over 21,000 bed days, with an overnight average length of stay of 5.4 days, an average National Weighted Activity Unit (NWAU) of 1.96
  - 2016/17 data shows that:
    - Emergency surgical cases have remained steady with around 240 per month
    - Elective surgical cases have fluctuated during the period (in line with bed closures and reduced staffing during holiday periods) with around 410 per month
    - Gastroenterology, general and orthopaedic surgery has the highest number of surgical/procedural cases
    - 79% of cases are for admitted patients
    - There were 158 day of surgery cancellations equating to 3.09% of total cases. The top reasons for hospital cancellations were emergency cases displaced routine and no beds available

- **Models of care**
  - The District aims to manage patients in accordance with the Predictable Surgery Program including
    - Developing clinical pathways (e.g. for older people requiring surgery)
    - Rollout out of Enhanced Recovery After Surgery (ERAS) (which has its own protocol at TSH)
    - Networked waitlist model with inter-hospital transfers to reduce length of time on the waitlist

- **Staffing**

  Surgical Services has a broad range of clinical disciplines:
  - Nursing: Nurse Unit Manager, Clinical Nurse Specialists, Consultants, Nurse Educators, RN's, and ENs
  - Medical: Registrar and Resident Medical Officers, Specialist Medical Officers
  - Allied Health: as required Physiotherapists, Dietitians, Occupational Therapists, Social Workers, etc.
  - Support services staff – administrative/clerical staff, housekeeping, hotel services admin, etc.

- **Infrastructure location and configuration**
  - The current operating rooms and peri-op infrastructure is aged, dysfunctional and needs to be replaced
  - Physical location of service delivery
    - Level 3:
      - 6 theatres
      - Peri-op spaces
      - CSSD
  - Inpatient beds – currently 2 surgical wards on level 3 with 40 beds operational and perioperative (Day Surgery ward) with 12 beds and 6 chairs
  - Outpatient clinics on level 3 adjacent to theatres for admission and preadmission and in outpatients for specialties.

CURRENT ISSUES AND CHALLENGES

- **Changing patient demographics**
  - The overall demand for operating and procedure rooms at Sutherland Hospital is increasing, due to a number of known population and other factors including:
    - TSH currently provides all publically provided elective orthopaedic surgery for residents of the Sutherland Shire and St George area as part of a networked service
    - Rates of projected population ageing in the Sutherland Shire means greater numbers of emergency and higher acuity surgical patients which require longer time in theatre. It also means an increase in potential cancellations due to comorbid complications and the number of patients that fail day surgery

- There are increasing numbers of patients being referred to TSH from the St George area, particularly for endoscopies
- The recent expansion of Sutherland Hospital will improve access and increase the number of patients added to surgical/procedure lists
- Increasing levels of older residents requiring surgical procedures, particularly orthopaedic and ophthalmic procedures
- Increasing demand for endoscopic procedures
- Potential increases in procedures related to ageing, chronic disease and obesity.
- Changing disease prevalence will impact surgical volumes for example some comorbid patients have complex care requirements impacting on surgical demand
- New surgeons will impact waitlist, theatre availability and bed requirements for specialised services, e.g. proposed introduction of ankle surgery

- **Changing surgical techniques**
  - The trend towards minimally invasive surgeries and faster recovery times mean that procedures previously performed in operating rooms are shifting to other settings such as day surgery or procedure rooms. However, implementation of NSW Health's High Volume Short Stay Surgical Model Toolkit (GL2012_001) is difficult due to a lack of dedicated operating / procedure rooms
  - HVSSS is an increasing component of surgical practice in many specialities. These patient benefit from being treated separately in the admission and discharge process to maximise efficiency
  - Conversely, emergency and complex planned surgery require significantly more resources (staff, theatre time, intensive care and longer length of stay)

- **Constraints on activity**
  - There is no Director of Surgery at TSH
  - Referral processes are currently cumbersome and outdated (faxed referrals and letter of confirmation to patients, with many GPs not knowing what is available at TSH) leading to some inequity of access
  - Waiting list:
    - Endoscopic wait list is triaged, however there are long waiting lists for clinic appointments meaning patients may wait more than 90 days for a procedure, which may result in adverse outcomes
    - There are a number of patients that cancel on the wait list and go privately
  - Unmet demand
    - Historically surgical outpatient clinics have been defunded resulting in patients being seen in private rooms. There is no access to surgical follow up clinic space currently, which is a requirement for specialist training
    - There is no access to multidisciplinary clinics, instead patients need to see individual specialists
    - Expansion of the National Bowel Screening Program will result in a significant increase in demand for colonoscopy services into the future
    - There will be increased demand for general and colo-rectal surgery with 2 new surgeons building up their lists
    - Day only activity is likely to continue to increase
    - Some urology and vascular activity is performed privately and at St George due to lack of appropriate hybrid theatre
    - Some urgent activity is directed to private hospitals due to lack of timely access to TSH theatres, however surgeons indicated their preference
    - Ophthalmology clinic and theatre lists are currently not adequately provided locally
    - There are currently available for 2 paediatric surgery lists per month, however this will increase with funding available for 4 lists per month
    - Endogynaecology demand is increasing, e.g. management of endometriosis
    - Emergency caesarean caseload is increasing
    - Currently there is insufficient medical imaging support for some surgeries to occur at TSH, e.g. some vascular procedures
    - Access to theatre time restricts the implementation of new or expanded services
    - Many patients are transferred to Kareena Private or other privates for urgent cases and endoscopies due to the wait list at TSH

- **Infrastructure constraints**
  - Currently operating rooms at TSH are ageing and are poorly configured and no longer fit for purpose. For example:
    - The age of the theatres means they will no longer be serviceable in 5 years' time
    - Theatres are smaller than recommended for surgical procedures that require large and bulky equipment, including Orthopaedics
    - Theatre size restricts advances in surgical techniques and the use of new equipment and technology
    - Streaming for HVSSS cannot be implemented in the current configuration
    - Increased day only activity, with higher turnover of cases, means more peri-op space is required
    - Patients requiring interventional radiology are seen in medical imaging not theatres
    - Lack of access to dedicated medical imaging within the operating precinct
    - There is inadequate peri-operative and supportive services capacity (anaesthetics, recovery, storage etc.) and recommended perioperative pathways (see NSW ACI Perioperative Toolkit, Feb 2018) cannot be fully implemented
  - Lack of Radiology in theatres

- **Staffing constraints**
  - Difficulty meeting College accreditation guidelines including Registrar led clinics, education requirements, etc.
  - There is no Director of Surgery at TSH to provide governance support.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Expanding ambulatory care clinics that support pre and post-acute care, including new clinics for:
    - General Surgery Clinic for triaging of new referrals for candidates for surgery: approximately 10-15 patients per week, requiring 4 clinic rooms for 4 hours x 1/week (Specialist, Registrar, Intern/student, Nurse) and admin support
    - General Surgical follow up clinics: approximately 10-15 patients per week, requiring 4 clinic rooms for 4 hours x 1/week (Specialist, Registrar, Intern/student, Nurse) and admin support
    - Early Pregnancy Assessment Service
    - Additional Gastroenterology assessment
  - Establish High Volume Short Stay Surgery (HVSSS) Unit to improve service efficiency and access to elective planned surgery and procedures. HVSSS unit to include operating rooms, post-anaesthetic care unit and inpatient beds dedicated to HVSSS with adequate storage areas for clean and dirty trays as well as equipment, goods and supplies
  - Extending the range of procedures that are suitable for the short stay environment as models of care and medical technologies make early mobilisation and early discharge not only possible but preferable
  - Ensuring sufficient peri-operative beds/chairs for the short stay environment
  - Providing access to theatres for new case lists for endogynaecology, emergency caesareans, vascular, urology, ophthalmology, maxillofacial, colo-rectal and paediatric procedures that are not currently performed at TSH to meet local demand
  - Increasing access for endoscopy to reduce extended waiting lists and improve equity of access
  - Improved referral and wait list processes
  - Undertaking early screening of patients (Optimisation) on the waiting list for pre admission work up.
  - Redirecting some patients from private rooms to outpatients

- **Infrastructure solutions for consideration**
  - 10 new purpose built operating rooms, including:
    - Dedicated emergency surgery operating rooms
    - Dedicated HVSSS including operating rooms, pre- and post-anaesthetic care:
      - > Planned Day Only surgery
      - > Extended Day Only surgery – length of stay less than 72 hours
      - > Short Stay Surgery – length of stay up to 72 hours
    - Dedicated planned surgery operating rooms
    - Dedicated Hybrid operating room to allow further surgical activity to be implemented at TSH to meet unmet demand, e.g. Interventional radiology, urology, vascular and ERCP activity
    - Dedicated endoscopy operating rooms
    - Improved access to medical imaging (x-ray and ultrasound), including in hybrid theatre and a mobile x-ray
    - Control room adjacent to theatres
    - Communications cabinet large enough for expanded services and potential increased future services
    - Peri-op space to include step down beds/chairs for endoscopy patients that don't require a bed
    - Adequate storage areas for equipment, goods and supplies
    - Sterilising services, which function optimally if located on a separate floor, accessed directly by clean and dirty lifts. Otherwise consideration will need to be given to the transport and storage of sterile and used trays
  - All these rooms need to be Operating rooms (implying 60 square meters) to allow for the level of technology used in the typical HVSSS specialities such as Upper GI, Urology, ENT, and for flexibility of function
  - It is noted the recent redevelopment included some additional surgical beds.
  - Increased Outpatient surgical clinics, including:
    - Preadmission clinics co-located with/adjacent to the operating rooms to allow specialist supervision of registrar clinics
    - Admission offices could be located in an Ambulatory Care centre
    - Assessment and follow up clinics, which could be located in an Ambulatory Care centre (it is noted that travel time to wards and theatres would need to be a consideration for efficiency of staff time and emergency requirements)
  - Improving electronic processes for referral and notification, including SMS reminders for appointments
- **Staffing solutions**
  - Meet College accreditation guidelines including Registrar led clinics
  - Consider the implementation of a Director of Surgery role
  - Staffing would need to be commensurate with increased services.

Workforce Services

SCOPE OF SERVICES

Workforce Services provide a variety of services to support workplaces, those who manage people in workplaces, and individual employees. Workforce Services is responsible for implementing workplace policies and for ensuring the Local Health District complies with all legislation covering employment matters.

The Directorate also supports programs for workforce planning, managing performance, workforce wellbeing, recruitment and selection, workforce reporting and Work Health and Safety (WHS).

DESCRIPTION OF CURRENT SERVICE DELIVERY

- **Operational description**
  - The Workforce Services Directorate provides District wide services, with individual staff responsible for some services for the TSH campus. Services include:
    - HR Advisory Services support TSH&SCHS and Garrawarra Centre staff to promote: a positive workforce culture (underpinned by the Code of Conduct); a high performance culture; safety; provide support for hiring managers; supporting managers with performance issues; building competence of managers to support staff; Award interpretation and policy advice, and using learnings to promote improvements and prevent risks
    - Support for employment in programs covering Aboriginal employment and peer support mentoring, employment of persons with disabilities and refugees
    - Health, Safety and Wellbeing: including preventing workplace injuries, compliance and continuous improvement for WHS, ensuring the safe return to work of injured workers, and supporting and enhancing the wellbeing of staff
    - Staff engagement, e.g. People Matters Survey to focus on areas to be worked on for improvement; work with iiHUB for District reward and recognition of staff
    - Ensuring a skilled workforce by compliance with:
      - Mandatory training and competency (in partnership with ODL)
      - Registration and credentialing
      - Performance development and review cycle to clarify expectations of roles, address gaps and identify development roles (70% compliance at TSH)
      - All record checks (criminal record, license, etc.)
- **Infrastructure location**
  - The Workforce Services Directorate is based at Sutherland Hospital, with workforce staff also based at individual facilities across SESLHD.

CURRENT ISSUES AND CHALLENGES

- A growing workforce will create staffing capacity issues for Workforce Services
- The move to increased community based services creates increased WHS risks for staff (driving, moving equipment, environmental safety, etc.)
- The new recruitment system ROB creates barriers to recruitment, e.g. for people without access to computers or who are not computer literate.

PROPOSED STRATEGIC INITIATIVES AND RECOMMENDATIONS

- **Service solutions**
  - Continue to comply with Ministry of Health directives and legislation
  - To reduce WHS risks for community staff, more robust checks will be required to ensure driving licenses are up to date, driver competence, and style of car is ergonomically suitable
  - Build capacity of managers to encourage an increasingly diverse and high performing workforce under the umbrella of a positive workplace culture, i.e. with ways to support individuals, framework for implementation
  - Increasing capacity and empowering managers to investigate and manage issues independently
  - Mentoring role expanded to different groups across the LHD, as a driver for engagement and staff retention. Currently developing TAFE course for Aboriginal mentors, could be expanded to encompass a wide range of groups, e.g. disability support, allied health peer mentors
  - Increasing access to health checks for staff, e.g. get Healthy at Work; screening services e.g. for melanoma
  - Making heathy food on site more available for staff
  - Look at future funding opportunities for staff wellbeing programs, e.g. from State Super, or Get Healthy at Work sponsored fruit boxes on wards
  - Improve training for staff in new technologies to reduce stress and potential workplace injuries associated with implementing new technology and systems
  - Support a wellbeing culture for staff, e.g. allow attendance at wellbeing sessions, walking groups, etc.
  - Promote Employee Assistance programs, converge classes for health and wellbeing, retirement issues, change management, etc.

- **Infrastructure solutions**
  - Consider space in any new build for storage of technology e.g. of WOWs, to avoid WHS concerns
  - Consider a quiet space for staff for privacy, debriefing, etc. away from wards
  - Consider the development of a community garden for staff wellbeing
  - Provide more bike racks and easily accessible showers for staff
  - Potential ICT solutions include:
    - Cloud based recruitment system that is easier to access and use
    - A more flexible workforce working 24/7 will require 24/7 access to technology
    - Better data analytics to be used more functionally e.g. live dashboards
    - Consider the needs of community based services to improve access to data and provide efficiencies e.g. in-car access to eMR, Tablets
    - Provide mobile phones and tracking system for community staff to enhance safety
    - Improving access to technology for clinical staff, e.g. Wi-Fi enabled Tablets

- **Staffing solutions**
  - New programs and an increased workforce across the campus will require staffing capacity commensurate with increased workload
  - More flexible hours will be required to support after- hours staff.

Appendix 3: Aboriginal Health Impact Statement

Aboriginal Health Impact Statement
Sutherland Integrated Health Services

Title of the initiative:	Sutherland Integrated Health Services Plan
Organisation/Department/ Centre:	South Eastern Sydney Local Health District
Contact name and title:	Valerie Jovanovic, General Manager The Sutherland Hospital & Garrawarra Centre
Contact phone number:	V Jovanovic (02) 9540 7193
Date completed:	26 February, 2019

Once approval has been received from your Organisation please provide a copy of the finalised Aboriginal Health Impact Statement to the Centre for Aboriginal Health by email: CAH@moh.health.nsw.gov.au

Summary

Provide a 200-300 word summary that demonstrates how the Aboriginal Health Impact Statement has been considered. This summary is required in addition to a more detailed response to the three components below

The SESLHD Journey to Excellence Strategy 2018-2021 outlines an ambitious stage of transformation - working to empower communities to optimise their health and wellbeing. The District's Equity Strategy notes although the health of residents as a whole compares favorably with other parts of NSW, there are substantial differences in access to services and health outcomes for different groups including Aboriginal and/or Torres Strait Islander people.

The Sutherland Integrated Health Services Plan (SIHSP) further articulates these strategies, with a focus on residents of the Sutherland Shire.

For Aboriginal people, the SIHSP builds on the many years of ongoing dialogue between the Aboriginal Health Unit and the Sutherland Hospital including the St George / Sutherland Hospital and Health Services Aboriginal Health Action Plan 2014/15 updated 2017-2019. The SIHSP provides an opportunity to continue to address issues enhancing the capacity of the hospital and improving the health of its resident Aboriginal communities.

This Aboriginal Health Impact Statement summarises some of the key issues in the SIHSP relating to Aboriginal people.

1. The health context for Aboriginal people

The population identifying as Aboriginal in the Sutherland Shire in 2016 was 2,435, representing 1.1% of the total Sutherland Shire LGA population. However, based on national data analysis, it is likely the number of Aboriginal people in the area is an underestimate. Australian Bureau of Statistics Census data (2016) on Aboriginal births and migration indicate that the Sutherland area is experiencing the largest growth in Aboriginal population of any LGA in SESLHD.

Aboriginal people have a different population age structure to the rest of the Sutherland Shire and NSW. While the non-Aboriginal population is rapidly ageing, Aboriginal people are facing increasing growth in younger age groups, due to higher rates of fertility and mortality. Conversely, the proportion of Aboriginal people aged over 60

is less than half that of non-Aboriginal people. In the Sutherland Shire, the median age of Aboriginal residents in 2016 was 25 years, as compared to 40 years for non-Aboriginal residents.

Similar to the Aboriginal population across NSW, Aboriginal people in the Sutherland Shire have a significantly shorter life expectancy than non-Aboriginal people.

The higher rates of mortality and shorter life expectancy are due to a range of factors including

- higher prevalence of risk factors (e.g. smoking, overweight and obesity)
- higher prevalence of some long term conditions and multiple morbidities (e.g. renal, cardiovascular, diabetes, respiratory and injury), and
- Social determinants of health (e.g. connectedness to family, culture, identity, country and land, access to early childhood services, participation in education / training and employment, etc.)

Given higher prevalence of some risk factors, long term conditions and rates of mortality for Aboriginal people it would be expected they would have higher utilisation of health services than non-Aboriginal people.

Note: in recent years the recording of Aboriginality in health service data has improved however it is acknowledged the data is not necessarily complete therefore remains a significant factor for improving equitable outcomes for Aboriginal people.

The SESLHD Equity Indicator Baseline report (2017) highlights the life expectancy gap for Aboriginal people in SESLHD. The gap in many LGAs is greater than the National gap where the gap compared to the non-Aboriginal population is 8.6 years for Aboriginal males and 7.8 years for Aboriginal females respectively. Nationally these gaps are smaller than they were in 2010-12. Data on SESLHD Median age at death shows a gap of 13 years for Aboriginal people in the Sutherland area compared to non-Aboriginal people. However this data has only recently been captured for the first time (2009-2012) and it should be noted with caution that data for Aboriginal people in each LGA is based on small numbers. Whilst it is confronting in nature, SESLHD has been advised to consider how to best “Close the Gap” in Aboriginal health outcomes and should consider this as an important measure.

For people accessing Sutherland Hospital services Aboriginal people accounted for

- 1.0% of all occasions of service in TSH&SCHS Campus Clinics
- 0.8% of all occasions of service in Off-Campus Clinics (including home-based care)
- 0.8% of all inpatient separations

Across SESLHD Aboriginal people had higher rates of admission for some potentially avoidable hospitalisations. Admission rates for conditions, including diseases of the circulator, endocrine and respiratory system, in SESLHD are similar to the rates in NSW and Australia, except for mental health disorders where rates can be two times higher within SESLHD when compared to NSW and Australia (Source: R Schwanz (2018) Final Burden of chronic disease among Aboriginal people in SESLHD).

Of all Aboriginal people admitted to Sutherland Hospital

- In 2017/18 there were 226 inpatient separations at TSH for people identifying as Aboriginal and Torres Strait Islander, with 79% being residents of the Sutherland Shire.
- In 2016/17 (Source: CaSPA FlowInfo v. 17, including day only and excluding ED only)
    - 54% of Aboriginal and Torres Strait Islander admissions were female and 46% male
    - People aged 70+ represented approximately 9% of separations for Aboriginal and Torres Strait Islanders, as opposed to approximately 40% for non-Aboriginal people, reflecting the differences in ageing populations
    - Obstetrics and neonates provided the highest numbers of separations

Although only a small number of Aboriginal people were admitted from rural LHDs they had a longer average length of stay and higher average Public Equivalent Model (reflecting more costly and/or complex care) than Aboriginal residents from metropolitan LHDs.

For more information refer to

- Technical Paper - Section 2 Demographic trends in our population
- Sutherland Integrated Health Services Plan
    - Section 4.1.1 Reducing inequity in priority populations
    - Section 3.2 Recognising health inequity
    - Appendix 2 Aboriginal Health Consultation Report
- NSW Combined Admitted Patient Epidemiology Data and ABS population estimates (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health
- SESLHD, 2017, Journey to Excellence Strategy 2018 - 2021
- SESLHD, 2015, Equity Strategy
- NSW Aboriginal Health Plan 2013 – 2023 (PD 2012_066)
- National Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health 2017.[i]

2. The potential impact of the policy, program or strategy on Aboriginal people including approaches to mitigate any potential undesired effects

There is evidence of a significant gap in health outcomes between Aboriginal and Torres Strait Islander people and non-Indigenous Australians, and treatment inequities in the health system. Combined with the level of comorbidities in Aboriginal and Torres Strait Islander people, their age at diagnosis and their socioeconomic position, these disparities require a refocusing of health care to meet the unique needs of each patient.

The Plan supports the continuation of a range of existing Aboriginal Health services and programs serving the Sutherland Hospital community including:

- an Aboriginal Hospital Liaison Officer for St George and Sutherland Hospitals
- Southern Sector 48 Hour Follow Up - 'Just calling to have a yarn' for post discharge support
- Bulbuwil 'Healthy Living' - An Aboriginal Healthy Lifestyle Support Program
- Narrangy-Booris - Aboriginal Early Childhood and Midwifery service
- An Aboriginal Health Workers - Chronic Care Services
- Quit for New Life smoking cessation program in the Aboriginal Maternal and Infant Health Services and Child and Family Health
- Cultural Healing through Paint and Color
- South East Aboriginal Health Care (SEACH Integrated Care Service SESLHD)
- Supplementary Services Program for Aboriginal and Torres Strait Islander people
- Care Co Coordinators and Aboriginal Health Outreach Workers
- Aboriginal Drug and Alcohol *Ngalaiya Wellbeing* program
- Sutherland Community Mental Health Service
- SESLHD Oral Health service.

For the future the Plan proposes:

- Exploring options for co-commissioning between the SESLHD and CESPHN in a range of areas including Aboriginal health
- All care and physical environments should be culturally appropriate.

The Plan recommends specific actions in the detailed capital planning process could include:

- Continue ongoing involvement of the Aboriginal community and/or Aboriginal Health Unit in planning committees particularly at the stage of facility design. Engagement with communities and acknowledgement of local Aboriginal culture and history will assist the health service organisation to demonstrate a *welcoming environment* that recognises the importance of cultural beliefs and practices of Aboriginal and Torres Strait Islander people and has been advised in the National Safety and Quality Health service standards
- These standards recommend that health service organisations need to create a place where Aboriginal people feel safe, comfortable, accepted, and confident that they will be respected, will be listened to and will receive high-quality care. These welcoming spaces will enable Aboriginal individuals, families and employees to uphold their cultural beliefs and practices and increase access to health services
- Use of Aboriginal designs/plaques to acknowledge the traditional custodians on which the hospital is built especially at major entrances. This is an important visual reminder that the campus is a ‘culturally safe place’ to visit, and provides a welcoming environment for people to access services. This could be further extended to the use of Aboriginal names (developed in partnership) for wards and meeting rooms
- Install, where possible posters and/or art depicting Aboriginal culture or Aboriginal specific information to assist Aboriginal patients feel welcome and have an appropriate length of stay for any treatment received
- Evidence of celebrating important events in the Aboriginal cultural calendar
- Information brochures that outline what to expect when visiting the organization, and the services available to support Aboriginal and families
- Provide an Aboriginal room for patients, families and carers within the acute campus, and include an additional culturally safe space for Aboriginal patients within an outpatient setting, given the likely increased demand for specialised outpatient services
- Maintenance of a flagpole with the Aboriginal and Torres Strait Islander flags
- Consideration to be given to funding sources and accommodation options to enable relatives/families who travel long distances the opportunity to reside close by while their family member is in hospital.

3. Engagement with Aboriginal people

At the commencement of the health service planning process for the Sutherland Integrated Health Services Plan (SIHSP) discussions were held with SESLHD's Manager Aboriginal Health to identify key issues for Aboriginal people in relation to the Plan.

Following this early discussion the Aboriginal Hospital Liaison Officer was invited to be a member of the Planning Advisory Group tasked with advising the development of the Plan including:

- Consultation, the development of the models of care and scenario modelling
- Informing the Group about contentious matters and/or risks and make suggestions for risk management
- Endorsing the Plan prior to submission to the Executive Steering Committee.

Separate consultations were held with the Aboriginal Hospital Liaison Officer and the Manager Aboriginal Health Unit to ensure the interests of Aboriginal people were addressed throughout the planning process. Comments on the draft plan from the Deputy Manager Aboriginal Health Unit were received and incorporated into the Plan. Feedback will be sought from the local Aboriginal community organisations on Implementation Plans that arise from this Integrated health Services Plan, for example from local Aboriginal interagency meetings. The NS QHS identifies and recommends that there is documentation of Aboriginal community consultation relating to the creation of a welcoming environment.

If funding for a capital redevelopment is provided it is intended ongoing advice will be sought throughout the capital planning process from the Aboriginal Health Unit and building design with representatives of the local Aboriginal community.

It should be noted that there has been ongoing dialogue between the Aboriginal Health Unit and the Sutherland Hospital for many years. This culminated in the development of the 'St George / Sutherland Hospital and Health Services Aboriginal Health Action Plan 2014/15 and updated 2017-2019 to enhance the capacity of the hospitals and improve the health of its resident Aboriginal communities. The current planning for the SIHSP provides an opportunity to continue to address issues raised in the Action Plan.

Approved by: Tim Croft Jangari **Date: 26/2/2019**

Title/position: Manager Aboriginal Health Unit (AHU)

Organisation/Department/Centre: AHU / Primary Integrated and Community Health

Contact phone number: 02 9540 8251

Signature: 

By signing this document you agree that the initiative satisfactorily meets the three key components of the Aboriginal Health Impact Statement.
Note: Must be approved by the relevant Executive Director or Director of the local health district, pillar organisation or Centre within the NSW Ministry of Health

[i] Australian Commission on Safety and Quality in Health Care. National Safety and Quality Health Service Standards User Guide for Aboriginal and Torres Strait Islander Health. URL: https://www.safetyandquality.gov.au/wp-content/uploads/2017/12/National-Safety-and-Quality-Health-Service-Standards-User-Guide-for-Aboriginal-and-Torres-Strait-Islander-Health.pdf

Appendix 4: Other key Government priorities

There are a wide range of State and Commonwealth priorities which will also guide the development of the Health Services Plan.

NSW "Making it happen" State Priorities [175]

The NSW government has identified 12 Premier's Priorities. These Priorities reflect its commitment to whole-of-government approaches to tackling important issues for the people of New South Wales.

Some priority actions include:

- Improving service levels in hospitals
- Delivering infrastructure
- Protecting our children
- Keeping our environment clean
- Making housing more affordable
- Improving education results
- Improving government services.

National Clinical Care Standards [176]

Part of the work by the Australian Commission on Safety and Quality in Health Care is to lead and co-ordinate national improvements in safety and quality in health care across Australia including providing a nationally consistent statement about the standard of care consumers can expect from their health service organisations. In 2017 they published eight standards, which cover high-prevalence adverse events, health care associated infections, medication safety, comprehensive care, clinical communication, the prevention and management of pressure injuries, the prevention of falls, and responding to clinical deterioration.

Other Commonwealth and State key priorities

There are a wide range of State and Commonwealth priorities which will also guide the development of the Health Services Plan:

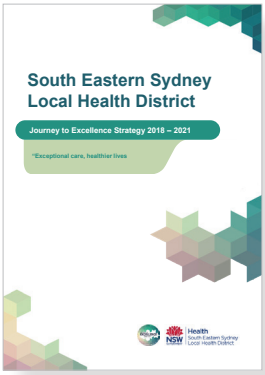
- A national framework for recovery-oriented mental health services [177]
- A new blueprint for mental health services [178]
- Whole of Health Program [179]
- National Primary Health Care Strategic Framework [180]
- Reducing Unwarranted Clinical Variation [181]
- NSW Integrated Care Strategy [182]
- Public Specialist Outpatient Services [183]
- The NSW Aboriginal Health Plan 2013-2023 [184]
- NSW Health Professionals Workforce Plan 2012 – 2022 [185]
- NSW Health Policy and Implementation Plan for Healthy Culturally Diverse Communities 2012-2016 [186]
- The NSW Strategic Plan for Children and Young People [187]
- NSW Health Framework for Women's Health 2013 [188]
- eHealth NSW Strategy for NSW Health 2016-2026 [189]
- State Infrastructure Strategy 2021-2032 [190]

Appendix 5: South Eastern Sydney Local Health District's strategic planning framework

South Eastern Sydney Local Health District is on a reinvigorated path to building higher performing and cutting edge health services.

This direction is guided by *SESLHD's Journey to Excellence Strategy 2018-2021* as well as several other key strategic planning documents.[xxvii]

This is set in the context of a strong focus on equity and community engagement.



SESLHD Planning Framework

Premier's and State Priorities
- NSW Health Towards 2021 Plan and Strategies
- Greater Sydney Commission plans

Service Agreement between NSW Ministry of Health and SESLHD

SESLHD Strategic Plan – Journey to Excellence
Sets out our vision, purpose, priorities and the outcomes we are aiming to achieve

Health Care Services Plan
Outlines the key directions, actions and outcomes for health and resource investment to deliver the SESLHD Strategy

Enabling Plans
- Asset Strategic Plan
- Workforce Plan
- Corporate Governance Plan

Clinical Services Strategies & Plans

Population Health Strategies and other plans

Enabling Strategies
For example
- Integrated Care
- Quality and Safety
- ICT/E-health
- Research

Annual Program of Work/Operational – Business Plans

[xxvii] SESLHD Plans can be accessed at URL: http://www.seslhd.health.nsw.gov.au/HealthPlans/default.asp

Appendix 6: Abbreviations

Abbreviation	Full Name
AAGR	Average annual growth rate
AAU	Antenatal assessment unit
ABS	Australian Bureau of Statistics
ACAT	Aged Care Assessment Team
ACAU	Aged Care Assessment Unit
ACI	Agency For Clinical Innovation
ACP	Advanced Care Plan
ACU	Ambulatory Care Unit
ADHC	Ageing, Disability and Home Care
AHLO	Aboriginal Hospital Liaison Officer
AIHW	Australian Institute of Health and Welfare
AIN	Assistant In Nursing
AMDU	Automated Medication Dispensing Unit
AMO	Admitting Medical Officer
AMS	antimicrobial stewardship
ANROWS	Australia's National Research Organisation for Women's Safety
AROP	Advanced Recovery Orthopaedic Project
ART	Acute Rehabilitation Team
ASET	Aged Care Services Emergency Team
ASR	Aged Standardised Rate
BHI	The Bureau of Health Information
BPSD	Behavioural and Psychological Symptoms of Dementia
BPT	Basic Physician Training
C&A	Child and Adolescent
CAG	Consumer Advisory Group
CALD	Culturally and Linguistically Diverse
CAMHS	Child and Adolescent Mental Health Service
CARS	Children's Acute Review Service
CaSPA	Clinical Services Planning Analytics
CCAC	Civil Chaplaincies Advisory Committee
CCM	Critical Care Medicine
CCSP	Community Care Supports Program
CCU	Coronary Care Unit
CCW	Conferencing, Collaboration and Wireless solution
CEC	Clinical Excellence Commission

Abbreviation	Full Name
CESPHN	Central and Eastern Sydney Primary Health Network
CFEH	Centre for Eye Health
CHCK	Calvary Health Care Kogarah
CHOPS	Confused Hospitalised Older Person Program
CHS	Community Health Service
CHSP	Commonwealth Home Support Program
CLS	Community Living Supports
CMC	Clinical Midwifery Consultant
CNC	Clinical Nurse Consultant
CNE	Clinical Nurse Educator
ComPacks	Community Packages
COPD	Chronic Obstructive Pulmonary Disease
COPS	Community Options Program Sutherland
COU	Close Observation Unit
CPAP	Continuous Positive Airway Pressure
CPCT	Community Palliative Care Team
CSSD	Central Sterile Services Department
CT	Computed tomography (Cat Scan)
CUPS	Chemical Use in Pregnancy
CVD	Cardiovascular disease
D&A	Drug and Alcohol
DAS	Drug and Alcohol Service
DNA	Deoxyribonucleic acid
DPET	Directors of Prevocational Education and Training
DPPHE	Directorate of Planning, Population Health and Equity
DR	Digital radiology
DSA	Digital Subtraction Angiography
ECG	Electro Cardiograph
ED	Emergency Department
EDSSU	Emergency Department Short Stay Unit
EEG	Electroencephalogram
eHOC	Electronic Handover of Care
eMeds	Electronic Medication Management system
eMR / eMR2	Emergency Medical Record
ENT	Ear Nose Throat
EPA	Early Pregnancy Assessment
EPAS	Early Pregnancy Assessment Service
eRIC	Electronic Record for Intensive Care
ESRG	Enhanced Service Related Group
ETP	Emergency Treatment Performance
FACS	Family and Community Services

Abbreviation	Full Name
FIB	Fascia Iliac Block
FRACP	Fellow of the Royal Australasian College of Physicians
FRAMP	Falls Risk Assessment and Management Plan
FTE	Full Time Equivalent
GEM	Geriatric evaluation management
GFS	Geriatric Flying Squad
GHS	Get Healthy Information and Coaching Service
GIT	Gastrointestinal Tract
GLBTQI+	Gay, lesbian, bisexual, transgender, queer or intersex
GP	General Practitioner
HACC	Home and Community Care
HARP	HIV and Related Programs
HASI	Housing and Accommodation Support Initiative
HDU	High Dependency Unit
HETI	The Health Education and Training Institute
HITH	Hospital in the Home
HVSSS	High volume short stay surgery
IBD	Irritable Bowel Disease
ICU	Intensive Care Unit
ID	Infectious Diseases
iiHUB	Improvement and Innovation Hub
ILD	Interstitial Lung Disease
iPM	Information Patient Manager
ISLHD	Illawarra Shoalhaven Local Health District
JMO	Junior Medical Officer
KPI	Key Performance Indicator
KRC	Kirketon Rd Centre
LBVC	Leading Better Value Care
LGA	Local Government Area
LHD	Local Health District
LOS	Length of Stay
MAU	Medical Assessment Unit
MDT	Multi-Disciplinary Team
MGP	Midwifery Group Practice
MID	Medical Imaging Department
MoC	Model of care
MoH	Ministry of Health
MoU	Memorandum of Understanding
MRI	Magnetic Resonance Imaging
MS	Multiple Sclerosis
MSP	Midwifery Support Service

Abbreviation	Full Name
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme
NGO	Non-Government Organisation
NMHSPF	National Mental Health Service Planning Framework
NOF	Neck of Femur
NS4	National Standard 4
NSLHD	Northern Sydney Local Health District
NSWHP	NSW Health Pathology
NUM	Nurse Unit Manager
NWAU	National Weighted Activity Unit
OA	Osteoarthritis
OACCP	Osteoarthritis Chronic Care Program
ODL	Organisational Development and Learning
OEDC	Outpatient Eating Disorder clinic
O&G	Obstetrics and Gynaecology
OoHC	Out of Home Care
OOS	Occasions of service
OP	Outpatient
OPAT	Outpatient Antibiotic Therapy
OPERA	Operational Performance Enterprise Reporting Application
OrBiT	Organisation reporting and business intelligence for transformation
OT	Operating Theatre
PACE	Probe Alert Challenge Emergency
PAS	Patient Administration System
P.B.S	Pharmaceutical Benefits Scheme
PDSA	Plan-Do-Study-Act
PECC	Psychiatric Emergency Care Centre
PES	Patient Entertainment System
PHIDU	Public Health Information Development Unit
PICH	Directorate of Primary Integrated Community Health
PIMHS	Perinatal and Infant Mental Health Service
PoCT	Point-of-care testing
POWH	Prince of Wales Hospital
PTS	Patient Transport Service
RACF	Residential Aged Care Facility
RADIUS	Rapid Assessment, Diagnosis and Intervention Unit Sutherland
RCCP	Respiratory Co-ordinated Care Program
REACH	Recognise, Engage, Act, Call, Help is on the way
RHW	Royal Hospital for Women
RN	Registered Nurse
RNSH	Royal North Shore Hospital

Abbreviation	Full Name
RPAH	Royal Prince Alfred Hospital
SASH	Safe and Supported at Home
SCH	Sydney Children's Hospital
SCHN	Sydney Children's Hospital Network
SCN	Special Care Nursery
SEAHC	South East Aboriginal Health Care
SEIFA	Socio-Economic Indexes For Areas
Seps	Separations
SESLHD	South Eastern Sydney Local Health District
SGH	St George Hospital
SHALT	Sutherland Heart and Lung Team
SHARE	Self Help Association through Responsibility and Enrichment
SHIRES	Sutherland Health Improvement, Referral and Education Service
SLHD	Sydney Local Health District
SOS	Southcare Outreach Service
SPECT/CT	Single Photon Emission Computed Tomography
SPHERE	Sydney Partnership for Health, Education, Research and Enterprise
SSEH	Sydney/Sydney Eye Hospital
SSU	Short Stay Unit
STACS	Sutherland Transitional Aged Care Service
STOP	Sensible test ordering of Pathology
SVHN	St Vincent's Hospital Network
SWSLHD	South Western Sydney Local Health District
TACP	Transitional Aged Care Program
TCP	Terminal Care Plan
The Plan	Sutherland Integrated Health Services Plan
TIA	Transient Ischemic Attack
TIIC	The Inspiring Ideas Challenge
TPN	Total parenteral nutrition
TSH	The Sutherland Hospital
TSH&SCHS	The Sutherland Hospital and Sutherland Community Health Services
UNSW	University of NSW
WHS	Work, Health and Safety
VAN	Violence, abuse and neglect
VISILERT	Visual reminders to monitor and promote patient rounding to reduce falls
VMI	Vendor Managed Inventory
VMO	Visiting Medical Officer

Appendix 7: Project methodologies

The inpatient projections are based on separation data that is coded to an Enhanced Service Related Group (ESRG) or Service Related Group (SRG). ESRG's and SRG's provide more reliable data than measuring demand and utilisation based on treating clinician and/or patient ward which have been found to overestimate these factors (e.g. Counting based on clinician or by ward can result in counting the same patient twice or more within the same admission, when care is provided across several different clinicians and/or wards).

It is important to note when examining projections that the accuracy of the projections is impacted by a range of factors including the accuracy of the NSW Department Planning and Environment of population projections, clinical coding and type changing.

Inpatient Projection Methodology

The HealthAPP is a MoH mandatory service and capital planning tool. It provides acute, subacute and ED projections.

The acute projection methodology uses historical trends of hospitalisation and projected population growth and structure to project future hospital admission rates and length of stay by age group, sex, LGA of residence and clinical specialty. It uses the state-wide admission rates and applies various assumptions (e.g. public/private mix, proportion of urgent versus non urgent activity, hospital of treatment) to develop the base case projections.

The HealthAPP is a medium to long-term projection tool. That is, it is concerned with changes that are likely to occur within five to 20 years, although the accuracy of the projections diminishes the further out the horizon. However, it is not the purpose of the projections to be definitive about the future, it is a tool that helps guide planning decisions.
The Ministry of Health projections tools are based on the Australian Refined Diagnosis Related Group version 7 and version 5.0 of ESRGs and SRGs.

ACUTE AGED CARE

This scenario involved revising the trends to account for

- Significant increases in activity in more recent years (2015/16 onwards), particularly for neurology, cardiology (specific ESRGs) renal, respiratory, ENT, colorectal surgery, upper GIT surgery and infectious diseases which has not been adequately reflected in the projections
- The introduction of thrombolysis
- Constrained surgical activity due limited theatre availably and ageing infrastructure.

Please note the impact of the scenarios on the projected acute aged care beds is relatively minimal. It is important to note the base case projection for aged care is 72 beds required by 2031 with the below scenarios adding the remaining beds (13) to equal a total of acute aged care 85 beds required by 2031.

The steps involved in this scenario:

1. To account for significant increases in more recent data that has not been adequately reflected in the projections, the relative utilisation for Sutherland shire residents was adjusted for the following ESRGs:

   111 - Chest pain, 112 - Unstable angina, 113 - Heart failure and shock, 114 - Non-major arrhythmia and conduction disorders, 114 - Non-major arrhythmia and conduction disorders, 115 - AMI w/o invasive cardiac inves proc, 116 - Syncope and collapse, 117 - Coronary atherosclerosis, 119 - Other cardiology, 141 – Diabetes, 151 - Oesophagitis; gastroent and misc digestive system disorders, 153 – ERCP, 157 - Inflammatory bowel disease, 162 - Diagnostic gastroscopy, 181 – Immunology, 184 - Infectious diseases, 211 – Stroke, 213 – Seizures, 214 – Headache, 215 – Dysequilibrium, 219 - Other neurology, 229 - Other renal medicine, 241 - Bronchitis and asthma, 242 - Chronic obstructive airways disease, 243 - Respiratory infections/inflammations, 244 – Bronchoscopy, 249 - Other respiratory medicine, 251 – Rheumatology, 261 - Pain management, 277 – Septicaemia, 281 – Dementia, 282 - Ear and upper respiratory infections, 442 - Disorders of biliary tract and pancreas, 481 - Tonsillectomy and adenoidectomy,

483 - Non-procedural ENT, 491 - Injuries to limbs – medical, 499 - Other orthopaedics - non-surgical, 503 - Glaucoma and lens procedures, 531 - Vein ligation and stripping, 539 - Other vascular surgery, 543 – Appendicectomy, 731 - Qualified Neonate, 812 - Drug and alcohol dependence and withdrawal.

Most of the relative utilisation adjustments involved increasing the rate to the state average but some were increased above 100 in some instances where there were significant differences in more recent trends (2015/16 onwards) compared with the projection.

2. The above was outputted from HealthAPP (excel) then mapped from ESRG to SRG. This was done as it is preferable to assess the projected average length of stay by SRG rather ESRG as there is more consistency when assessing more aggregated data. The projected average length of stay was then adjusted for some SRGs as it was considered (by clinicians and planning) the rate of decline in the projected average length of stay was excessive for 13 SRGs. The adjustments in the projected average length of stay still predicts a reduction in length of stay (and efficiencies are modelled in length of stay through the projected period) but the rate of decline is more moderate, the following ESRGs length of stay was adjusted:

   13 – Dermatology, 15 – Gastroenterology, 21 – Neurology, 22 – Renal Medicine, 24 – Respiratory Medicine, 25 – Rheumatology, 26 – Pain management, 27 – Non Subspecialty Medicine, 46 – Neurosurgery, 49 – Orthopaedics, 52 – Urology, 53 – Vascular Surgery and 72 – Obstetrics.

   Please note the length of stay adjustments was not done directly in HealthAPP as it currently does not have the functionality to adjust the length of stay by SRG (after the relative utilisation was adjusted by ESRG) within the tool.

3. Flow reversals were also modelled for the introduction of thrombolysis. Neurology ESRGs were flowed back from SGH to TSH. Specifically, all Stroke and TIA activity was reversed, and 78% all other Neurology ESRGs was reversed back (SGH to TSH) for Sutherland shire residents. The data shows that 78% of all other Neurology ESRGs arrived by ambulance and could be suspected strokes or other serious neurological impairment.

4. Due to the constrained surgical activity due to limited theatre availability and ageing infrastructure. Flow reversals were also modelled (SGH back to TSH) for low complexity surgical/procedural activity such as plastic and reconstructive surgery (ESRG 513), vascular surgery (ESRGs 531,532,539) and urology (ESRGs 521,522,523,524,529) for Sutherland shire residents.

5. The final overall projections are outputted by SRG and then projections are subsequently mapped from SRG to AMO speciality based on 2016/17 and 2017/18 proportions. The critical care bed days (ICU/HDU, coronary care) were also removed from the projections before the mapping occurred.

Source: FlowInfo V17.0, HealthAPP, HIE

SUBACUTE AGED CARE: GERIATRIC EVALUATION MANAGEMENT

This scenario involved adjusting the base case projections to reflect a more reasonable projected average length of stay for GEM patients. The GEM projections are sourced from ESRG 902 rehabilitation other overnight.

The steps involved in this scenario:

1. ESRG 902 rehabilitation – other overnight was adjusted to take into account that a small proportion of this ESRG is treated under general rehabilitation (19% separations, 23% bed days). The projected activity was removed from the ESRG

2. The projected average length of stay was adjusted from 18.7 days in the base case to 9.1 days in the scenario.

Source: FlowInfo V17.0, HealthAPP, HIE
Exclusions: ED only

SUBACUTE AGED CARE: MAINTENANCE CARE

This scenario involved adjusting the base case projections to reflect that fact that most of maintenance care activity occurs in the aged care ward but some activity does occur outside aged care.
The steps involved in this scenario:

1. The ward stay of maintenance activity was extracted for the previous 3 years. The data showed that on average 74.3% of separations and 74.1% bed days occur on the aged care ward with the rest distributed across other acute beds in the hospital

2. The proportions (both separations and bed days) were applied base case maintenance projections

3. The remaining maintenance activity, that is, the other maintenance care activity occurring outside the aged care ward (3 beds in 2031). The remaining activity is spread across the acute beds with no trend evident. It is assumed that the remaining projected activity will be absorbed acute bed base.

Source: FlowInfo V17.0, HealthAPP, HIE
Exclusions: ED only

SUBACUTE AGED CARE: PSYCHOGERIATRIC CARE

The scenario involved adjusting the base case for constrained activity in the behaviour management unit due to lack of available beds. The department would also like to expand the bed base to create a discrete unit for younger onset dementia patients. Predictably the average overnight occupancy is 100%.

The steps involved in this scenario:

1. The relative utilisation was adjusted for all age groups with the largest increase in RU for the 45-69 age group as the clinicians noted the increasing numbers of younger dementia patients presenting with behavioural issues. These younger patients also often have long length of stay due to the complexity of their issues and also have a lack of appropriate discharge options available for the younger cohort.

Source: FlowInfo V17.0, HealthAPP, HIE
Exclusions: ED only

REHABILITATION

The scenario involved adjusting the base case for the introduction of thrombolysis (both overnight beds and day only) and the increase in more recent activity for overnight stroke that has not been adequately reflected in the projections.

The steps involved in this scenario:

Overnight projection

1. ESRG 902 rehabilitation – other overnight was adjusted to take into account that a proportion of this ESRG is treated under aged care (81% separations, 76% bed days). The projected activity was removed from the ESRG

2. To account for significant increases in more recent stroke activity that has not been adequately reflected in the projections, the relative utilisation for Sutherland shire residents was adjusted for the for overnight stroke (ESRG 843). The current overnight stroke data supersedes the 2036 projection

3. Flow reversals were then modelled (SGH to TSH) for overnight rehabilitation (for all ESRGs) for Sutherland shire residents

4. ESRGs 897 and 898 were excluded in the final projection as these ESRGs are routinely managed on the cardiac and respiratory acute wards at TSH.

Day Only projection

5. To account for significant increases in more recent same day stroke activity that has not been adequately reflected in the projections, the relative utilisation for Sutherland shire residents was adjusted for the following day only ESRGs: 842, 891 895 and 901). The current same day stroke ESRG supersedes the 2036 projections (2016/17 325 same day stroke separations v 199 separations projected in 2036 for Sutherland Shire residents HealthAPP base case)

6. Flow reversals were then modelled that reversed all same day activity for Sutherland shire residents back from SGH (as it is planned that TSH will have a day only service)

7. The outpatient NAP rehabilitation clinics (4 clinics) data was moved in the admitted day only projections and the SGH HealthAPP day only growth rates were applied

8. The day only rehabilitation projections are based on assumptions that the unit will operate 5 days per week x 48 weeks per year at 160% occupancy.

Source: FlowInfo V17.0, HealthAPP, HIE
Exclusions: ED only, ESRGs 897 and 898

PALLIATIVE CARE

The projections were adjusted as the current data supersedes the base case projections. Improvements in the recording of palliative care data has been evident from 2015/16 data onwards.

The steps involved in the scenario:

1. The compound annual growth rate was calculated for the base case projections for each overnight ESRGs for the period 2014/15 to 2021, 2021 to 2026 and 2026 to 2031. Day only was excluded due to small numbers

2. The growth rate was then applied to each projected year from 2017/18 onwards by ESRG.

Source: FlowInfo V17.0, HealthAPP, HIE
Exclusions: ED only

MEDICAL IMAGING PROJECTIONS

The projections are provided by each medical imaging modality, as specified below.

- General x-ray
- MRI
- CT
- Ultrasound
- Angiography
- Fluoroscopy

The existing infrastructure (space, equipment and technology) is inadequate and ageing which has impacted on the growth of MID. MID noted that 2017/18 data is considered more complete than previous years. In absence of complete trend data, the SGH projected growth rates were applied. The SGH growth rates are based on calculating the utilisation rates (for the previous 8 years) by modality by inpatient/outpatient and applying the projected rate to the population projections. For ultrasound and MRI, the Randwick campus growth rates were applied as SGH also have access issues for those modalities.

The introduction of thrombolysis was also take into consideration in the projections. MID noted that on average stroke patients may need up to 4 CT scans and TIA patients may need 1 CT scans and 1 ultrasound scan. TSH is also acquiring a second CT in 2019. The activity noted in the Integrated Health Services Plan assumes the second CT will generate additional activity (3 patients per hour *240 days) which is reflected in the data presented. The MRI projections are based on the assumption that 3 patients per day are referred to SGH and approximately 6 patients per month are referred to private radiology.

To calculate medical imaging requirements, average daily throughput was calculated by dividing the hours available by the average procedure time. The projected activity is then divided by the throughput by the days available in a year. An occupancy rate of 85% is also applied. The current operating hours are assumed to continue into the future. The average procedure times were provided by the medical imaging

Source: Radiology Information System, August 2018, TSH, Strategy and Planning Unit (methodology)
Exclusions: mobile exams

Non Admitted Projection Methodology

In total nearly 70 scenarios were considered (see Table 12 below) with the majority aiming to improve access to care, they were broadly grouped into the following:

- Addressing unmet demand
- Establishing new clinics
- Enhancing existing services
- Fostering multidisciplinary clinics.

The steps involved in this scenario:

1. Baseline used 2017/18 data sourced from OrBiT, cross-checked with EDWARD data supplied by Performance Unit, SESLHD Mental Health Services, SESLHD Primary and Integrated Community Health and Centre for Oral Health.

2. Cross-checked completeness of data sets, differentiated setting type (i.e. outpatient clinic versus community health centre / home based care), etc.

3. Mapped IHPA Series 2 Clinics to inpatient SRGs. The growth rate is based on the acute scenario growth rate

4. Applied the SRGs growth rate to current occasions of service by setting type and modality (face-to face individual, face-to-face group, all other occasions of service)

5. For Mental Health used data provided by NSW Ministry of Health sourced from NMHSPF Planning Support Tool V2.1, Build 4.0.6, 1 May 2018 to calculate the growth rate

Assumptions:

- Current models of care and patient flows remain largely unchanged
- Duration of occasions of service based on Victorian Health functional benchmarks and advice from clinicians
- Room availability assumed 7 hours per day for 240 days per year at 80% occupancy to provide sufficient time for any room set-up, cleaning between patients, etc.
- Clinic / therapy rooms include clinic rooms, therapy rooms, consult rooms, treatment rooms, multidisciplinary rooms, therapy rooms, etc. for use for face to face occasions of service / activity i.e. where the patient is physically present
- All activity not involving face-to-face interaction occurs from staff members work station (as opposed to a clinic, consult or treatment room)
- Service event projections were based on rate of service events to occasions of service by IPHA Clinic Type in 2017/18
- NWAU projections were based on average NWAU per service event by IPHA Clinic Type in 2017/18.

Scenarios were developed based on extensive clinical consultations, with additional advice and/or clarification sought from the TSH&SCHS Planning Advisory Group, the Executive Steering Committee and Clinical Council. A summary of scenario analysis is detailed below.

Scenarios	Clinic	Discussion	Method
Enhanced service	10.04 Dental	- Clinicians advice: To reduce inequity of access, establish new services for adults and children in areas of need in the western half of the Sutherland Shire - SAPU: = 56 oos / 1,000 Sutherland shire residents (versus 71 for all SESLHD residents)	applied SESLHD rate to S'land population, deducted current activity
Change in location	10.04 Dental	- Clinicians advice: Close the school-based service at Menai and relocate to TSH	change setting: from off campus to TSH campus
Enhanced service	10.07 Endoscopy – urological / gynaecological	- Clinicians advice: Increased outpatient colposcopies and possibly development of a clinic to meet predicted demand due to changes to the cervical screening guidelines - SAPU: reviewed cervical screening guidelines noting "The change results in 2% more colposcopies in unvaccinated cohorts and 9% fewer colposcopies in cohorts offered vaccination" (2016 NCSP). Therefore, considered population growth and ageing will take sufficient account of any projected increase in colposcopies	No change
Change in location	10.11 Chemotherapy treatment	- Clinician advice: Chemotherapy at home is emerging area for development to improve patient wellbeing - SAPU: referenced Sunderland model "The delivery of chemotherapy at home: an evidence synthesis" identified, where patients met eligibility criteria, 13% of patient's preferred setting was their home	= current activity x 10%
New clinic	20.11 Paediatric medicine	- Clinicians advice: Allergy testing (requires nursing support for skin prick testing) - SAPU: assumed equivalent 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Enhanced service	20.13 Palliative Care	Palliative care: Expand OP clinic based at TSH - SAPU: Assumed 1 clinic / month (similar to SGH)	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.15 Neurology	- Clinicians advice: The implementation of a rapid access clinic for TIA and headache for rapid investigations to prevent ED presentation and admission. - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.15 Neurology	- Clinicians advice: Parkinson's Clinic, in association with integrated community-based nursing and allied health care - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.15 Neurology	- Clinicians advice: Neuro-ophthalmology clinic, a multidisciplinary clinic, currently only available at POWH with long wait. - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.15 Neurology	- Clinicians advice: Investigate opportunities for new discipline and multidisciplinary clinics to meet gaps in services for Vestibular clinics - SAPU: Assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Change in location	20.17 Ophthalmology	- Clinicians advice: implementation of all routine services and reduce delays to assessment and treatment including fluorescein angiography, retinal laser procedures, macular degeneration and glaucoma treatment SAPU: assumed 25% of select SSEH activity reversed to TSH	= 25% select oos attending SSEH reversed to TSH

Scenarios	Clinic	Discussion	Method
New clinic	20.18 Ear / Nose and Throat (ENT)	- Clinician advice: Provision of ENT outpatient service would enable pre-admission consultations, outpatient consultations and discharge follow up and provide an equitable service for Sutherland Shire residents - SAPU: assumed 40% flow reversal from SGH (based on population)	= SGH ENT oos x 40%
Enhanced service	20.19 Respiratory	- clinician advice: improve access to general respiratory, sleep and respiratory failure clinics	= 21 mins / oos, 4 hour clinic x 48 weeks
New clinic	20.19 Respiratory	- Clinician advice: multi-disciplinary Asthma clinic to meet increasing local demand and prevent ED presentation and admission. The ideal model would include support from Asthma educator, CNC, Pharmacist, Respiratory Scientist, administration and other allied health support as required	= 8 pts/clinic, 4 hour clinic x 12 months
New clinics	20.19 Respiratory	- Clinician advice: Introduce new integrated and community based multidisciplinary models of care, e.g. smoking cessation service (with D&A, psychiatry and O&G integrated with PHN and GPs), dyspnoea service (with cardiology, palliative care, aged care), pulmonary hypertension service (with cardiology, rheumatology, aged care), ILD clinic (with Rheumatology, palliative care and Cardiology), and metabolic clinic with endocrinology	= 8 pts/clinic, 4 hour clinic x 12 months x 5 services
New clinic	20.25 Gastroenterology	- clinician advice: allied health MDT for improved patient understanding and management of complex diseases and patient outcomes - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.28 Metabolic bone	- Clinician advice: An osteoporosis clinic to meet the unmet demand by the elderly population for fracture and refracture prevention. There is currently no structured care/ clinic or follow up - SAPU: assumed 1 clinic / fortnight	= 21 mins / oos, 4 hour clinic x 26 weeks
New clinic	20.33 Dermatology	-Clinician advice: Establishment of a Melanoma MDT between SGH and TSH to discuss patients and cope with the current advances in immune therapy. - SAPU: Assumed no impact on activity at TSH	No change
New clinic	20.34 Endocrinology	- clinician advice: A monthly pituitary disease clinic - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.34 Endocrinology	- clinician advice: An MDT clinic for renal failure (endocrinology/renal) - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.34 Endocrinology	- clinician advice: Potential for multidisciplinary care for diabetes/ophthalmology - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.34 Endocrinology	- Clinician advice: Introduction of a Young adult's clinic to meet the needs of a growing volume of young people with type 1 diabetes. - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.34 Endocrinology	- clinician advice: Potential for new model where Endocrinologist and diabetes educator visit GP clinics to better manage patients in the community and help avoid admissions and readmissions (see model in place in Newcastle and Liverpool) - SAPU: considered negligible impact on total NAP activity	- no change
Enhanced service	20.35 Nephrology	- Clinicians advice: An increase in outpatient clinic sessions is needed to accommodate new and chronic patients and reduce current waiting times - SAPU: Assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Enhanced service	20.44 Infectious Diseases	- Clinicians advice: Provide additional clinic times for general patients - SAPU: assumed 1 clinic / fort	= 21 mins / oos, 4 hour clinic x 26 weeks

Scenarios	Clinic	Discussion	Method
New clinic	20.44 Infectious diseases	- Clinicians advice: Establish an infectious diseases clinic for Southcare pts - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.45 Psychiatry	- Clinicians advice: An integrated Eating Disorder service including inpatient beds and psychiatric consultation liaison - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	20.45 Psychiatry	- Clinicians advice: When thrombolysis service commences (up to 5 inpatients / week), will need access to neuropsychiatry and clinical psychiatry (40% of stroke patients develop depression after stroke). - SAPU analysis: MH-CCP - 4% = severe illness treated in ambulatory setting @ 9 oos	= 5 patients x 4% develop depression requiring Amb care x 52 weeks x 9 oos
Enhanced service	20.49 Geriatric Evaluation and Management (GEM)	Clinicians advice: Expansion of GFS to include community-based clients who require rapid support at home and for further support of RACF patients, with a goal to reduce ED admissions by a further 50% - SAPU: assumed 50% of RACF residents admitted from ED could be diverted to NAP with each patient requiring 6.5 oos (average frequency of oos for GFS)	= ED admissions from RACF for 75 yrs & older (average past 3 years) x 50% x 6.5 oos
Enhanced service	20.52 Addiction Medicine	- Clinicians advice: significant unmet demand, particularly among vulnerable populations, only 1 in 6 people that need DAS accessing its services - SAPU: not all people will access services; clinicians oos x 5 but ND&ARC 1 in 3 people - PAG: determine appropriate ratio	Addiction Medicine oos x 5 add'l pts
New clinic	20.52 Addiction medicine	- Clinicians advice: Management of babies of mothers with substance abuse - SAPU: assumed equivalent 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Capital planning	30.05 Pathology (Microbiology, Haematology, Biochemistry)	- Clinician advice: A new pathology collection centre in a combined outpatient and ambulatory care precinct	For capital planning
New clinic	40.02 Aged Care Assessment	- Clinicians advice: New multi-disciplinary model for younger onset dementia patients so that early intervention and case-co-ordination and management by allied health and future care planning can commence on diagnosis; preference to keep people at home - SAPU: reviewed AIHW younger onset dementia rate, multiplied by average oos for clinic	= (rate 0.1 per 100 population aged < 65 yrs) x 3 oos
Enhanced service	40.06 Occupational therapy 40.18 Speech pathology	- Clinicians advice: Improved access to community-based speech pathology and occupational therapy - SAPU: assumed equivalent 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Change in location	40.08 Primary Health Care	- Clinicians advice: currently Sutherland Shire Early Childhood Nursing Service off-site but considering relocating to TSH campus - SAPU: f/u clinician advice activity to be recognised in the plan as community activity	no change
New clinic	40.09 Physiotherapy	- Clinicians advice: Investigate potential for prehabilitation model for aged care elective surgery candidates - SAPU: assumed 50% of planned surgical/procedural patients aged 75 years+ would benefit from pre-habilitation	= IPU seps planned surgery for 75 yrs and older (average past 3 years) x 50% x 6 allied health oos
New clinic	40.09 Physiotherapy	- Clinicians advice: Implement Advanced Recovery Orthopaedics Program (AROP) model at TSH to support earlier discharge and improved recovery - SAPU: AROP Business Case	= 7 oos x 120 patients

Scenarios	Clinic	Discussion	Method
New clinic	40.09 Physiotherapy	- Clinicians advice: Support new Osteoporosis Refracture prevention service at TSH - SAPU: used target population analysis from Brake the Break business case and ACI MoC for frequency of follow-up	= 200 patients x 2 oos
New clinic	40.10 Sexual Health	- Clinician advice: Sexual health want to reinitiate clinic at TSH - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 48 weeks
Change in location	40.11 Social Work	- Clinicians advice: Would do Southcare Community Health Social Work Service clinic at Southcare and not home based if space available	change setting: from off campus to TSH campus
New clinic	40.12 Rehabilitation	- Clinicians advice: Implementation of a multi-disciplinary Day Only/Outpatient service - Additional clinician advice: Clinicians were supportive of Day Only model but thought they would need both D/O and OPD - SAPU: assumed 2 clinics per week (similar to SGH)	= 33 mins / oos, 8 hour clinic x 48 weeks
Enhanced service	40.12 Rehabilitation	- Clinicians advice: Orthogeriatric service particularly for patients with a fractured neck of femur (NOF) - SAPU: Review orthopaedic IP activity by payment status, assume public pts would have approx 4-6 f/u rehab OOS	= IPU seps for public NOFs x 5 oos
New clinic	40.12 Rehabilitation	- Clinicians advice: Introduction of a Specialist Spasticity management clinic - SAPU: Assumed TSH campus, 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	40.23 Nutrition/ dietetics	- Clinicians advice: Investigate opportunities for new discipline and multidisciplinary clinics to meet gaps in services for Weight reduction, e.g. prior to surgery - F/u clinician advice, in line with the District wide Metabolic Disorders and Bariatric Surgery Service, services managed by GP	No change
New clinic	40.28 Midwifery and maternity	Clinician advice: An Early Pregnancy Assessment Service (EPAS) is required to accommodate local area review of threatened or complicated pregnancy issues. This service would be in the form of a 3 day a week outpatient clinic/ service running in the early morning prior to other O & G activity - SAPU: assumed 3 x 1-hour clinics per week	= 9 oos /week x 52 weeks
New clinic	40.28 Midwifery and maternity	Clinicians advice: Perinatal and Infant Mental Health Service (PIMHS) including a dedicated Clinical Midwife Consultant to co-ordinate the service and a social worker as engagement and follow up is particularly important in this group - SAPU: assumed 1 clinic per month	= 21 mins / oos, 4 hour clinic x 12 months
New clinic	40.28 Midwifery and maternity	- Clinicians advice: Investigate opportunities for new discipline and multidisciplinary clinics to meet gaps in services for Speech Pathology and dietician follow up for paediatric feeding issues - SAPU: Assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Enhanced service	40.30 Alcohol and Other Drugs	- Clinicians advice: significant unmet demand, particularly among vulnerable populations, only 1 in 6 people that need DAS accessing its services - SAPU: not all people will access services; clinicians oos x 5 but ND&ARC 1 in 3 people - PAG: determine appropriate ratio	Alcohol and Other Drugs oos x 5 add'l pts
Capital planning	40.30 Alcohol and Other Drugs	Clinicians advice: Needle and Syringe program only need space, not clinic rooms	For capital planning
New clinic	40.39 Neurology	- Clinicians advice: Multiple Sclerosis clinic, including CNC support, with access to ambulatory care space for infusions and access to outpatient rehabilitation - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months

Scenarios	Clinic	Discussion	Method
New clinic	40.39 Neurology	- Clinicians advice: Potential for other movement disorders and neuromuscular clinics in the future, e.g. sub-speciality clinics in Neuro ophthalmology and Movement disorders - SAPU: assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Enhanced service	40.41 Gastroenterology	- Clinicians advice: increase clinics for the management of IBD in outpatients and prevent the need for admission. Clinical Nurse Consultant (Inflammatory Bowel Disease) - SAPU: RACGP advice 10% of population with IBD but only 10% requiring specialist treatment	= Sutherland shire LGA population x 10% x 10%
New clinic	40.43 Hepatobiliary	- Clinician advice: support a liver clinic combined with current clinic - SAPU: assumed 40% flow reversal from SGH (based on population)	= SGH hepatobiliary oos x 40%
Base case	40.46 Endocrinology	- clinician advice: Ongoing funding of TIIC program for diabetes educator home visits to co-ordinate ongoing care post discharge for selected patients and ensure GP follow up - SAPU: existing service therefore projections already included	No change
Enhanced service	40.46 Endocrinology	- Clinicians advice: Investigate opportunities for new discipline and multidisciplinary clinics to meet gaps in services for Dietician for nutrition education in Diabetes Education service based at TSH - SAPU: assumed MDT with existing clinic	No change
Enhanced service	40.52 Oncology	- Clinician advice: Additional outpatient services including a drop-in clinic for cancer patients to receive semi-urgent specialist outpatient care. SAPU: Assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Enhanced service	40.52 Oncology	- Clinician advice: Additional outpatient services including a survivorship program and cancer care program to meet the physical and emotional needs of cancer patients and their families (e.g. Concord Hospital has an exercise physiologist post cancer) - SAPU: Assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Enhanced service	40.52 Oncology	- Clinician advice: Additional outpatient services including community support groups to provide information, support and assistance to patients adjusting to illness - SAPU: Assumed 1 clinic / month	= 21 mins / oos, 4 hour clinic x 12 months
Change in location	40.59 Post-acute care	- Clinicians advice: Would divert > 30% home-based care to Southcare if had space	- change setting: 35% from off campus to TSH campus
New clinic	40.59 Post-acute care	- Clinicians advice: Investigate funding opportunities for case management services, particularly for NDIS services for under 65 years; there is a population of people who are under 65 years with cognitive impairments who end up staying in hospital for a long time - SAPU: reviewed NDIS data	= 1.2% population under 65 years
Enhanced service	40.59 Post-acute care	- Clinicians advice: Enhance the capacity of the outpatient antibiotic therapy (OPAT) service, - SAPU: assumed 1 clinic / week	= 21 mins / oos, 4 hour clinic x 48 weeks
Capital planning	40.59 Post-acute care	Community services – older people should already be accounted for as off- site community services (ACAT, etc.), will just need a home base and infrastructure to support this, like Southcare's community services	For capital planning

Source: HealthAPP, OrBit, EDWARD, NMHSPF Planning Support Tool V2.1, Build 4.0.6, 1 May 2018

Appendix 8: Financial Impact Statement

		2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Acute Aged Care	Separations	2,754	2,933	3,111	3,290	3,468	3,534	3,601	3,667	3,734	3,800	3,876	3,952	4,029	4,105	4,181
	Bed days	18,970	19,952	20,934	21,916	22,898	23,244	23,520	23,797	24,073	24,626	24,950	25,273	25,597	25,920	26,244
	Beds	61	64	67	71	74	75	76	77	78	79	80	81	83	84	85
	NWAU 17	3,229	3,295	3,363	3,433	3,503	3,576	3,650	3,725	3,802	3,880	3,960	4,042	4,125	4,210	4,297
Subacute Aged Care	Separations	549	655	762	868	974	994	1,015	1,035	1,056	1,076	1,116	1,156	1,195	1,235	1,275
	Bed days	6,030	7,055	8,081	9,106	10,131	10,270	10,409	10,549	10,688	10,827	11,171	11,514	11,858	12,201	12,545
	Beds	18	21	25	28	32	31	32	32	33	34	34	35	36	37	39
	NWAU 17	1,253	1,355	1,439	1,528	1,623	1,724	1,831	1,944	2,065	2,193	2,329	2,474	2,627	2,790	2,963
Rehabilitation (day only)	Separations	-	240	481	721	961	985	1,008	1,032	1,055	1,079	1,107	1,135	1,163	1,191	1,219
	Bed days	-	240	481	721	961	985	1,008	1,032	1,055	1,079	1,107	1,135	1,163	1,191	1,219
	Beds/Spaces	-	1	2	2	3	3	3	3	3	4	4	4	4	4	4
	NWAU 17	1,308	1,367	1,407	1,447	1,515	1,586	1,661	1,739	1,820	1,889	1,961	2,036	2,113	2,193	2,277
Rehabilitation (overnight)	Separations	521	625	730	834	938	967	996	1,026	1,055	1,084	1,099	1,114	1,128	1,143	1,158
	Bed days	8,210	10,286	12,363	14,439	16,515	16,825	17,135	17,445	17,755	18,065	18,507	18,949	19,391	19,833	20,275
	Beds	25	31	38	44	50	51	52	53	54	55	56	58	59	60	62
	NWAU 17	1,602	1647	1743	1,846	1,954	2,069	2,190	2,319	2,455	2,599	2,752	2,913	3,084	3,265	3,457
Palliative Care	Separations	207	296	370	444	503	519	535	550	566	582	595	608	622	635	648
	Bed days	1397	1,912	2,428	2,943	3,458	3,491	3,525	3,558	3,592	3,625	3,695	3,764	3,834	3,903	3,973
	Beds	4	6	7	9	11	11	11	11	11	11	11	11	12	12	12
	NWAU 17	399	394	470	560	588	618	648	681	715	741	768	796	825	855	886
Total	Separations	4,031	4,749	5,453	6,156	6,844	6,999	7,155	7,310	7,466	7,621	7,793	7,965	8,137	8,309	8,481
	Bed days	34,607	39,446	44,285	49,124	53,963	54,815	55,597	56,380	57,163	58,222	59,429	60,636	61,842	63,049	64,256
	Beds/spaces	109	124	139	153	170	171	173	176	178	183	186	190	193	197	201
	NWAU 17	7,791	8,058	8,422	8,815	9,184	9,572	9,980	10,407	10,856	11,302	11,770	12,260	12,774	13,314	13,880
Outpatient	Occasions of Service		176,004	263,395	350,785	262,172	265,697	269,222	272,748	276,273	279,798	284,684	289,569	294,455	299,340	304,226
	Service Event		108,494	169,661	230,827	183,500	186,175	188,850	191,526	194,201	196,876	200,807	204,739	208,670	212,602	216,533
	NWAU 18		3,940	5,038	6,135	7,233	7,349	7,465	7,582	7,698	7,814	7,986	8,158	8,330	8,502	8,674
	Clinic Rooms					86	87	88	89	90	91	93	94	96	97	99
Community	Occasions of Service		164,346	234,242	304,139	209,689	212,753	215,818	218,882	221,947	225,011	228,970	232,929	236,888	240,847	244,806
	Service Event		97,752	138,894	180,035	123,425	125,498	127,570	129,643	131,715	133,788	136,509	139,229	141,950	144,670	147,391
	NWAU 18		3,304	3,624	3,945	4,265	4,347	4,430	4,512	4,595	4,677	4,788	4,898	5,009	5,119	5,230

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