Integrated Health Services Plan 2019

Health
South Eastern Sydney
Local Health District

November 2019

Executive Sponsors:

Vanessa Madunic, General Manager, The Royal Hospital for Women
Julie Dixon, Director of Planning, Population Health and Equity
Lisa Altman, Director of Strategy, Innovation and Improvement

Written and prepared by:

Alison Sneddon, Manager
Kimberley Booth, Health Services Planner (Activity and Projections)
Strategy and Planning Unit
Directorate of Planning, Population Health and Equity

Consultation support: Dee Turner, Director PWC

Planning support: Wendy Uptin and Keerthana Puthur

Design: Scott West

Thanks to The Royal Hospital for Women Foundation for photographs.

South Eastern Sydney Local Health District
Locked Mail Bag 21
TAREN POINT NSW 2229

Phone: (02) 9540 8181
Fax: (02) 9540 8164

Table of contents

Foreword	5
Executive Summary and Introduction	6
1. The case for change	18
1.1 SESLHD Journey To Excellence	18
1.2 Value based care for women – What matters to them	19
1.3 The Royal's leadership in the First 2000 Days	21
1.4 Women's health priorities across life stages	22
1.4.1 Young women	23
1.4.2 Women in the childbearing years	23
1.4.3 Women in mid-life	24
1.4.4 Older women	25
1.5 Achieving equitable care across women's life stages	26
1.5.1 Women who experience disadvantage and other vulnerabilities	26
1.5.2 Aboriginal women	27
1.5.3 Women from culturally and linguistically diverse backgrounds	28
1.5.4 Lesbian, Bisexual, Gay, Transgender, Queer and Inter-gender people	29
1.5.5 Women affected by or experiencing mental health problems or mental ill health	30
1.5.6 Women affected by substance abuse	31
1.5.7 Women experiencing domestic and other violence	32
1.5.8 Women with disability	33
1.5.9 Women as carers	33
1.5.10 Women as parents	33
1.6 Randwick Campus redevelopment	34
1.7 Activity at The Royal	35
2. Transforming healthcare for women and newborns	42
2.1 Value based care for women – What matters to them	44
2.2 The Royal's leadership in the First 2000 Days	45
2.3 Women's health priorities across life stages	51
2.4 Infrastructure development and capital implications	55
2.4.1 Capital development priorities	56
2.4.2 Other infrastructure and caoital development recommendations	58
2.4.3 Current and future space requirements	59
2.4.4 Scenario activity projections	60
2.5 A skilled workforce	69
2.6 Genetics and genomics	71
2.7 Healthcare enabled by systems and technology	73
2.7.1 Telehealth and virtual healthcare support	75
2.7.2 Analytics capability	75

Table of contents

2.8 Environmental Sustainability	76
2.9 Providing world class research, teaching and education	79
2.9.1 Research	79
2.9.2 Teaching and education	81
3. Partners in care	82
3.1 South Eastern Sydney Local Health District	82
3.2 Randwick Hospitals and Community Health Services	83
3.2.1 Prince of Wales Hospital and Community Health Services	83
3.2.2 Sydney Children's Hospitals Network (SCHN) - Randwick	84
3.2.3 Prince of Wales Private Hospital	84
3.2.4 Eastern Suburbs Mental Health Service	84
3.2.5 Shared Services on Randwick Campus	85
3.2.6 NSW Health Pathology	85
3.2.7 Breastscreen NSW	85
3.3 Directorate of Population and Community Health	86
3.4 Clinical networking	87
3.5 Private Sector Hospitals	88
3.6 Central and Eastern Sydney Primary Health Network	88
3.7 Universities	88
3.8 Non-Government Organisations	89
3.8.1 Australian Breastfeeding Association	89
3.8.2 Karitane	89
3.8.3 Gidget Foundation	89
Appendix 1 Consultation reports	91
Appendix 2 List of contributors	92
Appendix 3 Projection Methodologies	93
Appendix 4: Strategic planning and policy context	99
1. International and National Frameworks	99
2. NSW Government priorities	100
Appendix 5: Shared Services on Campus	104
Appendix 6: Role Delineation of Clinical Services	106
Appendix 7: Aboriginal Health Impact Statement	108
Appendix 8: Abbreviations	113
Appendix 9: References	116

Foreword

The Royal Hospital for Women ('The Royal') is a trusted name for the health care of women and newborns. It is one of Australia's leading specialist women's hospitals and the only one in NSW. Since 1820, The Royal has led advocacy and innovation in specialist women's and newborn's health and wellbeing, with an outstanding international reputation.

Our particular focus has been on sensitive and important women's health issues, reducing inequities and providing care for vulnerable and disadvantaged women and newborns. Our clinicians at The Royal are leaders in research and clinical care of complex, atypical or life-threatening conditions and specialise in women's conditions that have been traditionally under-diagnosed, under-treated or underserved. Our clinical guidelines and procedures for best practice are used across NSW and beyond.

The *Royal Hospital for Women Integrated Health Services Plan* ('the Plan') builds on our proud record. The Plan delivers on The Royal's role as the statewide leader in developing, supporting and embedding a gender-sensitive approach in the development of clinical care, research, education and training in women's and newborn health care. To meet the health needs of the women of NSW, we will continue to develop partnerships and people, and seek redevelopment of the infrastructure required to deliver contemporary models of care. We also recognise the importance of The Royal as a key partner on the Randwick Health and Education Precinct.

Reflecting our holistic and preventative approach to women's services, the Plan adopts a life stage approach in setting out priorities for service development and delivery.

The Plan defines The Royal's role in delivering on NSW Health's *First 2000 Days of Life Framework*, from pre-conception through to the postnatal stage. Transforming models of care will prepare The Royal for advances in fertility interventions, neonatal care and survival of premature newborns; the increasing numbers of older women and women with chronic conditions becoming pregnant; supporting perinatal mental health; and emerging models of maternity care.

The Royal will influence, shape and lead the provision of health services to women of all ages within SESLHD and across NSW. This requires building and strengthening services in specialities such as adolescent gynaecology, breast cancer, pelvic floor, pelvic pain, endometriosis, fertility preservation, obstetric medicine and gynaecological oncology. It also means taking a well women's model of care, focusing on what matters to women and improving health literacy on women's and newborn's health issues. We will work beyond the walls of the hospital in the community and enhance rural outreach with telehealth and training opportunities. Our expertise and research will be shared through close partnerships so that more women and newborns can access high quality healthcare closer to where they live.

Extensive consultation with our clinicians and other stakeholders was undertaken and a comprehensive review of service activity and projected demand was validated by our clinicians. The service needs identified in the Plan are thus robust and support the most effective use of available and future resources.

We would like to thank the many people who have contributed to the development of this Plan. Together, we are working towards our vision of "Exceptional care: healthier lives".

We believe that the Plan positions The Royal to be the leader in women's health in NSW and a key service for the SESLHD community and hospital network.

Tobi Wilson
Chief Executive
SESLHD

Michael Still
Chairperson
SESLHD Board of Directors

Executive Summary & Introduction

The Royal Hospital for Women will strengthen our position as the only women's hospital in New South Wales, and a state and national leader in the provision of health services to women, newborns and families.

This will happen in a responsive and collaborative environment which promotes wellness, informed choice, community outreach, innovation, teaching, research and strong partnerships to improve health outcomes.

With this Integrated Health Services Plan for The Royal, we aim to

a. Deliver on The Royal's role as the statewide leader in developing, supporting and embedding a gender-sensitive approach in the development of research, education, training and clinical care in women's and newborn health care

b. Continue to develop partnerships, our people, infrastructure, systems and processes that will enable The Royal to meet the health needs of the women of NSW

c. Recognise The Royal as a key partner on the Randwick Health and Education Precinct and an integral component of the Precinct's unique strengths in research, education and the delivery of care

The Royal believes that women are the heart of the caring community. We recognise the unique opportunity we have to empower and support women to better health and wellbeing, further improving the overall health of the community. We aim to optimise and advance collaborative, holistic and inclusive models of care that innovate and translate women's health research to clinical care. Building on our core strengths in newborn and women's health services, education and research, The Royal is uniquely placed to transform healthcare across the life course.

As the leading hospital for women in NSW, The Royal understand the unique challenges facing women and girls. We believe this is integral to co-designing health initiatives and providing healthcare across the lifespan that fosters gender equity and improves health outcomes for all women.

The Royal offers the largest and most comprehensive services for pregnancy, newborns and parenting education of any public hospital in NSW. We recognise our role towards meeting NSW Health's agenda for the First 2000 Days of Life. Our models of care from pre-conception through to the postnatal stage are designed for real improvements in health and wellbeing and to achieve the best possible outcomes.

We are committed to enabling an empowered workforce to drive the women's health agenda and provide exceptional care. Integrating with community services, primary care and non-government organisations we will strengthen our impact and broaden our reach to all women across the community and across the state.

The Royal Hospital for Women is a centre of excellence in women's health, sitting on one of the largest health and teaching campus in New South Wales and one of the largest in Australia – the Randwick Health and Education Precinct. This colocation means we attract renowned researchers and clinicians from a range of professional disciplines, to collaborate and deliver exceptional women's health care.

We will seek to have custom designed and purpose built facilities that enhance the woman-centred health care experience and support their families, while providing state of the art facilities for assessment and medical and surgical therapy, when required.

> ***"How impressed we have been with the staff at the women's hospital. World class nursing from the country's best. I couldn't be happier with the support I received. This has been an incredibly difficult time for my husband and I, however, their warmth and care helped me to get through a very painful time, both physically and emotionally. I wanted to recognise their amazing compassion and caring approach to their jobs, as well as express my appreciation for their invaluable kindness."***

Women's health matters

Amongst Australian women:

6 in 10
are overweight or obese [1]

1 in 2
have a chronic disease [1]

9 in 10
over 65 have a chronic disease [2]

1 in 2
have experienced a mental health problem [1]

1 in 7
women aged 50+ have osteoporosis [1]

1 in 4
have pelvic floor disorders [2]

1 in 10
suffer from endometriosis [3]

1 in 3
have experienced physical and/or sexual violence and/or emotional abuse by an intimate partner since age 15 [2]

Source:

[1] AIHW 2018
[2] National Women's Health Strategy
[3] National Action Plan for Endometriosis

Women are the majority of health consumers, the majority of health service providers and the majority of carers in the Australian community.

By improving the health of Australian women we will improve the health of the whole community. Women's physical, social and economic potential is optimised when they are healthy and their health needs are addressed. Women need access to information and services that respond appropriately to female health needs. This has a flow on effect to their families.

Different biological and societal factors impact women's and men's health and wellbeing, and women's experience of mental and physical illness are different from men's. Women are 1.6 times more likely than men to suffer coexisting mental and physical illness.

Affirmative action in providing a safe, empowering environment for women assists women in engaging with services, and improves their health literacy and self-management. Since 1820 we have led advocacy and action to empower women and advance women's health and wellbeing in NSW and beyond.

In our service planning and delivery, we are responding to women's changing health needs and the leading causes of total burden of disease across each stage in women's lives. A population health focus on the increase in obesity rates and advanced age of first time mothers is needed, along with clinical and research excellence together to address the resultant rising infertility rates and pregnancy complications. A comprehensive, multi-disciplinary approach to fertility, pregnancy and birthing will help to prevent women's health concerns in mid-life and older age arising from earlier life events. As a dedicated women's health service, The Royal has the critical mass of clinicians and researchers to address conditions such as endometriosis and incontinence that can be debilitating and distressing for younger and adult women, and rarely given prominence in the broader health system. A holistic view of women's health enables The Royal to address the impact of psychosocial determinants of health that can lead to, for example, Aboriginal women experiencing higher rates of co-morbid conditions, including diabetes, cervical and ovarian cancer.

The Royal will act on the National Women's Health Strategy to "reduce the burden of disease and improve quality of life for women and girls by:

improving sexual and reproductive health, ensuring we provide the best possible care for an ageing female population, combatting high rates of chronic conditions and mental ill-health, and addressing the health impacts of violence."

National Women's Health Strategy 2020-2030

Newborns matter

The time spanning roughly between conception and one's second birthday is a unique period of opportunity when the foundations of optimum health, growth, and neurodevelopment across the lifespan are established.

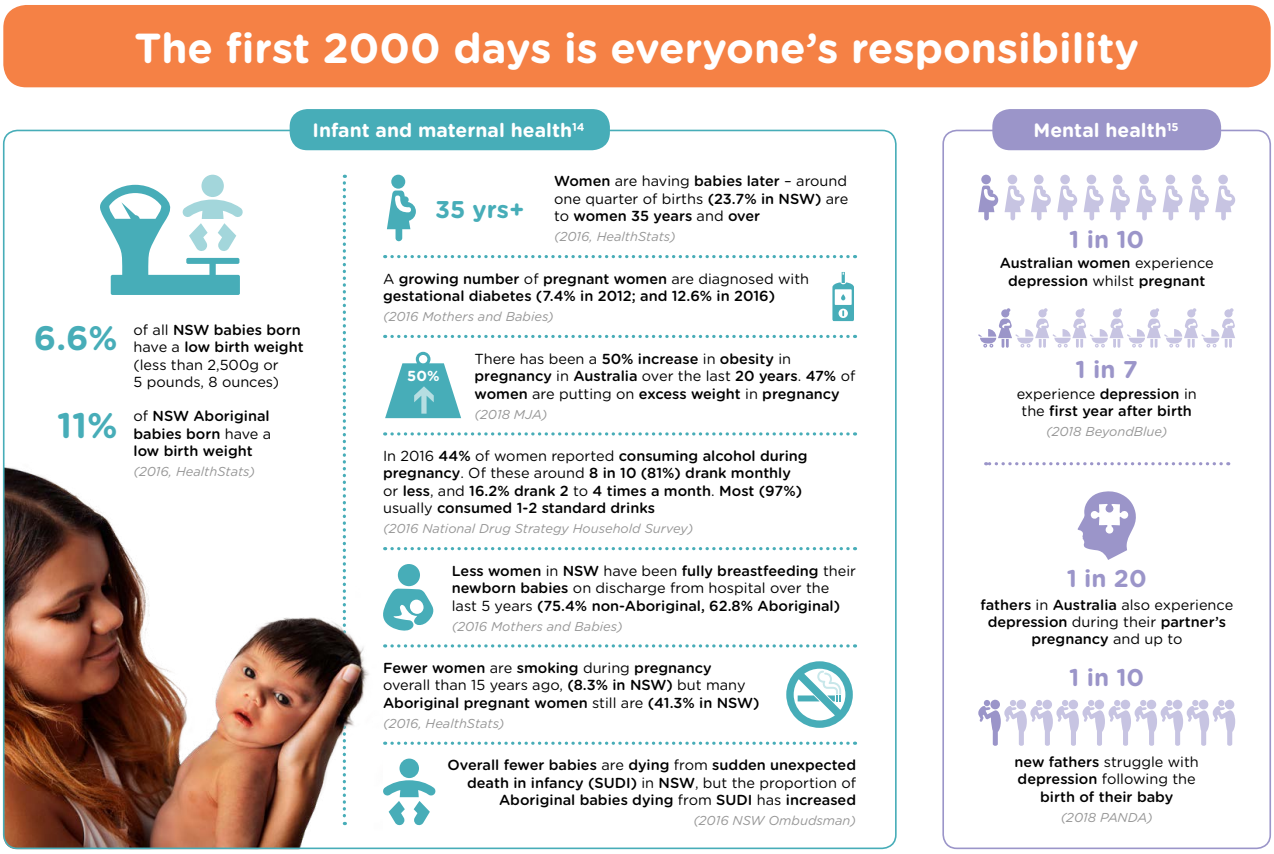
Promoting and providing 'optimal conditions' in early life is the best hope we have of hardwiring healthy physiological, structural, immune, metabolic and behavioural-response patterns in order to prevent many avoidable diseases.

Evidence suggests that there are three distinct developmental periods during this early period when actions for better outcomes can be taken: preconception, pregnancy and infancy.

NSW Health has taken this evidence and developed the *First 2000 Days Framework* as a mandatory policy, extending the period to almost 5 (preschool), which takes into account early learning in literacy and numeracy prior to the formalised school curriculum.

The Royal's leadership during the preconception, pregnancy and newborn period is essential to the successful implementation of the priorities of the *First 2000 Days Framework*

As we expand our services in areas such as fertility preservation, advances in maternal fetal medicine, obstetric and internal medicine, genetics and genomics we expect to see continuing improvements in outcomes. Further developing the options for maternity care in the community and the capacity of the Newborn Care Centre will optimise outcomes and the experience of women, their partners and babies.



Source: NSW Health: The First 2000 Days Framework, p.16.

What we do

The importance of our role in leading models of care, research and advocacy on women's health issues, fertility, birthing and neonates, our work with vulnerable women with complex needs, and our focus on what matters to women and their families was confirmed in consultations with consumers, clinicians and other staff and service providers.

We provide specialised, statewide and quaternary services in a number of key areas of women's and family health, including:

- **Neonatal Intensive Care** – Our Neonatal Intensive Care Unit (NICU) is the largest in NSW and the state's main surgical centre for premature neonates. It is one of a select few Australian NICUs which operates the world-class Family Integrated Care model and is the leading trial site for Family Integrated Care.
- **Maternity and obstetrics** – We set the standard with the most comprehensive, woman-centred pre-conception, pregnancy and birthing models of care that include home birth, midwifery group practice, GP shared care, obstetric internal medicine clinics and Baby Friendly Health Initiative accreditation. The Royal is the quarternary referral maternity and neonatal hospital for NSW.
- **Perinatal mental health** – We pioneered best practice perinatal mental health care as part of routine antenatal care over 20 years ago. The Royal's approach was adopted for Federal Government guidelines released in 2017.
- **Mothersafe** – Our statewide counselling and advisory service supports women and their health care providers concerned about exposures during pregnancy and breastfeeding.
- **NSW Fetal Therapy Centre** – As a statewide service, our Maternal Fetal department was selected was selected by NSW Health to be NSW's Fetal Therapy Centre providing care for women with high-risk pregnancies referred from throughout the state.
- **Genetics and Genomics** – Our Genetic Service, in partnership with the Centre for Clinical Genetics at Sydney Children's Hospital, provides prenatal genetic services to SESLHD and to NSW patients referred to The Royal. In addition Genetic services are provided to NICU, Maternal Fetal Medicine, and the Fertility and Research Centre.
- **Fertility and Reproductive Medicine** – Our Fertility and Research Centre, established in conjunction with UNSW, is a state-wide first in combining holistic fertility care with cutting-edge research activity
- **Paediatric and adolescent gynaecology** – We are a leader in this field, with patients travelling from across NSW, interstate and New Zealand due to the reputation and breadth of the service available.
- **Pelvic Pain and Endometriosis** – We are developing innovative, multi-disciplinary pelvic pain management protocols and manage referrals from throughout NSW and beyond. Our treatments for endometriosis informed the National Endometriosis Action Plan (2018).
- **Pelvic Floor** – We established NSW's first advanced practice continence and women's health physiotherapist-led pelvic floor clinic, an innovative model of access to right care-right time-right place for women with pelvic floor disorders.
- **Menopause and Osteoporosis** – Our expertise in the treatment of menopausal symptoms, osteoporosis and a variety of gynaecology conditions experienced by women in midlife and older age is highly regarded. Clinics at the Sydney Menopause Centre are led by a reproductive endocrinologist who is a clinical professor.
- **Gynaecological oncology** – We established Australia's first dedicated gynaecological cancer centre which has become a model for similar facilities throughout Australia and New Zealand.
- **NSW Breast Centre** – We are a leading breast service in NSW, providing state-of-the-art investigation, diagnosis and treatment of breast conditions, and high risk clinics for mutation positive women and their families.

As a national leader we share our knowledge and expertise. We work with other health services to build local capacity to enable women to access care close to home and seek to increase our potential to provide time and resources to further this.

The Royal works beyond the walls of the hospital in health service provision and we will strengthen our role in providing home and community based care and support to people in rural and remote areas in NSW through outreach, telehealth and education.

A snapshot of our activity

Women come from our local community and beyond SESLHD

Each Year :

around
6,000
babies are born on the Randwick campus

4000 at The Royal and 2000 at POW Private
to which The Royal provides neonatal support services

more than
1,000
babies

are admitted to the Newborn Care Centre with approximately 600 being premature and many requiring a surgical procedure

32% are from outside SESLHD

We see **increasing numbers** of women with **complex mental health** and **psychosocial issues**

over 2,500 women
are seen in Outpatients by allied health, with over **5,000** occasions of service

950 women are seen by Maternal Fetal Medicine, with **39%** coming from outside SESLHD

5,500 women are cared for in Maternity and Midwifery clinics with over **31,300** occasions of service

750 women are seen by Fertility and reproductive Medicine with **36%** coming from outside SESLHD

more than
2,000 women
are provided with gynaecological procedures in our hospital
38% are from outside SESLHD

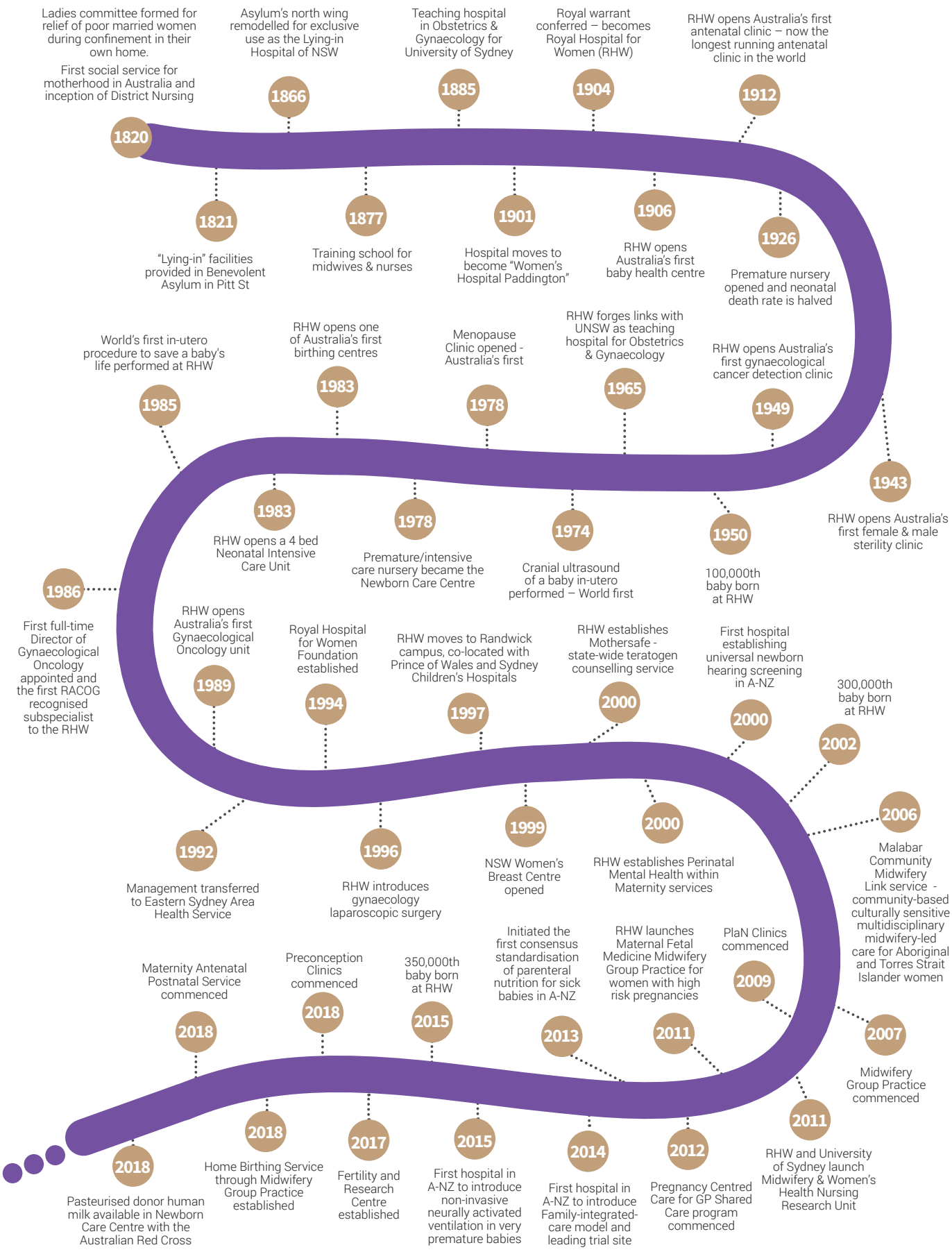
nearly
3,000 women
are cared for in gynaecological oncology clinics with over 8,000 occasions of service
75% are from outside SESLHD

more than
130 Women
have breast surgery
23% are from outside SESLHD

over
580 women
require other acute inpatient care in our hospital
37% are from outside SESLHD

Our journey

The Royal Hospital for Women has been one of Australia's foremost specialist hospitals for women and babies, since its early beginnings as New South Wales first 'lying-in' hospital for women in 1820.

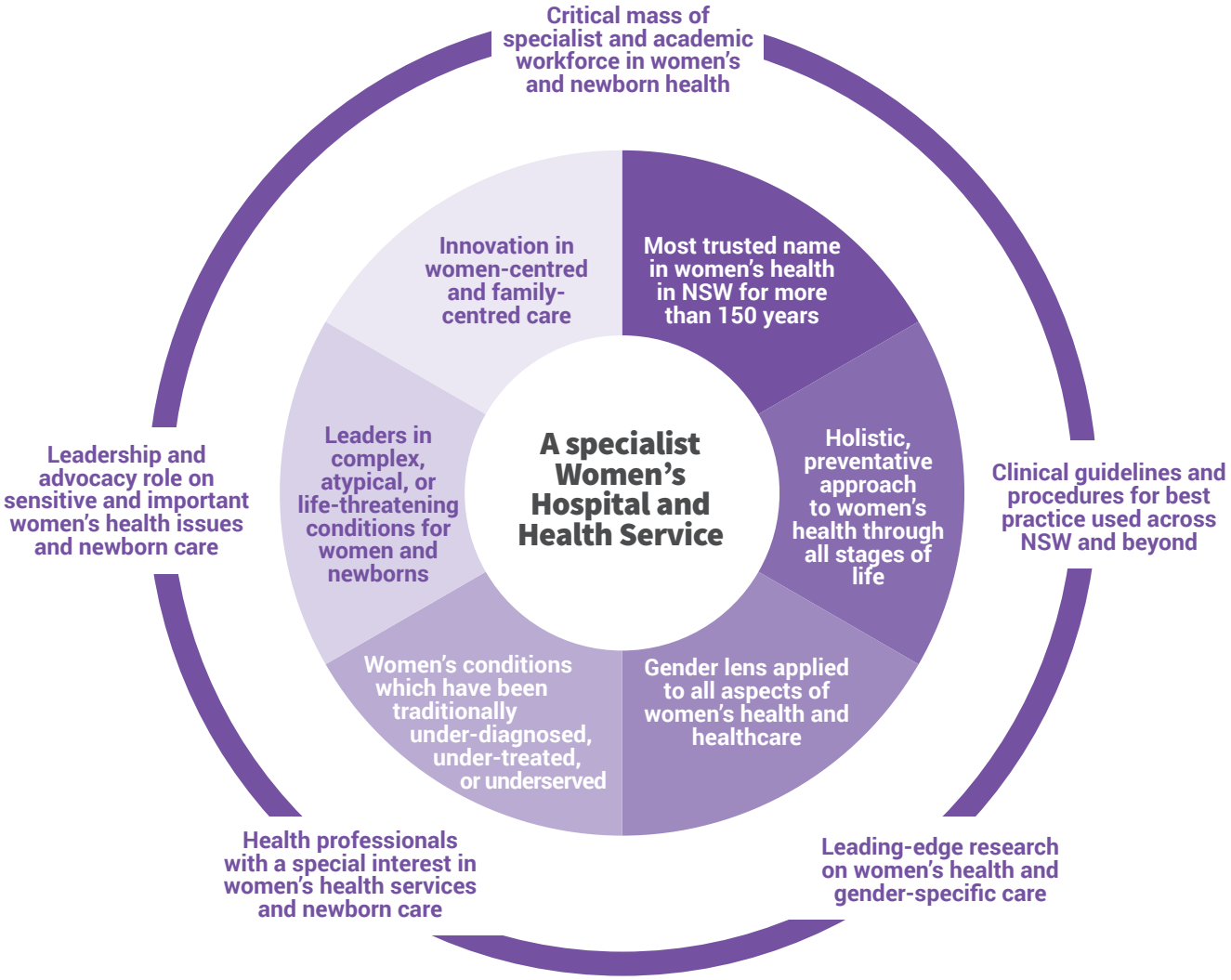


A specialist women's hospital and health service

The Royal Hospital for Women is one of Australia's leading specialist hospitals dedicated to improving and advocating for the health and wellbeing of women and newborns, and the only one in NSW. The others in Australia are:

- The Royal Women's Hospital - Victoria, Melbourne, Victoria
- Royal Brisbane and Women's Hospital, Brisbane, Queensland
- Women's and Children's Hospital, Adelaide, South Australia
- King Edward Memorial Hospital, Perth, Western Australia.

The Royal is the only facility of its kind in NSW that provides a combination of primary, secondary, tertiary and quarternary services for women.



What does a world class Women's Hospital and Health Service look like?

The Royal Hospital for Women meets many of the characteristics of a world class women's hospital and health service, which are outlined below.

Through the implementation of *The Royal Hospital for Women Integrated Health Services Plan* we aspire to meet all of these characteristics and strengthen our contribution to women's and newborn's health and wellbeing and our status as a world-class women's hospital and health service.

- Women and their health and wellbeing are firmly at the centre of the decision-making processes
- Emphasis is on being well and staying well, with a strong focus on preventative health care, with excellent integration with community based care including a seamless transition into hospital and back to the community through local health practitioners. Differing models of continuity of care are offered to all women as standard
- Comprehensive interprofessional multidisciplinary care and support is provided across physical and mental health coupled with attention to cultural factors and the social determinants of health impacting on women
- Custom designed and purpose built facilities that enhance the patient experience and allow women to be safe, comfortable and at ease, while providing state of the art facilities for assessment and medical and surgical therapy. The impact of the physical environment on staff, patient and visitors' wellbeing and the importance of light, space and good nutrition is taken into account, along with environmental sustainability
- Co-location with a specialised children's hospital and adult acute facilities, preferably adjacent to a university
- Access for all to quality, affordable diagnostics and, where indicated, genomic testing and counselling
- Use of virtual health, including tele-health, and electronic integration across systems using popular technology
- Complete online registration, with their own records accessible to the patient and option for diagnostic and test results to be uploaded in a timely manner and by health professionals or patient
- Provision of online information and services, as a benchmark for evidence based care and in extensive community languages
- Ongoing teaching and education is provided to ensure common goals and contemporary healthcare. The hospital is sought after as a centre for teaching and learning
- Adaptive and accountable leadership, operating in a learning organisation where staff have the capacity and capability to do their job well and reach their potential
- Forging genuine and enduring partnerships with our community and health and social care providers, particularly those with a focus on women and families.

> ***My mother has been visiting the clinic for a few years now and I am present at her appointments. I have to commend the current level of service. The service has improved drastically and is exceptional. Staff ware calm, patient and a great help. As I'm sure you can imagine, having an elderly mother who is unwell is taxing enough. Having access to friendly, welcoming and accommodating staff at the Gynaecology Department is a great help and makes the visit to the hospital so much more welcoming. We both left with smiles on our faces from our experience.***
>
> Jackie (*patient's daughter*)

Transforming healthcare for women and newborns

The Royal is committed to leading transformational healthcare for women and newborns in NSW and beyond.

We are positioned to anticipate and respond to our immediate challenges, as well as to embrace new opportunities and innovative ways of delivering high quality care in the long term. To ensure this, our Plan is structured around:

VALUE BASED CARE FOR WOMEN – WHAT MATTERS TO THEM

Putting what matters to women at the heart of everything we do, we will lead NSW to more flexible and responsive approaches to health and wellbeing, safer and better outcomes. Women will have a voice in care planning and decisions about their health.

THE ROYAL'S LEADERSHIP IN THE FIRST 2000 DAYS

Through effective and collaborative support and intervention in preconception, in maternity and newborn care, we will help children have the best possible start in life physically, developmentally, socially and emotionally, and address the escalating prevalence of adult disease and morbidity.

WOMEN'S HEALTH PRIORITIES ACROSS LIFE STAGES

Through advocacy and leadership in complex and challenging women's health priorities across life stages, with a focus on Aboriginal, culturally diverse and disadvantaged communities at both local, state and national level, we will leverage from our history to new challenges and innovation. Backed by the strength of the Randwick Health and Education Precinct partners, we will lead in key areas of women's and family health, including:

- **Mental health:** we will enhance and innovate our mental health care for women and provide a comprehensive perinatal mental health wellness centre
- **Young women:** we will strengthen our approach to improving the health and wellbeing of young women, with a focus on adolescent gynaecology, fertility and reproduction
- **Women in mid-life and later years:** we will take a wellness approach, incorporating preventative practice with our specialist models of care in endometriosis and pelvic pain, pelvic floor, gynaecological oncology, and provide consultation to the campus and rural areas on women's health
- **Violence against women:** we will address violence against women as a health issue
- **Promoting and providing equitable care.**

INFRASTRUCTURE DEVELOPMENT AND CAPITAL IMPLICATIONS

A new purpose built facility for The Royal on the Randwick campus is required to meet future demand and provide for new evidence based models of care. Interim development is required for the Newborn Care Centre and Birthing Suite. In addition, access to community based facilities that better support women to keep well in their community and enable them to receive our expert care when needed. We will explore options for family accommodation in proximity to the hospital.

A SKILLED WORKFORCE

Our strong clinical leadership for women's and newborn's health and wellbeing in NSW, with high quality gender-based, culturally appropriate care and rapid translation of research findings into clinical practice, will attract and enable workforce development beyond the hospital walls. We will support an environment where our people, and those who come in contact with us, can be accountable, happy and well, and supported to reach their potential.

GENETICS AND GENOMICS

We will lead the application of genomics and genetic determinants of health to tailor diagnosis, support and health care provision in women's health and pre-conception.

PROVIDING WORLD CLASS RESEARCH, TEACHING AND EDUCATION

Taking advantage of opportunities within the Randwick Health and Education precinct, and beyond, we will foster research, teaching and education to advance best practice; deliver better outcomes and equip the current workforce, future clinicians and other health professionals across NSW for life-long learning. We will build translational research capacity and capability in women's health, and contribute to international knowledge.

HEALTHCARE ENABLED BY SYSTEMS AND TECHNOLOGY

Transforming the way healthcare is delivered to improve access, enhance self-management and clinical decision-making, we will ensure the right information at the right time from anywhere, on any device.

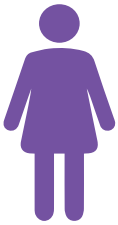
Our priority recommendations

To realise our vision, this Plan identifies future infrastructure and service development opportunities and recommendations. These were determined following consultation with clinicians, consumers and partner organisations and exploration of leading models of care, and were informed by national, state and local strategic priorities.

These have been further defined by clinicians and consumers to identify immediate and short term priorities as below:

Rebuild and expand the Newborn Care Centre

Rebuild the Birthing Unit and improve triage functionality



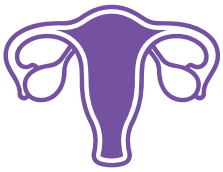
A well women's model of care across the life stages and focus on what matters to them

Comprehensive breast services centre, allowing expansion of the NSW Women's Breast Centre and NSW BreastScreen

Women's Assessment Service for women presenting with acute gynaecological disorders and obstetric complications during pregnancy, diverting from the ED

Ambulatory Care Centre integrating a range of specialist outpatient services, preventative healthcare through to chronic condition management with a focus on self-management

Integrated Perinatal and Infant Mental Health and Wellbeing facility in partnership with NGOs



National leadership in pelvic floor and pelvic pain, endometriosis, adolescent gynaecology, fertility preservation, obstetric internal medicine and gynaecological oncology

Enhanced rural outreach, telehealth and training through an integrated approach

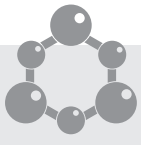
ENABLERS

Website designed for accessibility of booking systems, health and service information, clinical guidelines

A workforce leading teaching, research and innovation and in partnership with universities

Multidisciplinary team approach, attracting and sustaining allied health, junior and senior medical and nursing workforce

Cross-agency partnerships with primary health care, other government and non-government organisations



Increased access to genomics in partnership with Sydney Children's Hospital and NSW Health Pathology

This Integrated Health Services 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 The Royal and our partners toward delivering high quality, compassionate health care to our communities. Importantly, the Royal's approach is consistent with the National Women's Health Strategy 2020-2030:

"gender sensitive services that treat women holistically, encompassing all aspects of herself, not just the disorders she presents with – across the life course from preconception to old age."

The purpose of this plan

The Royal Hospital for Women Integrated Health Services Plan outlines our aspirations for the future delivery of health care to women and babies of the South Eastern Sydney Local Health District and beyond.

Deliver on The Royal's role as the statewide leader in developing, supporting and embedding a gender-sensitive approach in the development of research, education, training and clinical care in women's and newborn health care

Our plan takes account of changing health needs and aspirations, emerging health trends, and national and international best practice models of care and reflects an integrated care approach. It also projects future health service and infrastructure requirements to support women and babies and provide timely and appropriate care when needed.

The Royal Hospital for Women Integrated Health Services Plan is one of a suite of plans which also includes:

- *The Greater Randwick Integrated Health Services Plan*
- *St George Integrated Health Services Plan*
- *Sutherland Integrated Health Services Plan.*

The SESLHD *Journey to Excellence Strategy 2018-2021*, national and state strategic directions have informed these Plans.

Continue to develop partnerships, our people, infrastructure, systems and processes that will enable The Royal to meet the health needs of the women of NSW

Our community extends across NSW, reaching beyond Sydney into regional and rural NSW. Maintaining and building on relationships with community partners will be a key to the proposed models of care and to furthering the Royal as a leading light in women's health.

Our community partners include a range of non-government organisations providing health services, health information, social support and fundraising; shared care General Practitioners; the Central and Eastern Sydney Primary Health Network; and both private and public health service providers.

The Royal Hospital for Women Foundation is a key partner in how we connect and engage with our broader community as well as the fundraising role they provide. There is also significant opportunity to further relationships with consumers and carers during and following episodes of care in a truly participatory model of care.

Redevelopment and redesign of The Royal will enable the expansion requirements of key services such as the NICU, Birthing Suites and Breast Services, allow contemporary models of care, improve efficiencies and most importantly improve the experience of patients and their families. Consequently the consultations with clinicians have sought to gain their advice and opinions on necessary physical adjacencies and proximities and initial design features to support contemporary and emerging models of care. Capital implications are outlined in the Plan and specific requests of clinicians may be found within the consultation reports in the appendix.

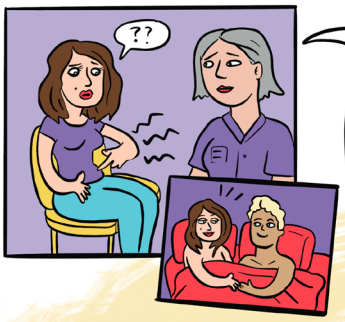
Recognise The Royal as a key partner on the Randwick Health and Education Precinct and an integral component of the Precinct's unique strengths in research, education and the delivery of care

The Royal Hospital for Women is a centre of excellence uniquely situated with the Sydney Children's Hospital, delivering specialist and complex care to women, babies and children with a well-established academic alliance with the adjacent University of NSW. This colocation means we attract renowned researchers and clinicians from a range of professional disciplines, to collaborate and deliver exceptional women's health care, shared interaction of research, education and current clinical problems with rapid translation of research results.

Along with our other precinct partners, we are driving an integrated, clinically driven approach to precinct planning, strengthened partnerships and collaborations in health, research and education and designing a healthy, green and welcoming place for staff, patients, families, visitors and the community.

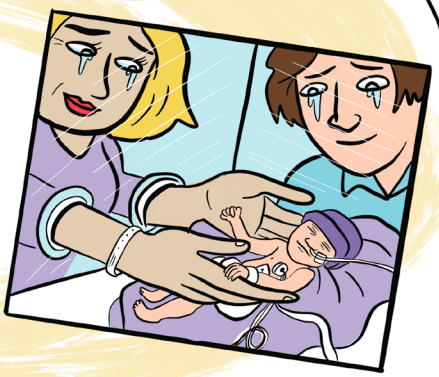
The NSW Government is investing in the Randwick Health and Education Precinct to create one of Australia's leading centres for health and wellbeing, committed to the integration of health, research, education and teaching to drive innovation, and become an economic powerhouse for Sydney.

My Life's Journey

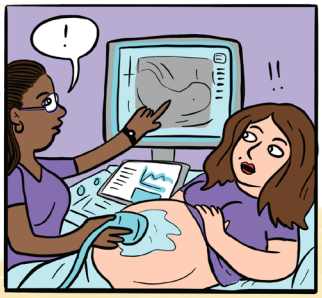


Reaching my teens, The Royal "online" helped me find out my period pain and pain with sex is not normal - and how to seek help. My GP referred me to the Adolescent Gynaecology team - pain improved and my relationships and sexual health also improved.

This is me in the NICU, born at 26 weeks. Family Integrated Care meant that my parents were guided by neonatal experts to look after my changing needs as I grew over the next 14 weeks.

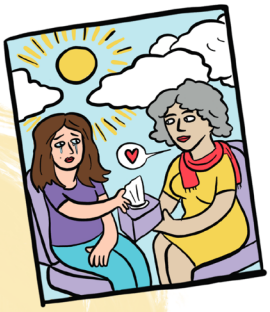


I'm pregnant and refered to Maternal Fetal Medicine. I learn that my son has a congenital diaphramatic hernia. My midwife and the holistic model of care helps me through my PREGNANCY.



The Royal's preventative health care model promotes positive mental, physical and pelvic floor health during my pregnancy.

It was a tough time for me with birth trauma. A multi-disiplinary team of PSYCHOLOGISTS and PHYSIOTHERAPISTS coached me through my anxiety and physical recovery.



Now in my 40's... What is that lump in my tummy? The big C - OVARIAN CANCER.

My son had a successful surgery, and EXPERT care in the Newborn Care Centre meant we could go home earlier than EXPECTED.

Recovering after surgery and chemo, I went through EARLY MENOPAUSE.

The Royal's personalised exercise and lifestyle program helped support my sense of SELF, improved physical symptoms, anxiety and quality of life... and REDUCED the risk of OSTEOPOROSIS.

Thank you Royal Hospital for Women for a LIFETIME of SUPPORT!

1. The case for change

1.1 SESLHD Journey To Excellence

The ***SESLHD Journey to Excellence Strategy 2018-2021***[1] has a strong focus on better value care and "predictive, preventive, personalized and participatory" care. The Royal, as a SESLHD service, enacts this approach:

- Our first focus is strong, healthy communities where people with the right skills, knowledge, motivation and resources can look after many aspects of their own care, especially if they have long-term health conditions
- We will make sure people can make sense of the different services and support for their needs and their circumstances. We must make it easier for people to find and access the care and support they need
- Person-centred – designing care around and with people, so that their needs and their experiences are at the centre of how we think, how we plan, how we design our services, how we invest and how we deliver care
- Making sure we care for and support people in, or close to, their homes so they can stay as independent as possible for as long as possible
- Making sure our hospitals remain world-class but that we think beyond their walls to address the deeper challenges of health and wellbeing for and with the community
- Increase the number of hours given back to patients and the community e.g. reduce waiting times/reduce number of visits
- Shift care into the community or outpatient settings.

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.

FIGURE 1: FIVE PRIORITY AREAS

1.2 Value based care for women – What matters to them

Value based care is one of the key priorities for NSW Health, measuring value in terms of the Institute for Healthcare Improvement Quadruple Aim of health outcomes, experience of patients, experience of providers and effective and efficient care. In this context, health outcomes are defined as the outcomes that matter to patients. A key goal is to improve value for patients and in doing so, unite the interest of all health care system stakeholders.

Consultations undertaken in the development of this Plan and the *SESLHD Women's Health Strategy 2018* identified opportunities to improve access, safety and quality of care for women living in the District. These included:

- supporting implementation of models of clinical practice, assessment, diagnosis and treatments that are applicable to women
- developing models of care to deliver trauma informed care
- increasing health literacy for consumers
- facilitating improved access for women experiencing additional vulnerabilities, for example, poverty, homelessness, mental illness, and disability, victims of domestic and family violence and/or sexual assault, carers
- encouraging culturally appropriate access in mainstream services, especially for Aboriginal women and women from culturally and linguistically diverse backgrounds, for example, by increasing the numbers of bilingual, bicultural and cross-cultural workers
- using gendered data to make decisions about clinical planning.

To better understand the needs of women, The Royal has a Community Advisory Committee which meets regularly and has representation on the SESLHD District Consumer and Community Council. Members of the Committee have actively participated in the development of this Plan. There is opportunity to strengthen this committee and their role in co-producing the forward service development initiatives identified in this Plan.

The Royal Hospital for Women Foundation has successfully engaged former patients and community members in fundraising as well as pro-bono work and advocacy resulting in improvements in health care provision. An example of this is Mackenzie's Mission, where the parents influenced the Federal Minister for Health to invest millions towards pre-conception genetic testing becoming increasingly available to all couples.

At The Royal, a person-centred and compassionate approach is embedded in our culture, placing the woman at the heart of everything we do and involving her partner and family as much as possible and within her wishes. This is evident in conversations with staff, in stories heard by The Royal Hospital for Women Foundation, in the interviews with former patients conducted in this service planning and in patient surveys such as the NSW Health Bureau for Information's (BHI) *Healthcare Observer patient surveys*.[2]

We are doing well in providing better value care for women. We can always do better.

The BHI *Maternity Care Survey Results for Jan- Dec 2017*, provides insight from a sample of women (38%) about their overall experience of care as well as maternity-specific care across the continuum from antenatal care through labour and birth to follow up care after leaving the hospital.

The Royal performed at the level of its peer group across all elements of the survey. In relation to its own performance over time, The Royal maintained our positive ratings across all elements of the survey and demonstrated significant improvement in the following specific elements:

- shortly after the birth a health professional spoke with patient about how the birth had gone (67% in 2015 to 81% in 2017)
- patient felt involved in discharge decisions (65% in 2015 to 75% in 2017).

The Royal rated significantly more highly than NSW for:

- First antenatal appointment at less than 14 weeks
- Less than 30 minute wait for antenatal check ups
- After the birth, health professionals taking care of you were kind and caring

Areas for improvement:

- 72% of respondents had a follow-up appointment with a midwife or nurse in the first 2 weeks after arriving home, compared to 86% for NSW
- Other areas, while not significantly different from NSW responses, that were less positive than the NSW average include:
  - 50% of respondents said they were you given enough information about caring for themselves and their baby at home before leaving hospital
  - 63% rated the care they received in the first two weeks after arriving home from the hospital as very good
  - 69% said that health professionals discussed the importance of healthy weight gain [at antenatal check-ups]
  - 53% said that health professionals discussed their worries or fears with them [at antenatal check-ups].

The BHI *Adult Admitted Patient Survey Results for Jan- Dec 2017*, which surveyed a sample of women who were admitted to The Royal in 2017 (including maternity services) reflects the overall experience of women with an inpatient admission:

- 76% of respondents rated the care they received as very good
- 78% rated the doctors who treated them as very good and 84% rated the nurses who treated them as very good
- 87% would speak highly If asked about your hospital experience by friends and family 90% felt they were treated with respect and dignity while in the hospital.

Areas for improvement include:

- 25% of respondent's discharge was delayed on the day of discharge, with 65% of those delays due to waiting to see a doctor
- 31% of respondents had to wait more than 4 weeks to see a specialist for planned surgery
- 22% of respondents were not told of potential side effects of medication.

1.3 The Royal's leadership in the First 2000 Days

Evidence shows there are a number of interventions that represent 'best buys' in the first 2000 days of life. Quality and universally available antenatal care is one of the core evidence-based interventions. The emotional and physical care of a pregnant woman has been shown to have a significant impact on mother and baby outcomes. Pregnancy is an important time for identifying the exposure of parents and carers to stressors, and targeting interventions to those who need them.[3]

Within *The First 2000 Days Framework*, reference is made to a review of evidence on the first 1000 days by The Australian Centre for Community Child Health, Murdoch Children's Research Institute which demonstrated that:

- the social and environmental conditions in which families are conceiving and raising children have a direct impact on child development
- developmental plasticity is at its greatest during the first 1000 days
- while experiences during the first 1000 days have deep and long lasting effects, it is never too late to make changes to improve health and wellbeing
- optimal early childhood development is achieved by an integrated and holistic approach to policy, programs and services
- biological events during fetal and early life predispose a child to a great risk of physical and mental health problems as an adult.

The Royal Hospital for Women has a leadership role in preconception, maternity and newborn care. This contributes to a broader state and district-wide range of population, community and clinical strategies across the First 2000 Days.

Maternity services at The Royal believe that pregnancy and birth are normal life events. The services aim to promote a nurturing environment for women and their families focusing on healthy, positive experiences throughout pregnancy, birth and the early parenting journey. Staff are committed to providing care that is tailored to individual needs.
An exemplary range of models of care is provided for women, leading practice change in NSW. These are enhanced by access to specialist services at The Royal in Fertility, Maternal Fetal Medicine, Obstetric and Internal Medicine, pain and pelvic floor and Newborn Care. Further developing the options for maternity care in the community and the capacity of the Newborn Care Centre will optimise outcomes and the experience of women and their partners, and ensure children have the best start in life.

The First 2000 Days strategy implementation within SESLHD will provide The Royal with an opportunity to strengthen and further develop current models of care, particularly through enhanced collaboration with community based services and other services involved with social care.

Pregnancy provides a unique opportunity to promote good health and wellbeing for women and their families and to prevent the development of chronic conditions during pregnancy and later in life. For example, antenatal care including smoking cessation, the prevention of or early intervention for pelvic floor disorders, gestational diabetes mellitus, mental health disorders, substance use disorders, overweight and obesity and musculoskeletal pain disorders adds significant long term value to the routine care provided to women during pregnancy.

1.4 Women's health priorities across life stages

Women represented

51%

of the total population of the South Eastern Sydney LHD in the 2016 census

Women represented

50.5%

of the total population of NSW in the 2016 census

13% were aged between 15 and 25 years,
33% between 25 and 45 years,
23% between 45 and 65 years, and
16% were aged over 65 years

12.5% were aged between 15 and 25 years,
28% between 25 and 45 years,
25.8% between 45 and 65 years, and
16.6% were aged over 65 years

There are proportionally more women between 25 and 45 years of age within SESLHD than the NSW average. Other age groups are similar, which suggests that life stage planning for these cohorts in SESLHD will be relevant to the broader trends of our state wide community. SESLHD's demographic ranges from very wealthy to pockets of significant disadvantage, has a significant Aboriginal population and diversity (as outlined in section 1.5).

A life stage approach to health care recognises that women and girls can experience a range of diverse health needs and risks across their lifespan, for example young women and risky behaviour, mid age women and sexual and reproductive health, and older women and recognition of how social isolation, caring roles and financial insecurity can impact on health.

In addition, a life stage approach supports "joined up" services across departments, services and settings to enable integrated care across health disciplines and the health care continuum. This approach differs from current services structures at The Royal and will require involvement and commitment of clinicians, managers and consumers in the re-design of models of care and work flows.

General health trends, such as population ageing, increasing incidence of obesity and diabetes, and more people living with long term conditions, impact women as parents, carers and as individuals, and impact differently across life stages, requiring a variety of approaches and interventions.

Young Women

Child Bearing Years

Middle Years

Older Women

1.4.1 Young Women

There are 486,139 women aged between 15 and 24 in NSW. Of these, 28,923 are residents of the local catchment areas of Waverley, Woollahra, Sydney (inner and East), Randwick and Botany local government areas (ABS Census 2016). This is 50% of the SESLHD population in this age group. Four hundred and sixteen women identified as Aboriginal and Torres Strait Islander. We know that many more young women travel into the area for university and work, making The Royal more convenient to access and offering a full range of women's health services.

Key priority groups of young women for The Royal, identified by stakeholders in both the SESLHD Women's Health Strategy and this Royal plan consultations were:

- international students
- young mothers (before and after birth)
- socially isolated young women and those experiencing poverty
- young carers
- young women with intellectual disability
- young women who experienced childhood trauma, those experiencing intimate partner violence, refugees
- young women experiencing chronic and complex health conditions.

The Royal has expertise in researching and providing contemporary services for women on issues that matter to them and often go unrecognised elsewhere, such as pelvic pain, endometriosis and pelvic health. Early intervention with young women has long-lasting effects on their health and wellbeing. In Australia the prevalence of pelvic pain is significant with 60-90% of women reporting dysmenorrhoea, 1 in 6 reporting sexual pain, and 1 in 5 experiencing chronic pelvic pain[4]. Dysmenorrhoea is the main reason for missed school or work in young women and in this way is the most significant social, health, education and financial inequity that young women and girls face early in life.[5] Sexual pain and dysfunction has been reported to be as common as 1 in 3 young women[6] and contributes to difficulties with pregnancy conception. Promoting sexual and pelvic health for women in our community is important for early management and prevention of these significant health concerns, which are specific to women.

Endometriosis is a common yet frequently under-recognised chronic disease, which impacts significantly on school and work. The National Action Plan for Endometriosis,[7] launched in December 2018, reports: 1 in 10 women suffer from endometriosis; up to 1 in 3 women with endometriosis have fertility problems; the average delay between onset and diagnosis is 7 to 12 years; women and girls who have close relatives with endometriosis are up to 7-10 times more likely to develop it.

In Australia young women aged 18 to 24 are more likely to experience physical or sexual violence than women in any other age group. The incidence of sexual assault for women aged 18 to 24 is twice as high as for all women. Young women may be overlooked as possible victims of gendered violence because they may be experiencing intimate partner violence but not in a 'domestic' situation, or may be experiencing violence at school or work, and/or from peers.[8]

In Australia in 2011, women aged 18-34 were the group most likely to access specialist homelessness service.[9]

In SESLHD in 2016, 4917 people aged between 15 years and 24 years were providing unpaid care to a person with a disability (2016 Census).

1.4.2 Women in the childbearing years

Equipped with more information and a higher level of health literacy, many women will expect to be more active participants in their care journey during their reproductive years. Less accepting of a 'one-size-fits-all' approach, women will want services to be tailored to their individual and family circumstances. This includes reproductive choices about the decision to have a child, preparation for pregnancy, care during pregnancy and birthing choices.

A world-first randomized controlled trial[10] comparing continuity of midwifery care throughout pregnancy with standard public hospital care, found that caseload midwifery reduced interventions in birth and reduced costs. The Midwifery Group Practice model of care, in which the Royal is a national leader, is also supported by overwhelming patient and family satisfaction.

Pre-conception care, a growing area of practice, addresses risk factors prior to pregnancy, lifestyle modifications, genetic counselling, and can be delivered in partnership with General Practitioners (GPs).

Infertility rates and pregnancy complications are expected to rise due to a continued increase in obesity rates and advanced age of first-time mothers. The Royal has the highest rate of older first time mothers in Australia and the highest number of over 40 year olds having their first baby.[11]

During pregnancy, the prevalence of pelvic floor disorders increases, with up to 60% of women reporting urinary or anal symptoms.[12] This increases further following childbirth with up to 90% of women reporting at least one pelvic floor symptom at 6 weeks postpartum.[13] Pregnancy, childbirth and parity are risk factors for pelvic floor disorders later in life[13] and as such, the childbearing years provide a unique opportunity to improve the pelvic health of women both during this time and later in life. Level 1 evidence and Grade A recommendations exist for antenatal pelvic floor muscle training to prevent pelvic floor dysfunction postpartum.[14] Other significant health concerns during pregnancy include gestational diabetes mellitus, musculoskeletal pain disorders and overweight. These conditions may persist following pregnancy, contributing to chronic disease over the life course.

Women are at increased risk of experiencing mental ill-health during pregnancy and the year following childbirth.[15]

Issues of fertility, reproduction and pregnancy bring women who may not have sought advice or care for other health conditions (including mental health, intimate partner violence, drug and alcohol use, breast and bone health) into contact with The Royal. The Royal is uniquely placed to engage holistically with women about other health and related issues during their reproductive care and can provide multidisciplinary care options and expertise not available elsewhere.

Maria is a 31 year old woman from a CALD background who has an unplanned but wanted pregnancy, though her partner already has children and is not supportive of the pregnancy.

With a long history of mental health issues and currently taking antidepressants and mood stabilisers, Maria is concerned about the health of her baby. She contacted the MotherSafe phone line on 4 occasions with an increasing list of questions about the impact of exposures including beauty treatments such as eyelash extensions. After an extensive face to face consultation, Maria was referred to a psychiatrist for ongoing management.

1.4.3 Women in mid-life

From the late reproductive years leading up to menopause, many women experience hormonal changes affecting their ovaries, breasts and bones. Together with symptoms associated with ageing and lifestyle factors, women may be at risk of adverse health outcomes or, conversely, are likely to experience healthy aging. The Royal has led clinical care of symptoms and management of conditions significantly affecting women in mid-life (such as menopause, breast and gynaecological cancers) and seeks to continually improve as this cohort grows.

In SESLHD, 23% of women are aged between 45 and 65 years, and looking to the future, this age cohort represent a higher proportion as the cohort between 25 and 45 years is 33% of the female population. In the local catchment for The Royal, 41,389 women residents are between 45 and 65 years. Across NSW there are 967,016 women in this age group, comprising 25.8% of the female population (ABS 2016 Census).

Health considerations for women following menopause include the increasing prevalence of pelvic floor disorders to between 30-50%[16] ; experience of urogenital atrophy/syndrome of menopause, vasomotor symptoms and sexual dysfunction[17] ; and increased risk of cardiovascular and endocrine conditions, namely heart disease, diabetes and osteoporosis.[18] Physiological changes during this life stage affect the life of a woman permanently and carry significant emotional, psychological, social and physical burden.[18] Integrated services to support women post menopause have been identified as important considerations in the improvement of healthcare services for women.

Menopause transition can affect women's physical and mental health and increases risk for future cardiometabolic health.[18]

Breast cancer and gynaecological cancers such as endometrial cancer (the most commonly diagnosed gynaecological cancer in developed countries) and ovarian cancer are of significant concern for women between 50-70 years.

Whilst it can occur at any age, the incidence of breast cancer increases significantly in women over 40 years (125 per 100,000 population), peaking in the 65 to 69 years age group (422 per 100,000 population).[19]

SESLHD residents experience higher rates of breast cancer when compared to NSW.[20] Despite the profile of breast cancer in the media, data recently released by the Cancer Institute NSW shows 45,895 women aged 50 to 74 in the South Eastern Sydney region are either overdue for a mammogram or have never had one.

1.4.4 Older Women

In 2016, there were 27,881 women over the age of 65 years living in the local catchment, this being 40% of the women residing in SESLHD. Statewide, there are 649,936 women in this age cohort (ABS Census 2016).

Older women outnumber men in SESLHD, with 55% of the population over the age of 65 being women, and 64% of the population over 85 years being women. By virtue of these numbers, The Royal has an increasingly important role as women enter older age.

Stakeholders identified the following groups of older women as particular priorities: [21]

- those at risk of falls
- older women living with dementia
- older Aboriginal women (older than 45 years)
- those experiencing or who have experienced trauma, violence and abuse
- older LGBTIQ people
- older women living alone
- older women experiencing homelessness.

Across Australia 87% of women aged 65 and over have a chronic disease, with Aboriginal and Torres Strait Islander women experiencing higher rates of comorbid conditions including diabetes, cervical and ovarian cancers.

There are specific health concerns such as incontinence and osteoporosis, which are more prevalent for older women than older men.[22] Four times more women aged 50 and over have osteoporosis or osteopenia than men of the same age.[23] The Royal has, in response, developed programs specifically to address this.

Managing more than one chronic condition is also more common in women than in men.[24] Falls, fracture and incontinence increase the likelihood of admission to hospital and residential care for older adults. Falls are common in 30% of adults over 65, nearly 1 in 4 women may have osteoporosis and minimal trauma fracture is experienced in up to 40% of women over 50.[25,26] Nocturia, or getting up more than once to the toilet overnight, and urinary incontinence are common causes of falls in older adults. 50% of older women experience nocturia and the experience of nocturia alone has an associated increase in mortality risk.[27] Lung, breast and bowel cancers, alongside coronary heart disease, are the leading causes of fatal burden for older women.

Vulnerable populations include older Aboriginal women (45 years and older), older women from Culturally and Linguistically Diverse (CALD) backgrounds where language or cultural norms are a barrier to accessing services. Homelessness is an increasing issue for older women.[28]

1.5 Achieving equitable care across women's life stages

Ensuring our services are culturally sensitive and responsive to the often complex needs of women and their families identified as "priority populations" is an ongoing priority for The Royal. Identified across national, state, and SESLHD women's health frameworks and strategies, achieving equitable health care between and within population groups is a clearly stated aspiration. In SESLHD, a clear strategic direction is working together to improve equity in health and wellbeing, with a focus on those who need it the most.[29]

Equitable care across women's life stages means taking into consideration that:

- each individual has unique and often complex health needs, shaped by the context in which they live
- women and girls are diverse in age, social and economic circumstances
- the type of work undertaken (paid and unpaid), culture, language, education, beliefs, spirituality and a range of other factors can influence health behaviours and outcomes
- sub-groups within the priority populations are not homogenous groups, with individual, social and cultural contexts shaping distinct health needs
- through targeted health program design, education and service delivery focusing on the particular needs and circumstances of priority groups of women and girls, there is substantial scope to improve health equity among all women and girls and across the whole population
- we refocus our work to better address the social determinants of health and wellbeing
- we invest to provide more care in the community and more prevention and wellness programs.

While it is recognised that "there have been improvements in the lives and health of women and girls in Australia over the last decade, with a reduction in smoking and alcohol consumption and in death rates from some cancers, many women remain disadvantaged, with greater health needs, lower access to quality health care and poorer health outcomes".[30] It is further recognised that many women and girls fall into more than one of the identified priority population groups and this can have a compounding effect on health needs and outcomes.

Information about priority populations we encounter in SESLHD has been informed by the SESLHD *Women's Health Strategy 2019*.

1.5.1 Women who experience disadvantage and other vulnerabilities

Women and girls in socioeconomically disadvantaged and marginalized groups continue to experience poorer health outcomes than the general population.[31]

Women continue to earn less than men. In 2016 in SESLHD, 11.8% of women had nil income compared to 8.6% of men and 37.4% of women had a total personal weekly income of under $499 compared to 26.8% of men. Women were underrepresented in the top personal income brackets of $3,000 or more per week compared with men (3.4% compared with 8.8%). The Local Health District (LHD) has pockets of significant disadvantage, especially in areas of Botany, Rockdale, Kogarah and Hurstville.

The key groups of women identified as experiencing high levels of disadvantage were:

- women experiencing socioeconomic disadvantage – in addition to the known health impacts of socioeconomic disadvantage, including poorer health, increased risk of chronic diseases and shorter lifespan, the impacts of socioeconomic disadvantage experienced by women are more likely to include immediate and long-term effects for their children
- women experiencing homelessness - without an effective homelessness health response in the long term the health risks of women experiencing homelessness increase as they continue to cycle between a broad range of health and other services

- women experiencing social isolation – socially isolated women are often older, and are at increased risk for cardiovascular disease, cognitive deterioration, mental health issues and earlier death
- women carers – women are more likely to be carers and in addition to increased socioeconomic disadvantage, tend to experience greater risk of social isolation, depression and stress related to their caring role. This is exacerbated by cultural expectations for women from Aboriginal families and culturally and linguistically diverse families.

1.5.2 Aboriginal women

"Because of her, we can"

The theme of NAIDOC week 2018 reminds us of the pivotal role that Aboriginal and Torres Strait Islander women have in their communities. In order to thrive, to be healthy and well, women's voices need to be heard and women's business and women's health regarded.

In 2016, the ABS recorded over 8,200 people (4,140 female) identifying as Aboriginal and/or Torres Strait Islander in the area covered by the SESLHD.[32] Although there is an identified community of Aboriginal women living in La Perouse it is important not to ignore the significant numbers of Aboriginal women living in other areas in the SESLHD, especially Sutherland, and Sydney City LGAs.

Aboriginal women experience higher levels of domestic and family violence than non-Aboriginal women.[33] They participate less in cancer screening programs and have higher rates of cervical and ovarian cancers than non-Indigenous women.[34] They generally experience poorer access to health care services. Aboriginal women experience poorer outcomes for a range of conditions than non-Aboriginal women, for example diabetes,[35] ischaemic heart disease, other cardiovascular conditions[36] , and breast cancer.[37]

Aboriginal people represent

1%

of the District's population

50% of these are women

Although there is a large Aboriginal community in the La Perouse (Botany Bay) area, the largest number of Aboriginal women live in the Sutherland LGA followed by the Randwick and Sydney City LGAs

The smoking rate among Aboriginal people is higher than that of the general population. Aboriginal young people take up smoking at substantially higher rates than their non-Aboriginal counterparts and begin smoking at an earlier age. Factors that influence smoking prevalence among Aboriginal people include low socio-economic status, marginalisation, normalisation of smoking within their community, and stressful life circumstances.[38]

Despite an increase in life expectancy, Aboriginal women will still die earlier (approximately 10 years) than non-Aboriginal women.[39] Trans-generational trauma impacts on individual Aboriginal women and their communities. It is built on intergenerational experience of historical violence and racism, removal of children, child abuse, experiencing or witnessing violence, poverty and social exclusion. For Aboriginal women intergenerational trauma can lead to severe mental health effects, including anxiety and depression and post-traumatic stress (PTS).[40] A trauma-based approach to care is especially important in Aboriginal health care.[41] This should include an approach to working with Aboriginal women based on cultural safety, addressing long standing issues of trust.

Aboriginal women, including older Aboriginal women may take a carer role with grandchildren, children, partners or extended family. Aboriginal people living with disability and their carers face additional challenges related to socioeconomic disadvantage, and cultural perceptions of disability that may limit carers asking for and/or receiving adequate support.[42]

The *National Women's Health Strategy 2020-2030* acknowledges that the life course for Aboriginal and Torres Strait Islander women and girls is different from non-Indigenous women and girls. Cultural determinants of health are important for Aboriginal and Torres Strait Islander women and girls, as a 'strong connection to culture is strongly correlated with good health, through strengthened identity, resilience and wellbeing'.

1.5.3 Women from culturally and linguistically diverse backgrounds

Migrant and refugee women are at greater risk of suffering poor maternal and child health outcomes than other women.[43]

For SESLHD, the country of birth for the highest proportion of recent arrivals was China. Excluding England and Ireland, the next highest cluster was Nepal, India, New Zealand, Indonesia, and Philippines. Stakeholders identified the following higher priority groups of women:

- Asylum seekers and refugees
- Newly arrived women with acute trauma needs
- Pregnant women and mothers
- Socially isolated women
- Women with poor health literacy
- New and emerging communities
- International students.

Differing cultural beliefs regarding health, illness, self-care and experiences with health services, prevention and treatment can lead to varying understandings of the health system and present challenges for women in accessing health care.[44, 45, 46, 47,48] This can be compounded by language barriers and poorer levels of health literacy. At key points in women's lives, for example pregnancy and giving birth, some cultural groups experience high levels of stress due to severed connections with family, village and community. Some women seeking asylum and international students are Medicare ineligible and face additional challenges in accessing appropriate and timely health care for themselves and their families.[49]

31.1%

of women in SESLHD were born in a mainly non-English speaking country

In 2016, the majority of women who were born overseas in non-English speaking countries were from

China (8%) followed by **Philippines** (1%), **Indonesia** (1%), **Greece** (1%), **India** (1%), **Nepal** (1%) and **Thailand** (1%)

LGAs with the highest number of women born in China were

Georges River, Randwick and Sydney City.

More women (6%), than men (5%) reported being "not at all" or "not well" proficient in English

1.5.4 Lesbian, Bisexual, Gay, Transgender, Queer and Inter-gender people

Members of the LGBTQI community experience higher levels of depression, anxiety and affective disorders than their peers. [50]

Being gender sensitive and aware of the emerging needs of LGBTQI people, such as improving access, inclusive practices, language used, form design, surrogacy are priorities for The Royal given its proximity to the residency of a significant proportion of the LGBTQI community and to key community based services such as the Albion Centre and Kirketon Road Centre.

> ***"We had a calm birth at The Royal with delayed cord clamping as we wanted. Midwives were amazing and we were impressed with the care. My partner is non-binary and transitioning female to male. Their comfort was as important as mine."***

LGBTQI people experience stigma and discrimination across all life stages. LGBTIQ people are more likely to experience poorer mental health and to use health services more often than solely heterosexual women.[51] They are less likely to participate in some forms of cancer screening, especially cervical cancer. Stakeholders advise that health services do not generally have systematic and appropriate processes for responding to LGBTIQ people with health needs. Tracking LGBTIQ people through our health systems is difficult because this is not generally asked about during routine assessments.

This priority group includes lesbians, female-identifying individuals and individuals assigned female at birth and may include transgender men and women, intersex, non-binary and gender diverse people.

Analysis of the 2016 census by the ABS concluded that Australian families are characterised by increasing diversity - including a rise in the number of same-sex couple families. Information on same-sex couples living together, within the same household, has been collected since the 1996 Census however data is not captured for relationships which extend beyond the household and some sex or gender diverse people may not be represented in data on same-sex couples.

There has been a 39% increase in same-sex couples living together in Australia from the 2011 to 2016 census, with a total of 46,800. Younger people accounted for almost all of the increase. Forty-nine percent of the total were female same-sex couples. Same-sex couples were more likely to live in capital cities than outside capital cities and the proportion of same-sex couples was highest in Canberra and Sydney (1.4% and 1.2 % respectively). Both male and female same-sex couples tended to live in inner-city suburbs of capital cities, though female same-sex couples tended to be more geographically dispersed and less concentrated than male same-sex couples. Yet seven of the top ten suburbs for female same-sex couples were in inner Sydney. In 2016, almost three quarters (73%) of people in same-sex couples were aged less than 50 years old, compared with 53% of people in opposite-sex couples.

Like the majority of Australian families (95%), most same-sex couples lived in a single family household (98%).
The proportion of same-sex couple families with children increased from 12% in 2011 to 15% in 2016. Female same-sex couples were more likely to have children than male same-sex couples and in 2016 one quarter (25%) of female same-sex couples had children, compared with 4.5% of male same-sex couples. Close to 55% of opposite-sex couples had children. Lesbians or gay men who are lone parents are not identified in Census data although they would be included in the total counts of lone parents. Other aspects of parenting such as parents who are not usually resident in the same household as the child are not captured in the Census.[52]

> ***"A queer couple went through the midwifery practice and really spoke highly of The Royal, so we booked in and it felt exactly the right decision. Antenatal care was exceptional and the continuity of care to community nurse and mothers' group was really great. The midwives are really well trained in being inclusive and we never felt any animosity. In a utopian world, it would be good to connect with other families in the same position at the same time in the local area"***
>
> Lesbian couple

1.5.5 Women affected by or experiencing mental health problems or mental ill health

While good mental health is essential to the overall health of both men and women, women experience some mental health conditions at higher rates than men.

Mental health disorders represent the leading cause of disability for women in Australia. 43% of women have experienced mental illness at some time.[53]

In 2014-15, 13.5% of Australian women reported experiencing high or very high levels of psychological distress.

Around 1 in 5 women in Australia will experience depression and 1 in 3 women will experience anxiety during their lifetime. Women also experience post-traumatic stress disorder (PTSD) and eating disorders at higher rates than men.[54]

Anxiety and depressive disorders lead the cause of disease burden in adolescent and young women and adult women up to 44 years.[55]

Depression and anxiety can affect women at any time in their life but there is an increased chance during pregnancy and the year following the birth of a baby. Up to 1 in 10 women experience depression while they are pregnant and 1 in 6 women experience depression during the first year after birth. Anxiety conditions are thought to be as common with many women experiencing both conditions at the same time.[56]

For women, prevalence of psychotic illness is more even across age groups than for men, with almost 3 cases per 1,000 population in those aged between 25 and 54 years.

According to The Royal's Director of Perinatal and Women's Health, over 20% of the women attending The Royal's maternity or Newborn Care Centre have a significant past mental health history, about half of whom (400/annum) will need review by the Perinatal Mental Health Clinical Midwifery Consultant (CMC). Of these, about half (200/annum) in particular those women with multiple complex psychosocial issues (substance misuse, domestic violence (DV) or child protection) will be referred to the perinatal Mental Health clinic for a psychiatric assessment.

Over the last 15 years, The Royal has been seeing an increasing number of women with complex mental health and psychosocial issues: from 5.3% identified using the Antenatal Risk Questionnaire (ANRQ) tool in 2003, to approximately 8% in 2017 (using the ANRQ-Revised in the Perinatal Integrated Psychosocial Assessment (PIPA) study sample). Many of these women need longer term therapy and multidisciplinary team involvement especially where there are child protection or substance use issues. This increased complexity has highlighted the need for increased levels of mental health staffing and expertise.

The Royal's Foundation has recently committed funding for a full-time psychologist (for three years starting 2019) to provide outpatient counselling to our more complex perinatal clients.

There is an identified need to develop additional targeted programs to address the specific mental health care needs of women and girls, and a priority to: **"Emphasise prevention and early intervention in mental health and wellbeing, focusing on perinatal mental health, including mental health care for those who have experienced miscarriage or stillbirth."** [57]

Mary's Story

Mary is a 38 year old with a history of developmental trauma. After several miscarriages her IVF twin pregnancy came as quite a shock and she expressed concerns to antenatal staff on how she would cope, as she and her partner John had no supports and were financially stressed.

Over the course of the pregnancy Mary and John discovered that one of the twins was not growing at the expected rate. As the pregnancy progressed Mary became increasingly anxious, requesting weekly ultrasounds, and needing intensive reassurance from MFM staff and the obstetrician. Mary's behaviour became concerning for MFM staff and so psychiatry (Perinatal and Women's Mental Health) were called in to consult and help with a management plan.

Mary was diagnosed with severe anxiety disorder with personality vulnerabilities, but declined medication or counselling.

When Mary delivered her twins by elective caesarean, one twin was very growth retarded and the other healthy. The small twin went to the Newborn Care Centre (NCC) and progressed well however Mary and John remained concerned. They wanted the baby to be kept in the NCC much longer than staff felt was needed, mainly because Mary was not coping with the healthy twin at home, and couldn't imagine how she would care for both twins.

Mary's anxiety increased and her behaviour became a challenge for the staff caring for the small twin.

Multiple case conferences were held, and staff from the Perinatal and Women's Mental Health Unit were again involved to develop a management plan that included reassurance and behaviour modification. Staff were also provided with support.

Mary and John's small twin soon joined his family at home. The Perinatal Mental Health Outreach followed up with Mary at home and continued to do so for the next 6 months, providing anxiety management skills and facilitating the engagement of additional services to support her.

1.5.6 Women affected by substance abuse

Women face unique issues when it comes to substance use, in part influenced by differences based on biology and on culturally defined roles for men and women.

We know that:

- Women often use substances differently than men, such as using smaller amounts of certain drugs for less time before they become addicted
- Women can respond to substances differently. For example, they may have more drug cravings and may be more likely to relapse after treatment
- Sex hormones can make women more sensitive than men to the effects of some drugs
- Women who use drugs may also experience more physical effects on their heart and blood vessels
- Brain changes in women who use drugs can be different from those in men
- Women may be more likely to go to the emergency room or die from overdose or other effects of certain substances
- Women who are victims of domestic violence are at increased risk of substance use
- Divorce, loss of child custody, or the death of a partner or child can trigger women's substance use or other mental health disorders
- Women who use certain substances may be more likely to have panic attacks, anxiety, or depression
- Women themselves describe unique reasons for using substances, including controlling weight, fighting exhaustion, coping with pain, and attempts to self-treat mental health problems.[58]

Of particular concern to The Royal, in a national household survey in 2016:

- Between 2013 and 2016, the proportion of pregnant women abstaining from alcohol slightly increased from 53% to 56% but this rise was not statistically significant
- Of pregnant women who were unaware of their pregnancy in 2016, fewer consumed alcohol before they knew they were pregnant (declined from 56% in 2013 to 49% in 2016) but a similar proportion drank alcohol after they knew they were pregnant (about 1 in 4 in both 2013 and 2016)
- About 1 in 6 (15.7%) women smoked tobacco before they knew they were pregnant, and this dropped to 1 in 10 (11.3%) after they found out they were pregnant (no change from 2013)
- A small minority had used illicit drugs; 3.1% used an illicit drug before knowledge of their pregnancy and 1.8% used illicit drugs after they knew they were pregnant (similar proportions to 2013).[59]

"Substance use during pregnancy can be risky to the woman's health and that of her children in both the short and long term. Most substances, including alcohol, opioids and stimulants, could potentially harm an unborn baby. Use of some substances can increase the risk of miscarriage and can cause migraines, seizures, or high blood pressure in the mother, which may affect her fetus. In addition, the risk of stillbirth is 2 to 3 times greater in women who smoke tobacco or marijuana, take prescription pain relievers, or use illegal drugs during pregnancy.[59] Marijuana can result in smaller babies, especially in women who use marijuana frequently in the first and second trimesters.

When a woman uses some drugs regularly during pregnancy, the baby can go through withdrawal after birth, a condition called neonatal abstinence syndrome (NAS). Research has shown that NAS can occur with a pregnant woman's use of opioids, alcohol, caffeine, and some prescription sedatives. The type and severity of a baby's withdrawal symptoms depend on the drug(s) used, how long and how often the mother used, how her body breaks down the drug, and if the baby was born full-term or prematurely.

A substance use disorder involves using too much alcohol, tobacco or other drugs. It can also be called substance abuse, substance dependence or addiction.

The most commonly abused substances in Australia are tobacco and alcohol. Drug use disorders include the misuse of illegal drugs (such as cannabis and amphetamines) as well as the use of prescription medicines, like painkillers or sedatives, for non-medical reasons.

People who use illegal drugs have much higher rates of mental illness than the rest of the population. The most commonly used illegal drugs in Australia are cannabis, ecstasy, cocaine and meth/amphetamines.

1.5.7 Women experiencing domestic and other violence

Women who experience family and intimate partner violence are more likely to report poor mental health, physical function and general health than other women. [60]

One in three women have experienced physical and/or sexual violence and/or emotional abuse by an intimate partner since age 15.

As a woman-focussed facility, the Royal has a key role in identifying women and babies at risk or affected by violence and in providing a safe and supportive environment to prevent or reduce the impact on them.

Intimate partner violence is the greatest health risk factor for women aged 25-44[61]

Domestic and family violence has long-reaching effects on women and children and contributes significantly to the burden of disease for women. Australia's National Research Organisation for Women's Safety 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.[61] The research identifies the following impacts on women and children of domestic and family violence:

- Poor mental health
- Problems during pregnancy and birth
- Alcohol and illicit drug use
- Suicide
- Injuries
- Homicide.

In addition to these personal and familial impacts of reducing violence, addressing prevention of violence against women has major social and economic benefits.[62]

The following issues were identified by stakeholders consulted during the development of the SESLHD *Women's Health Strategy* in 2018:

- Violence against women in families from CALD backgrounds, including:
  - links between some cultural practices and violence against women
  - issues related to attitudes to male/female roles and accepted practices
  - issues specific to refugees, such as settlement and isolation
- Violence against women in Aboriginal communities and families, including:
  - issues linked to intergenerational trauma and loss
  - challenges in working with Aboriginal communities to change the drivers for violence
- Access to safe accommodation and support for women and children escaping violence, including:
  - same sex couples
  - women with male children
  - transgender women
- Access to services which are able to address complex needs, including mental health or drug and alcohol issues
- Violence against younger women, including
  - sexual assault
  - domestic and family violence
- Violence against older women, including:
  - sexual assault
  - violence by children against parents
  - elder abuse
  - ongoing domestic violence by a partner
- Sexual assault; including sexual assault of
  - women with disability
  - students, including international students
  - women living with mental illness and limited access to sexual assault forensics.

1.5.8 Women with disability

Women and girls with intellectual or other disabilities, and their carers, have higher risk of poor mental health, early onset of chronic conditions and social and economic disadvantage than the general population.[63]

In 2015 the number of people in SESLHD with disability was estimated at 100,350. The most common type of activities for which assistance is needed for people with a disability is assistance with health care (15.6%) followed by property maintenance (13.9%) and household chores (12.8%).

Women with disability experience poorer access to health care, are vulnerable to exploitation and abuse, are less likely to receive screening for breast and cervical cancer and are now potentially affected by changes to services available to them because of the National Disability Insurance Scheme (NDIS).

40%

of people with a disability in the SESLHD are living with a moderate, severe or profound disability and a significant proportion

37% of people with a disability are aged between 55 and 74 years old

1.5.9 Women as carers

Carers have higher risk of poor mental health, early onset of chronic conditions and social and economic disadvantage than the general population.[64]

LGAs where a higher proportion are providing unpaid assistance are Georges River, Sutherland and Rockdale. The weekly median income of primary carers aged 15–64 in Australia was 42% lower in 2015 than that of non-carers. Women carers report lower quality of life, higher levels of social isolation and higher rates of depression, anxiety and distress than male carers.[65]

Key priority groups of female carers identified by stakeholders included women transitioning from being carers to needing care, women caring for someone living with mental illness and young women as carers.

Across SESLHD in 2016,

10%

of the population over the age of 15 years were carers providing unpaid assistance

60% of the carer population are women

1.5.10 Women as parents

Becoming a parent is a significant transition in life. Although becoming a parent is considered a normal life event, it is a major life change, and brings with it new anxieties and issues.[66]

Women as parents may be expected to routinely balance work, home and other familial demands, sometimes leading to conflict and distress.[67] This may especially be the case with sole parents.[68] For women with additional vulnerabilities parenthood can be especially challenging. Depression is a risk for new mothers, with the following groups at higher risk:

- Young mothers
- Mothers from CALD backgrounds
- Mothers who did not complete high school
- Mothers with previous history of depression
- Mothers in poor quality relationships
- Mothers experiencing stressful life events.[69]

Women with children with special health needs experience poorer physical and mental health than the broader population.[70] There is however, evidence that mothers who can access parenting support, help with coping strategies and social connections experience lower levels of parenting stress.[71]

1.6 Randwick campus redevelopment

The Randwick campus redevelopment has created an opportunity to rethink the future of The Royal in the context of a world renowned academic health science centre, attracting and harnessing broad ranging clinical and academic expertise, as well as business and industry skills, to pioneer innovative and translational research for optimal patient care and population outcomes.

Building on our core strengths in women's health services, education and research in midwifery and obstetrics, maternal-fetal medicine, reproductive medicine, urogynaecology, gynaecological oncology and menopause, The Royal is uniquely placed to capitalize on its co-location with both adult and paediatric tertiary referral hospitals, a mental health service, three renowned medical research centres and a prestigious university to advance the scope and quality of knowledge and care provided to women and newborns in NSW and beyond.

The Royal relocated to the Randwick campus in 1997 and since then has had no significant capital investment. Current physical facilities are constrained in some areas and no longer support contemporary models of care.

Examination of critical clinical relationships on the campus has identified opportunities to leverage more integrated models of care through co-location and closer physical proximities to the Sydney Children's Hospital and shared campus services (Randwick Campus Redevelopment Clinical Services Alignment Brief).

As part of the Randwick Health and Education Precinct, the Royal is committed to overarching principles for the campus including:

- Commit to a generational opportunity for the future of the Campus
- Leverage the greatest collective benefit for partners and communities
- Be designed around people and places and not institutions, including the capacity of the built environment to facilitate the ways in which people interact
- Service models and models of care will be evidence-based (local, national and international), promote multidisciplinary care and facilitate integrated healthcare
- Pursue an increased depth of integration between clinicians, educators, researchers, academics and industry partners
- Be co-designed and coproduced with community members, staff and key partners
- Partners will engage in an open, transparent and collaborative manner and facilitate the interaction between healthcare, research and education
- Promote the best use of resources
- Provide and promote a healing, health promoting and ecologically sustainable environment
- Promote social connectivity with staff and the broader community.

1.7 Activity at The Royal

Activity patterns across The Royal reflect its role servicing the local population as well as its statewide leadership in women's and newborn health care. Decline in activity in some areas has been offset with a need to manage increased complexity in the multidisciplinary care provided for women and newborns from across NSW.

These specialised activities are seen in the following examples.

Maternal care for known or suspected foetal problems is highest of the antenatal separations (at 22%)

Higher proportion of surgically complex caesarean deliveries than peers (17% vs 10%)

Improved survival of the very sick newborns, particularly of the extremely low gestation infants has meant substantial increase in NICU hours in the past decade (54% increase)

33% of newborns in intensive care are surgical, requiring complex multidisciplinary care

Birth rate of local population is consistent with the decline in the NSW birth rate.

Botany Bay is projected to be above the NSW average

MotherSafe takes 20,000 telephone calls per year from women and health care providers statewide

Inpatient non procedural gynaecology, gynaecological surgery and gynaecology oncology are projected to increase the most (overall 2.4% per year from 2017 to 2031)

Female Reproductive System Disorders: Major complexity - 46% from other metro LHDs and 18% from rural LHDs (LOS 5.5 days)

There are 74 specialty outpatient clinics –

this activity will increase with changing models of care

1.7.1 INPATIENT ACTIVITY

1.7.1.1 OBSTETRICS ACTIVITY

TABLE 1: Trends in Obstetrics inpatient activity by ESRGs, Royal Hospital for Women, 2013/14 to 2017/18

ESRG	DATA	2013/14	2014/15	2015/16	2016/17	2017/18
721 - Antenatal admission	Separations	3,085	3,117	3,487	3,463	3,685
	Bed days	4,141	4,057	4,477	4,246	4,549
	Average length of stay	1.3	1.3	1.3	1.2	1.2
722 - Vaginal delivery	Separations	2,806	2,766	2,886	2,741	2,530
	Bed days	8,330	8,055	8,610	7,995	7,312
	Average length of stay	3.0	2.9	3.0	2.9	2.9
723 - Caesarean delivery	Separations	1,195	1,177	1,199	1,243	1,233
	Bed days	6,507	5,910	6,313	6,292	6,410
	Average length of stay	5.4	5.0	5.3	5.1	5.2
724 - Postnatal admission	Separations	907	771	554	728	687
	Bed days	1,398	1,416	1,077	1,322	1,219
	Average length of stay	1.5	1.8	1.9	1.8	1.8

Source: CaSPA FlowInfo v 17.0

Inclusions: Patient flag=acute, Obstetrics ESRGs V5.0

Exclusions: ED only

Separations means "The formal process whereby an inpatient leaves a hospital or other district health service facility after completing an episode of care (e.g. discharge to home, discharge to another hospital or nursing home, or death) (Source: http://www.healthstats.nsw.gov.au/ContentText/Display/Definitions)

More detailed data analysis of inpatient obstetrics activity indicates:

- The majority of activity came from the surrounding LGAs of Randwick, Waverley, Botany Bay and Sydney (Inner and East) at 68%, with 32% from Randwick, 16% from Waverley, 13% from Botany Bay and 9% from Sydney (Inner and East). The highest inflows were from Sydney LGA (SLHD) at 8% followed by Rockdale LGA 2%
- The 30-34 age group account for the highest proportion of separations at 40%, followed by the 35-39 age group (28%)
- Antenatal admissions represent 42% of activity within Obstetrics (with day only activity accounting for the majority of separations), followed by vaginal deliveries at 31%
- Day only antenatal admissions have increased substantially from nearly 2,000 separations in 2007/08 to just over 3,600 in 2017/18, equating to a 6.5% growth per year or 180 more separations per year
- Over the 10 year period vaginal deliveries have remained steady with around 2,600 to 2,900 deliveries per year. Caesarean deliveries have also remained steady, with between 1,100 to 1,300 deliveries per year over the period. The average length of stay (Av LOS) has declined from 6.0 days to 5.2 days for caesarean deliveries and 3.6 days to 2.9 days for vaginal deliveries. However, more recent data shows that LOS decline is slowing considerably compared with data from 2001-2012. For example, for caesarean sections from 2001-2012 there was a reduction in LOS from 6.3 days to 5.4 days. Since 2012, some small reduction in LOS has occurred but has remained relatively stable at 5.0-5.3 for the previous 4-5 years
- The mode of delivery (i.e. proportion of caesarean deliveries versus vaginal deliveries) has fluctuated year to year but the pattern has been relatively stable in the previous 15 year period, with around 69% vaginal deliveries and the remaining caesarean sections.

When the residents of Botany Bay, Randwick, Waverley, Woollahra and Sydney (Inner & East) Local Government Areas (LGA's) are hospitalised for obstetrics, just over 32% do so in private hospitals. These outflows totalled just over 3,500 separations equating to nearly 33 obstetric beds, so private hospitals are critical in relieving demand at The Royal. The public/private split for local residents has remained fairly stable in the last 4 years, however differs significantly between clinical groups. For example, most local residents birth at the Royal for vaginal deliveries (69%) but for caesarean deliveries, 49% birth at private hospitals and 47% at The Royal. This pattern has been stable.

1.7.1.2 GYNAECOLOGY ACTIVITY

TABLE 2: Trends in inpatient gynaecology activity, Royal Hospital for Women, 2013/14 to 2017/18

DATA	2013/14	2014/15	2015/16	2016/17	2017/18
Separations	2,760	2,742	2,804	2,777	2,754
Bed days	4,998	4,733	5,107	5,504	5,498
Average length of stay	1.8	1.7	1.8	2.0	2.0
% Day Only	56%	58%	57%	56%	55%
Av NWAU	0.97	0.93	0.94	1.00	0.97
Av PEM	1.06	1.01	1.02	1.08	1.06

Source: CaSPA FlowInfo v 17.0

Inclusions: Patient flag=acute, gynaecology SRG

More detailed data analysis of acute inpatient activity indicates:

- More than half of the activity comes from the surrounding LGAs of Randwick, Waverley, Botany Bay and Sydney (Inner and East) at 53%, with 24% from Randwick, 26% from Waverley, 11% from Botany Bay, 10% from Woollahra and 6% from Sydney (Inner and East). The highest inflows were from SLHD LGA at 12% followed by ISLHD at 6%
- Gynaecology oncology has a high proportion of inflows at 75% with most inflows coming from ISLHD and the ACT. Not surprisingly this ESRG has the highest Av NWAU at 2.9 and longest overnight length of stay at 5.9 days
- Most patients were referred from outpatients at 71% and the 16-44 age group account for the highest proportion of separations at 67%
- Surgical separations accounted for 82% of activity and 81% of bed days, but medical separations are increasing the most by 5% proportionally
- Other gynaecological surgery Enhanced Service Related Group (ESRG) accounts for the highest proportion of separations at 19%, with the most frequent Diagnosis Related Group (DRG) being recorded as N07A Uterus and Adnexa Procedures for Non-Malignancy Major complexity, followed by ESRG 711 - Abortion with dilatation and curettage (D&C) at 17% and ESRG 717- Non procedural gynaecology at 16%
- Non procedural gynaecology ESRG has had the highest growth, with DRG N62B Menstrual and other Female Reproductive System Disorders Minor Complexity more than doubling in 15 years. This growth is due to local residents. Major complexity has also increased, particularly in 2017/18 due to increasing inflows from other Southern NSW, SLHD and HNELHD LHDs as well as growth in local women being admitted
- The average overnight LOS has declined but the rate of decline is now slowing, remaining around 3.0 days
- Short stay separations (up to 72 hours) account for 85% of activity, with an average NWAU of 1.68, compared to those separations that stay greater than 3 days, with an average NWAU of 2.50
- The average NWAU has increased over the 15 year period but has remained relatively stable since 2004/05, with some year to year fluctuation. Gynaecology oncology has the highest average NWAU at 2.9 followed by hysterectomies at 2.1 and endoscopic procedure for female reproductive system at 1.15.

1.7.1.3 OTHER INPATIENT ACTIVITY

TABLE 3: Trends in other acute activity, Royal Hospital for Women, 2013/14 to 2017/18

DATA	2013/14	2014/15	2015/16	2016/17	2017/18
Separations	653	748	660	722	714
Bed days	2,040	2,250	1,871	2,087	2,309
Average length of stay	3.1	3.0	2.8	2.0	2.0
% Day Only	56%	58%	57%	56%	55%
Beds required	7	7	6	7	8
Av NWAU	1.15	1.05	0.94	0.97	1.11
Av PEM	1.28	1.18	1.04	1.09	1.24

Source: CaSPA FlowInfo v 17.0
Inclusions: Patient flag=acute
Exclusions: renal dialysis, chemotherapy, unqualified neonates, qualified neonates, gynaecology, obstetrics, perinatology and qualified neonates
Beds required is based on an 85% occupancy

Other acute activity excludes obstetrics, gynaecology, qualified neonates and perinatology.

More detailed data analysis of other acute inpatient activity indicates:

- Day activity has tripled over the period from 13% to 39% of total separations
- Overall activity has increased. In the previous 5 years, activity has remained within 650 to 750 separations
- 66% of separations come from SESLHD followed by ISLHD (9%) and SLHD (7%)
- General medicine accounts for 22% (Z48 - Other surgical follow-up care, Z04 - Examination and observation for other reasons 21%) followed by General Surgery 21% (Complications of procedures, not elsewhere classified and R10 - Abdominal and pelvic pain) and Breast Surgery 18%
- The overnight Av LOS has declined overall but there has been significant year to year fluctuation.

1.7.1.4 CRITICAL CARE – NEONATAL AND SPECIAL CARE NURSERY

TABLE 4: Trends in critical care medicine for Royal Hospital for Women, 2013/14 to 2017/18

ESRG	DATA	2013/14	2014/15	2015/16	2016/17	2017/18
Qualified Neonate	**Separations**	868	813	745	715	727
	Bed days	5,558	4,931	4,692	4,725	4,459
	Average length of stay	6.4	6.1	6.3	6.6	6.1
	Beds required	22	20	19	19	18
	Av NWAU	1.53	1.42	1.43	1.62	1.58
	Av PEM	1.73	1.62	1.63	1.85	1.74
Perinatology	**Separations**	324	347	326	356	361
	Bed days	9,684	9,882	8,962	9,291	10,072
	Average length of stay	29.9	28.5	27.5	26.1	27.9
	Beds required	38	39	35	37	40
	Av NWAU	9.7	10.8	9.3	10.0	10.4
	Av PEM	10.8	12.0	10.4	11.0	11.6

Source: CaSPA FlowInfo v 17.0
Inclusions: Patient flag=acute, perinatology and qualified neonates
Exclusions: ED only
Beds required is based on a 70% occupancy

It is important to note that has been significant strain on activity, particularly for NICU where the average overnight occupancy exceeds 94%. This is well above the MoH guidelines of an ideal occupancy rate of 70-75%. Currently 53-57 beds are required in total (based on applying a 70% occupancy rate) however there are only 44 beds available in the newborn care centre.

More detailed data analysis of critical care inpatient activity indicates:

- Improved survival of the very sick newborns, particularly the extremely low gestation infants, has resulted in exponential growth in demand for neonatal care resources and NCC occupancy. NICU hours have increased substantially in the past decade with a 54% increase
- There has been a slight increase (around 1-2%) in the number of extremely low birth weight infants (less than 1.5kg) proportionally over the period, with the growth particularly evident in the previous 3 years. These infants are driving the demand on NICU beds and account for 77% of total NICU hours
- SCN hours have fluctuated over the period. There appears to be more stability in the data in the last 6 years, with the number of SCN hours declining due to NICU infants spillage into SCN and promoting a LHD network approach in facilitating efficient back transfer of referred sick infants to district neonatal units for convalescence and ongoing care of prematurity, particularly in the last 3 years
- 65% of activity is from SESLHD residents, 31% from other metro LHDs and 4% from rural /interstate. Residents coming from ISLHD has increased by 2% proportionally
- 15% of our residents (including ISLHD) outflow to other NICUs for perinatology
- 33% of perinatology separations are surgical with an average NWAU of 14.2 compared with medical at 7.1. The number of surgical perinatology separations has increased proportionally by on average 3%. Surgical NICU hours has nearly doubled from 28,000 hours to 52,000 hours
- Clinicians indicated that due to the lack of NICU beds, the most stable infants are transferred to SCN earlier than appropriate to ensure beds are available for the incoming sick/premature infants.

FIGURE 2:
Qualified Neonates and Perinatology Separations by Weight, 2004/05 to 2017/18

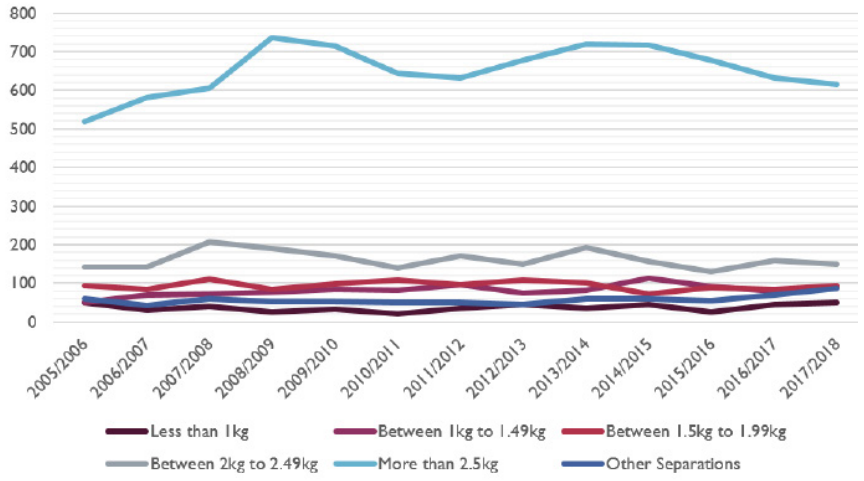
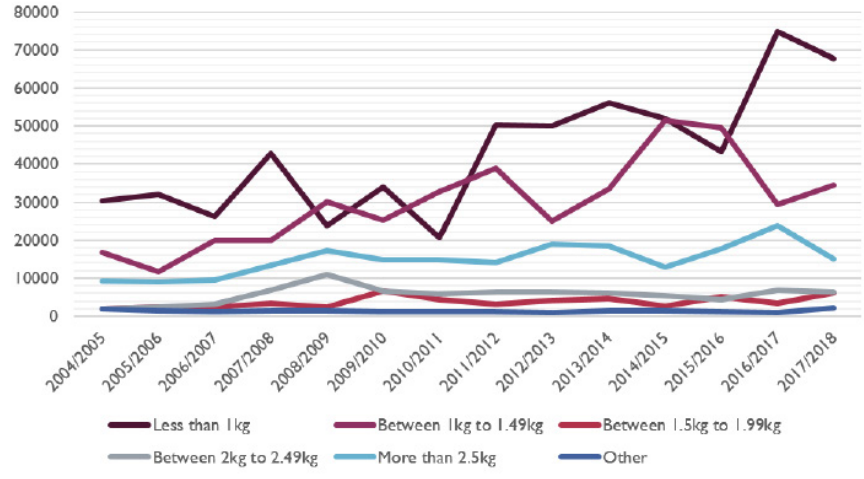


FIGURE 3:
Qualified Neonate and Perinatology NICU Hours, 2003/04 to 2017/18



1.7.1.5 CRITICAL CARE – CLOSE OBSERVATION UNIT

The Royal has a 5 bed close observation unit (COU). COU hours has remained relatively stable but have fluctuated year to year with an average occupancy of 68%. ESRG 718 - Gynaecological oncology is the highest user of the critical care beds at 1 bed or just over 6,100 hours. The trends show that COU hours have increased for gynaecology oncology over the period which is consistent with the increasing separations for this ESRG. Caesarean deliveries are the second highest user at 1 bed or 6,060 hours, with COU hours and separations remaining relatively stable for this ESRG.

1.7.2 AMBULATORY CARE ACTIVITY

In 2017/18 The Royal had over 67,500 outpatient occasions of service (OOS), with a total NWAU of 3,200 and just over 4,000 community/home based occasions of service, with a total NWAU of 151.

It is acknowledged ambulatory care data is not necessarily complete and recording data in previous years has been problematic. However, in recent years SESLHD has undertaken a vigorous campaign to improve recording of non-admitted activity and while the 2017/18 data is considered to be a reasonably accurate reflection of activity, prior years data is not as robust as 2017/18 data so is unreliable for trend analysis. It is envisaged data recording will continue to improve enabling more detailed trend analysis to be conducted in future years.

It is important to note that chemotherapy and the fertility research centre OOS are included in the table below, but are excluded in the projections.

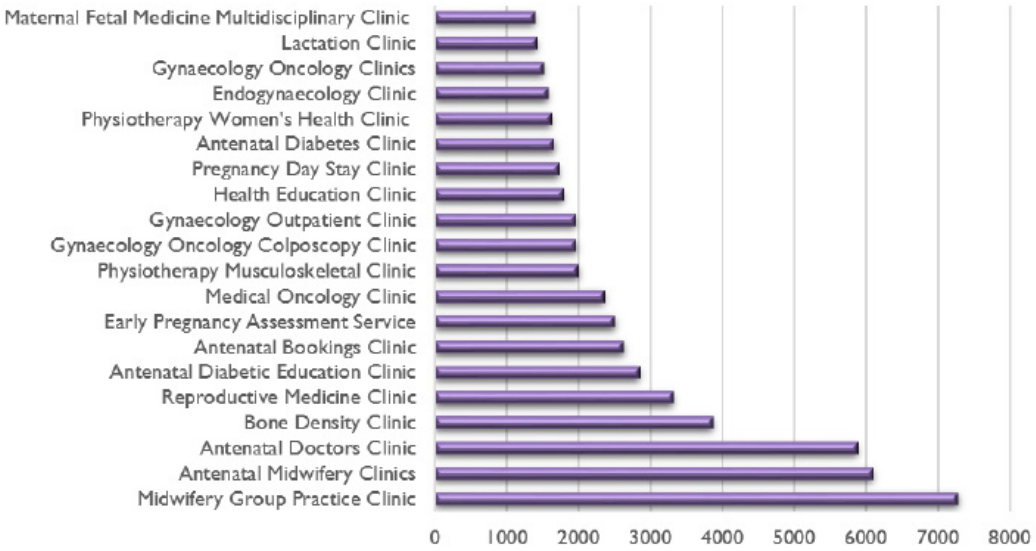
TABLE 5: Non-admitted activity by setting and modality, Royal Hospital for Women, 2017/18

VALUES	OPD / HOSPITAL	COMMUNITY / HOME / OTHER	TOTAL
Occasions of service	67,648	4,077	71,725
Face to face - individual	61,086	3,981	65,067
Face to face - group	3,151	0	3,151
Other modality	3,411	96	3,507

Source: OrBiT, cross-checked with EDWARD data supplied by Performance Unit

Exclusions: Activity accounted for in other settings including: emergency department, day surgery, interventional procedure rooms, medical imaging, pathology, pharmacy

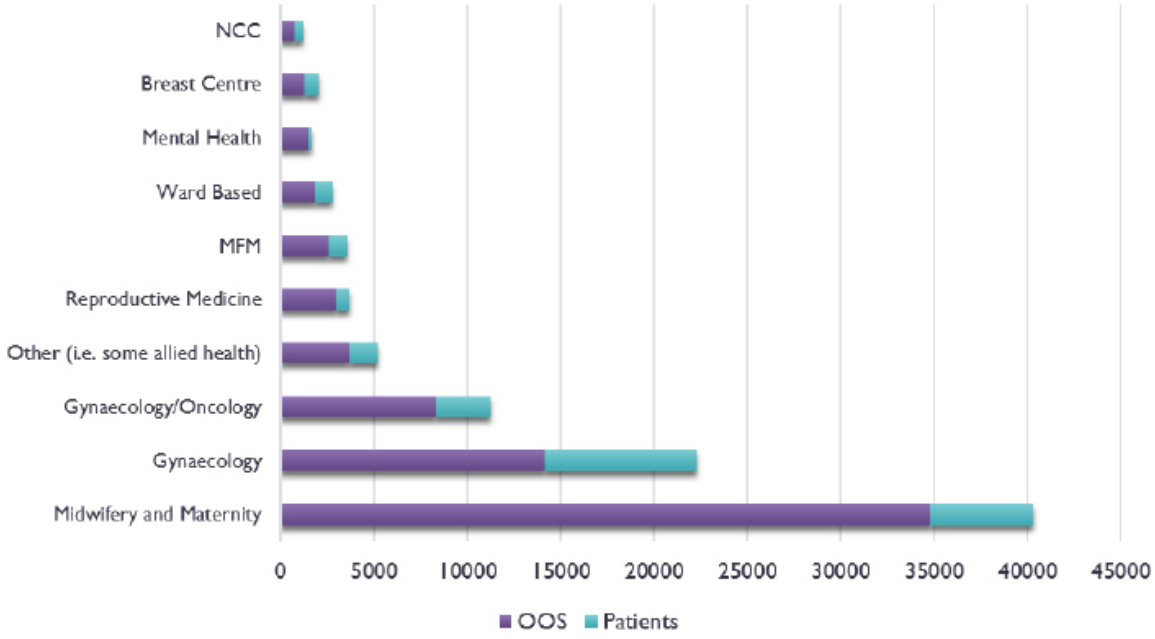
FIGURE 4: Top 20 Non admitted patient occasions of service by clinic name, Royal Hospital for Women, 2017/18



Source: OrBiT

Exclusions: Activity accounted for in other settings including: emergency department, day surgery, medical imaging, pathology, pharmacy

FIGURE 5: Non admitted patient occasions of service and number of patients by clinical discipline, Royal Hospital for Women, 2017/18



Source: OrBiT
Exclusions: Activity accounted for in other settings including: emergency department, day surgery, medical imaging, pathology, pharmacy

Please note the above data includes all setting types and modalities, e.g. telephone calls. Only face-face activity is used in the projections.

The disaggregated data for non-admitted activity showed:

- Number of patients: approximately 18,000 patients
- Clinics: 74 clinics in total
- Age: patients aged between 26 and 43 accounted for 74% activity
- Aboriginal and/or Torres Strait Islander people accounted for 1.1% of all occasions of service
- Frequency of attendance: on an average four occasions of service per patient, with the medical oncology clinic having the highest average occasions of service per patient at 10 occasions of service per patient, followed by the Midwifery Group Practice Clinic at 5 occasions of service per patient
- Midwifery Group Practice Clinic, Antenatal Midwifery Clinics and Antenatal Doctors Clinic have the highest number of occasions of service
- Modality of care: overwhelmingly face-to-face with an individual and or group (96%)
- Client resident location: Over 80% come from local catchment population followed by clients that live within or near the District's geographic boundaries. This however varies between clinics. For example, MFM have a high proportion of inflows
- Provider: midwives/nurses provided 40% of occasions of service, followed by gynaecologist 9% and physiotherapist 7%
- Financial Group: more than 75% of activity were non-chargeable, with a further 21% privately referred public patient, and the remainder being compensable.

Please note missing data was identified in the Breast Centre and Midwifery and Maternity and this has been accommodated in the projections.

2. Transforming healthcare for women and newborns

To provide "Exceptional care and healthier lives", our mission is to:

- be The Voice of Women's Health
- provide women, their babies and families with exceptional woman-centred healthcare
- continue to reshape and redefine women's healthcare.

We will strengthen our position as the only women's hospital in New South Wales and a state and national leader in the provision of health services to women, babies and families. This will happen in a responsive and collaborative environment which promotes wellness, informed choice, community outreach, innovation, teaching, research and strong partnerships to improve health outcomes.

Aligning and growing with changing patterns of need while making the most effective use of available and future resources, is a key driver in the development of this Plan. 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 The Royal both on and off campus.

Recommendations stated in the Plan will guide the immediate and long-term efforts of The Royal toward continuing to deliver high quality, compassionate health care with our community and partners.

Summary of recommendations

Value based care for women

- Support the Royal's Community Advisory Committee to build membership across stakeholder groups
- Engage consumers in co-design approaches for service development
- Develop evidence-based models and secure access to facilities that shift care into the community and enable women to receive The Royal's expert care when needed.

The Royal's Leadership in the First 2000 Days

- Provide a statewide telehealth service for pre-conception advice and care
- Expand reproduction and fertility services to include comprehensive fertility preservation, enhanced genetic testing, access to publicly funded assisted reproduction and the provision of pregnancy terminations
- Provide walk-in options for antenatal and postnatal clinics, and community outreach with a focus on priority populations
- Further develop the model for obstetric and internal medicine, to cater for women with chronic and complex medical conditions
- Enhance Newborn Care through Hospital in the Home, redeveloped family friendly facility and expanded well-baby clinic and allied health participation
- Develop a multi-disciplinary birth trauma service to provide postpartum debrief as routine postnatal care
- Improve perinatal and infant mental health services, developing a centre of excellence through collaboration between The Royal, the Mental Health Service, non-government organisations and the UNSW
- Improve care with a multidisciplinary model for pregnancy loss, stillbirth and neonatal death

Recommendations

Women's health priorities across the life stages

- Improve population health and wellbeing through targeted health promotion activities
- Establish a Well Women's Centre with a focus on improving equitable access to surveillance and screening, prevention, health promotion and wellbeing
- Improve health literacy in priority populations
- Establish advanced Women's Health practice models in outpatient and community settings
- Establish National Centre for Adolescent Gynaecology
- Establish Women's Assessment Service, for rapid access triage and assessment for women with obstetric and gynaecology conditions
- Continue to develop enhanced gynaecology services for endometriosis, pelvic pain, pelvic floor and menopause
- Re-establish gynaecological oncology clinical and academic comprehensive centre of excellence, serving as a hub for SESLHD and NSW
- Establish a comprehensive breast services model.

Infrastructure

- A new purpose built facility to meet future demand and provide for new evidence based models of care, on the Randwick Health and Education precinct
- Explore options for family accommodation in proximity to the hospital

Enablers

Recommendations are identified for

- A skilled workforce
- Genetics and Genomics
- Healthcare enhanced by systems and technology
- Environmental Sustainability
- Providing world class research, teaching and education

2.1 Value based care for women – What matters to them

Consumers are important partners and co-creators of any new models of care.

Goals

- Improve health outcomes that matter to women, by engaging women to participate in the planning and delivery of care and the measurement of health and wellbeing outcomes
- Use these insights to further inform expenditure, clinical models and the experience of receiving, providing and the effectiveness and efficiency of care

What we are doing well

As a leading women's health provider, The Royal is continually seeking or developing evidence-based models of care towards strong, healthy communities. We engage with our community regularly through conventional structures and aim to expand both formal and informal consumer involvement mechanisms to continue to improve our person-centred and compassionate approach to women's health services.

At The Royal, some gynaecological procedures that have been conventionally surgical have shifted to medical management and that medical management is increasingly moving from an inpatient setting to outpatients and community settings. Likewise, models of care for antenatal and birthing have been evolving to a more community oriented and integrated person-centred approach.

Coupled with advances in technology, these trends offer opportunities to respond to women's needs across priority populations and life stages.

The SESLHD *Community Partnerships Strategy* [72] was developed in 2015 to provide a framework for consumer engagement and to ensure consumers and community members are engaged in co-design of health services and campus developments.

Recommendations for the future

- Support the Royal's Community Advisory Committee to build membership across stakeholder groups
- Engage consumers in co-design approaches for service development
- Engage community members in developing evidence-based models for care in the community
- Secure access to facilities and partnerships that shift care into the community and enable women to receive The Royal's expert care when needed.

2.2 The Royal's leadership in the First 2000 Days

Goal

Through effective and collaborative support and intervention in preconception and during the first 1000 days, the Royal will give children the best possible start in life physically, developmentally, socially and emotionally, and address the escalating prevalence of adult disease and morbidity

What we are doing well:

Clinical Midwife Consultant from Liverpool, training in The Royal's Maternal Fetal Medicine unit:

> ***"I love the fact that there is a One Stop Shop for your women carrying babies who will require neonatal surgery. You have a highly co-ordinated MFM unit with a relaxed approach. I was so impressed that all the consultants came to the woman to talk with her on the same day, what great team work. I also loved the fact that the women get to tour the special care nursery with the midwife who is looking after them before, during and after birth."***

- The Department of Reproductive Medicine (recently becoming the Fertility and Research Centre (FRC)) is a holistic fertility and IVF centre combining basic and clinical research with comprehensive assisted reproduction treatment (ART) services, fertility preservation for cancer patients and genetic condition testing and counselling for parents, provided in a public hospital setting. Commencing in March 2017, the FRC now operates from a new dedicated clinical suite with ultrasound and consulting rooms which are co-located with counselling and early pregnancy assessment services at The Royal, and funded by philanthropic donations secured by The Royal's Foundation. A new embryology laboratory and surgical suite has been funded by the UNSW. The Sony Foundation Australia Limited has also allocated a one-off funding towards initial costs associated with research and operations of the FRC, related to adolescent oncofertility. The FRC is ideally placed to deliver an integrated, coordinated, patient-centred approach to addressing fertility problems, building on a foundation of collaborative partnership that have been working in the fields of fertility, fetal and maternal medicine, genetics and oncology. Uniquely, also on site are the laboratory for hormone measurement and other blood tests, and the male fertility laboratory, providing convenient and timely access for patients. The FRC is a joint initiative of The Royal and the UNSW, with other important partners including SCH Randwick, POWH, NSW Health Pathology (NSWHP) and Future Fertility. Future Fertility provides a forum for collating data relating to fertility of oncology patients world-wide.

- An exemplary range of maternity models of care is provided for women, leading practice change in NSW, with antenatal and birthing care options including:
  - GP Shared Care with Midwives and Obstetricians through Antenatal Outpatients
  - GP Shared Care with Midwives – Pregnancy Centre Care Groups
  - Midwifery Group Practices providing midwifery care for one third of all women birthing at The Royal in an all risk model of care in collaboration with designated obstetricians
  - A publicly funded Home Birth service, offering women with a low-risk pregnancy the choice of being able to birth at home, commenced in July 2018
  - Malabar Community Midwifery Link Services, caring for Aboriginal and Torres Strait Islander families and health promotion within the community
  - Maternal Fetal Medicine Midwifery Group Practice
  - Private Obstetricians
  - Medical Disorders in Pregnancy Clinic
  - Diabetes in Pregnancy Clinic (including Gestational Diabetes and pre-existing Type 1 and Type 2 Diabetes
  - Twins Clinic
  - Preconception Clinic.

- The Midwifery Group Practice (MGP) model of care is highly sought after with women needing to book a place in the program as soon as they are pregnant. Thirty per cent of women who book at The Royal are cared for by MGP midwives. The MGP model of care has been evaluated as highly successful and cost effective. A follow-up study has also shown overwhelming patient satisfaction. The continuity of care provided by this service is a goal in the provision of maternity care in 'Towards Normal Birth'. Women's Health Australasia (WHA) commented that The Royal is a leader in this model of care in Australia.

- The Royal was the only hospital in the state offering a unique model-of-care known as Midwifery Antenatal and Postnatal Service when it was implemented at the hospitalin 2018. The model allows women to see the same midwife throughout pregnancy and postnatally in collaboration with the GP shared care program. This named midwife is skilled in recognition of pathology; consulting and referring as per the ACM guidelines. They are available via phone for non-urgent matters 7 days per week 8am-430pm, with all urgent calls going through the birthing unit and postnatal services. The named midwife helps plan and guide women through their pregnancy and early parenting – linking them with services when needed.

- A maternity service for Aboriginal and Torres Strait Islander families in the District - the Malabar Community Midwifery Link Service (The Malabar Midwives) was introduced in 2006. Based in Malabar, the service provides Aboriginal women with continuity of care through a known midwife practice of midwives for their perinatal care. This is a multidisciplinary team that receives enhancement funding through New Directions via the Commonwealth Government. Mentorship for Aboriginal Midwives is an important component of the service. An Aboriginal midwife completed her mentorship and was recruited into the Malabar practice as a permanent staff member in January 2019. In partnership with the Sydney Children's Hospital Randwick, the service provides clinics at La Perouse, AMS Redfern, Malabar and The Royal, with home visits also arranged according to need. The service has won numerous awards in the health sector.

- A Cross Cultural Worker, based on site at The Royal three days per week, provides support to women and families from migrant and refugee background through pregnancy and the transition to Child and Family Health Services. This includes International Students who are Medicare ineligible. The worker also facilitates an antenatal CALD group. Commencing in 2017, the model has been funded and managed by the District Child, Youth and Family Services to provide support for women and families from migrant and refugee background through pregnancy and the transition to child and family health services. This includes International Students, who are Medicare ineligible. The model has a high level of support and is subject to a research and evaluation project. Funding and management was committed by the District's Child Youth & Family Services (CYFS) since 2017 for the initial 3 years.

- The Chemical Use in Pregnancy Service (CUPS) provides pre-termination counselling, antenatal care and education, information and advice regarding substance use and post-natal care for mothers and babies. The outpatient clinics treat babies for neonatal abstinence syndrome and offer the opportunity for women and families to engage with health providers for support and information for any issue they may be experiencing. There is a focus on holistic management and coping skills, and can range across lactation or feeding support, mothercraft, emotional support, as well as more general health support. A partnership between The Royal, SESLHD Drug and Alcohol Service and the Sydney Children's Hospital, CUPS also provides education, feedback and advice to GPs in managing this patient cohort.

- The Maternal-Fetal Medicine (MFM) department provides an integrated multidisciplinary service for women experiencing a "high risk" pregnancy. Referrals for fetal anomalies are received from around NSW. A midwifery group practice team was introduced in 2011 and provides 24/7 on call for women engaged with the practice to enhance continuity of care through labour and birth (the first service of its type in Australia). The Department has been chosen by NSW Health to be the New South Wales Fetal Therapy Centre and provides a NSW referral service for laser procedures for twin-twin transfusion syndrome as well as a number of other quaternary procedures such as in utero transfusions, fetal shunt placements.

- Women with medical complications in pregnancy may be referred to the obstetric physicians at The Royal with the aim of safe and healthy pregnancies. Medical conditions may predate the pregnancy or develop for the first time in pregnancy, and have the potential to affect the unborn baby commonly because the woman may need early delivery of a premature baby or because of the medications used to treat the medical condition. Examples of medical conditions predating pregnancy include: epilepsy, heart disease and thyroid disease. Some medical conditions only occur in pregnancy such as pre-eclampsia, obstetric cholestasis, gestational diabetes and hyperemesis gravidarum (excessive nausea and vomiting). The two Obstetric physicians at The Royal work very closely with other medical specialists (e.g endocrinologists and nephrologists at POWH), GPs, midwives and obstetricians to provide multidisciplinary care for women with medical problems.

- MotherSafe provides a comprehensive telephone counselling service for women and their healthcare providers concerned about exposures during pregnancy and breastfeeding. Such exposures may include prescription drugs, over-the-counter medications, street drugs, infections, radiation and occupational exposures. Some women may be offered face-to-face counselling appointments at the MotherSafe clinic. MotherSafe has produced a range of factsheets for common exposures and provides a state-wide service for NSW.

- The PLaN (Pregnancy Planning Lifestyle and Nutrition) preconception clinic has been established in Westfield in partnership with Karitane in August 2019.

- The Newborn Care Centre (NCC) provides integrated neonatal services with a complex and high acuity caseload. The Centre works closely with The Royal's fetal medicine specialists and the Sydney Children's Hospital paediatric surgeons and subspecialty surgeons, subspecialty paediatricians (geneticists, infectious diseases specialists, endocrinologists and other) as well as staff of the Children's Intensive Care Unit. Surgical procedures are undertaken within the NCC when the baby is too unwell to transfer to the Randwick Campus Operating Suite.

- After participating in a multicentre, multinational, cluster-randomised controlled trial on the effectiveness of Family Integrated Care, the Newborn Care Centre adopted this model of care as standard within their unit, integrating families as partners in the NICU care team towards demonstrated positive health and wellbeing outcomes for parents and newborns.

- Pre-conception counselling services. Women with pre-existing medical disorders can be referred to this monthly multidisciplinary service where they are seen by an obstetric physician, an obstetrician, a geneticist, a MotherSafe specialist, a midwife and a diabetes educator. They are counselled as to how the pregnancy may affect the medical disorder, and how the medical disorder, medications, genetics etc may affect their pregnancy. A comprehensive workup prior to pregnancy allows these women to enter pregnancy safely, with their medical disorder optimized.

- Breastfeeding support, promotion and protection. The Royal is accredited with the WHO Breastfeeding Friendly Health initiative (BFHI), and engages actively with the Australian Breastfeeding Association (a not-for-profit community based organisation) through ABA counsellors attending The Royal's antenatal classes and participating in The Royal's BFHI program. The Royal is a key organiser of the annual SESLHD Breastfeeding Seminar Day and participates in the SESLHD Lactation Group.

  The Royal performs well in meeting NSW Health key performance indicators. For example, in the 6 months January to June 2018 of 1581 discharged from inpatient care:

  - 98% of babies received at least one feed of colostrum or breastmilk
  - 85% were exclusively breastfed from birth to discharge (target = must be at least 75%)
  - 98% were breastfeeding at discharge from inpatient care
  - 96% of babies experienced immediate and undisturbed skin to skin contact following a vaginal birth
  - 77% of babies experienced immediate and undisturbed skin to skin contact following a caesarean birth or within 10 minutes of arrival in recovery.

  Of 1148 transferred from inpatient care to domiciliary care:

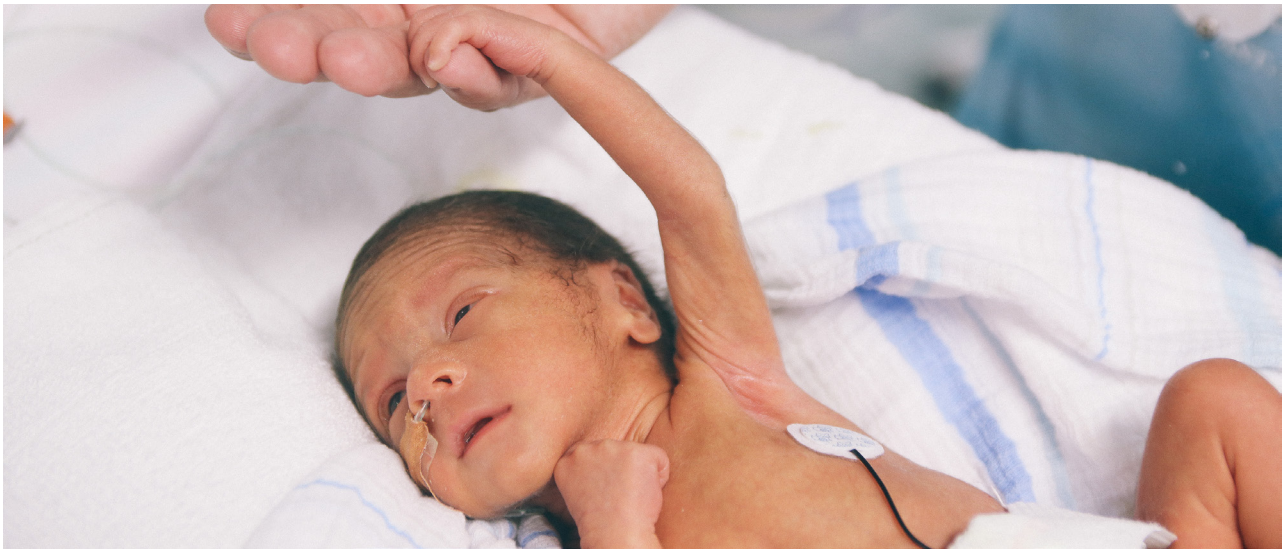
  - 85% of babies were exclusively breastfed from birth to discharge on domiciliary care
  - 97% of babies were breastfed (not exclusively) on discharge from domiciliary care.

- In Newborn Care, feeding babies with their mother's or donor human milk is encouraged, reducing the health risks that premature babies face. A Lactation Consultant has been employed in the Newborn Care Centre to support mothers to express breastmilk and feed their babies. Red Cross provides donor human milk to the NICU within the Newborn Care Centre, launched in December 2018.

BFHI is a joint UNICEF and World Health Organization (WHO) initiative that aims to give every baby the best start in life by creating health care environments where breastfeeding is the norm and practices known to promote the health and wellbeing of all women and babies are implemented. Attaining BFHI accreditation signifies that the facility is committed to evidence-based, best-practice maternity care. In Australia, the Australian College of Midwives is the lead organization for the implementation of BFHI.

Breastfeeding Promotion, Protection and Support is a national and NSW policy directive. "Breastfeeding is important for optimal infant nutrition, growth and healthy development, protection against infection and chronic disease, and benefits the mother's health. Breastfeeding provides short-term and long-term health, economic and environmental advantages to children, women, families and society."

(NSW Health, Breastfeeding in NSW - Promotion, Protection and Support. Policy Directive PD2018_034)



Recommendations for the future

- Provide a world class fertility preservation practice and research for young women (and young men) with cancer and non-cancer conditions where their fertility may be affected by treatment, working with SCH, POWH and UNSW
- Provide affordable access to the full range of reproductive medicine services, including assisted reproduction and provision of pregnancy terminations for psychosocial reasons in accordance with NSW legislation
- Provide genetic testing and counselling for people at high risk, primarily by referral from GPs and obstetricians, clinical genetic testing of embryos for patients with known single gene mutations and screening for chromosome abnormalities
- Provide state-wide preconception telehealth services
- Explore or enhance partnerships with community providers
- Further develop Pregnancy Centred Care Antenatal Groups for women receiving care through Midwifery Group Practice (MGP)and Maternity Antenatal and Postnatal Services (MAPS)
- Enhance the Homebirth Service through ongoing mentorship and education of midwives within MGP to increase the number of midwives who will offer a Homebirth Service
- Extend the community outreach clinic for MAPS to additional GP practices and Child and Family Health Services
- Develop a Vaginal Birth After Caesarean model of care within the MAPS model of care
- Introduce a Preterm Birth Clinic according to the recommendations of the Preterm Birth Prevention Alliance
- Develop a Kings Cross Midwifery Group Practice in collaboration with other SESLHD and community partners for homeless women to address inequities in health outcomes
- Increase the capacity of pregnancy day stay unit to further improve community access to assessment and treatment of medical disorders in pregnancy
- Provide an outreach service for Obstetric Medicine via Telehealth to address inadequacies in rural and regional access to obstetric medicine services
- Establish postpartum debrief clinic
- Develop a multidisciplinary birth trauma service to support women who have experienced birth trauma, including enhancing services for obstetric anal injury (OAIS)
- Establish a postnatal review clinic for targeted conditions
- Extend multidisciplinary support from first year after birth to preschool age for women and babies affected by substance use
- Establish multidisciplinary perinatal infections clinics to implement statewide strategies for management of Hepatitis B and C, emerging viruses including Zika, and CMV, HIV, toxoplasmosis and parvovirus, along with an expected increase in syphilis
- Build on the Family Integrated Care model in the Newborn Care Centre to provide a residential transitional care program, Hospital in the Home, and follow-up care via telehealth and drop-in clinics
- Provide a Drop-in Clinic in outpatients for breastfeeding support
- Enhance the Pregnancy Loss Service Clinic with multidisciplinary enhancement

Recommendations for the future

- Identify best practice online resources for pregnancy loss and threatened pregnancy loss
- Increase the collaboration between the perinatal component of the MHS and ESMHS Perinatal & Infant Mental Health Service (PIMHS) team through joint clinical and educational activities
- Develop a centre of excellence for perinatal and infant mental health, providing comprehensive services for women from SESLHD, ISHLD and surrounds experiencing mental illness. A consortium of The Royal, ESMHS, Directorate of Population and Community Health, POW Private Hospital, Karitane and the Gidget Foundation will implement a step-up/step-down day and inpatient program for mothers and babies in a holistic 'wellness' model, focused on women and their partners with moderate to severe mental health problems.
- Build capacity for outreach perinatal mental health service provision to rural areas through telepsychiatry or fly-in fly-out clinics.

What we will see...

Rachel attended The Royal's Women's Assessment Service when she began bleeding at 8 weeks in her pregnancy. She was seen by doctors and was able to have an ultrasound and blood tests performed immediately. Rachel and her partner were stressed because they had experienced previous miscarriages. Unfortunately, an ectopic pregnancy was diagnosed. Rachel opted for surgical management. She had a laparoscopy the same day and was cared for overnight in the ward.

She was followed up by the early pregnancy psychologist in the weeks following the ectopic and had a number of sessions to help with adjustment. A few months later she conceived again and was supported by the counselling services of the perinatal and infant mental health consortium. She had her pregnancy care with the midwifery group practice at The Royal. She and her partner were able to access postnatal wellness and support services provided by the consortium following the birth of their baby.

2.3 Women's health priorities across life stages

Goals

- Empower women to be active participants in decisions affecting their health and health care across their life stages
- Develop health initiatives that focus on improving health, targeting protective and risk factors and critical intervention points for women across the life course.

Providing supportive, sensitive and responsive care to women at all stages of their lives, we will develop best practice service models that meet the needs of women in adolescence, during their reproductive years, in mid-life and later years. We will use a holistic model of health which recognises that a broad range of environmental, socioeconomic, psychological and biological factors impact on health. We recognise that healthy ageing begins at preconception with healthy mothers, and continues on to birth and through the life course.

We will use these models to increase our understanding of women's experience and goals – what matters to them – and use these insights to improve the quality and responsiveness of our service, address the increase in chronic and complex conditions, mental ill-health, obesity and cancer, combined with greater complexity. We will increase our focus on identifying and addressing the health impacts of violence against women. It is important to note that the identified priority population groups are not necessarily discrete. Many women belong to more than one priority population and experience multiple issues contributing to vulnerability.

We will strengthen our focus on prevention and self-care; including community, stakeholder and advocacy engagement.

What we are doing well:

- Clinics for girls and young women who have a range of gynaecological problems including (but not limited to) indeterminate genitalia, structural uterine anomaly, polycystic ovaries, painful periods, fertility issues (particularly fertility preservation of girls and young women who have cancer), urogenital disease, Congenital adrenal hyperplasia and severe vaginitis. The service has patients who come from across NSW, and some will travel from across Australia and New Zealand due to the reputation of the service and the lack of similar services. The Royal is a leader in this field
- A specialist service for women with pelvic floor dysfunction in line with international recommendations from the International Consultation on Incontinence. Staff within the service are recognised nationally and internationally for their contribution to advancing clinical care, education and research. Pelvic floor disorders are highly prevalent for women throughout the life stages, with urinary incontinence alone prevalent in 25-45% of women
- Women with endometriosis and pelvic pain have access to medical treatment, and surgery as required, for complete treatment of disease by skilled and specialised staff who are recognised internationally as leaders in this field. The service offers unique treatment modalities for pelvic pain, some of which were first done internationally and/or in Australia at The Royal
- Women experiencing problems during and after menopause are provided with pharmacological treatment and lifestyle suggestions, drawing on endocrinology and obstetric expertise and latest research, within a women's health philosophy. Outreach is provided to Moree and with Aboriginal communities in rural areas – clinics run through cooperative Aboriginal Health Services and training of Aboriginal health workers
- Women with a range of medical conditions or hypertensive disease may be referred to the obstetric physicians at The Royal to assist in the management of one or more medical complications pre-pregnancy, in pregnancy, or postpartum. The "one stop shop" model optimises pregnancy outcomes but also provides a woman with care that respects and meets her expectations as far as possible. This is achieved by providing high quality, informed, co-operative care which includes the woman and her family in decision making

- Many women with breast cancer are now living longer relevant to the aftercare of cancer and ongoing surveillance. Women identified with genetic mutations for breast cancer or with a family history of breast cancer (high risk) comprise 35-40% of The Royal's patients
- As is evident from patient survey data, women appreciate the sense of sensitivity, warmth and dignity offered by the gynaecological cancer clinics at Royal Hospital for Women. The best treatment outcomes for women diagnosed with gynaecological cancer are achieved with the provision of care in a multidisciplinary team setting, which at The Royal includes the gynaecological oncologist as medical lead, medical oncologists, radiation oncologists, palliative care physicians, medical physicians, specialists in cancer genetics, radiologists, nuclear medicine physicians, oncology nurses and nurse consultants, clinical psychologists, a dietitian, and the physiotherapy, social work, and aged-care teams.

What we will see...

Susie (33 years old) had been suffering from excruciating period pain since her teenage years which was worsening. Her GP had tried the oral contraceptive pill but it was no longer effective. She was referred to the endometriosis clinic at The Royal Hospital for Women. At the time of her clinic visit, there were other symptoms noted such as painful bowel motions and intercourse. An examination was suspicious for severe endometriosis.

She was referred for a specialist deep infiltrating endometriosis (DIE) ultrasound to help with the diagnosis. Susie was found to have severe endometriosis with cysts on both ovaries and a nodule which was likely affecting the bowel.

A further referral was made to the colorectal unit to discuss a possible bowel resection at the time of removal of endometriosis.

Susie's surgery was planned by the advanced laparoscopic gynaecologic surgeons in combination with the colorectal surgeons and she had an excellent outcome with complete resection of the disease including bowel resection.

Following surgery, her symptoms improved, but Susie continued to have some pain with intercourse. She attended the pelvic pain physiotherapy clinic and was able to progress with exercises and techniques to help her pain.

She conceived in the next year and had her antenatal care through the Royal, with the birth of a baby girl.

Recommendations for the future

- Improve population health and wellbeing through targeted health promotion activities
- Establish a Well Women's Centre, providing equitable access to surveillance and screening, contraception services, female clinicians, prevention services, health promotion and wellbeing
- Embed in current services safe and accessible services for women experiencing family, intimate partner and or sexual violence
- Further develop models for priority populations, as identified in the Plan, to reduce inequities in health service access and health outcomes, including but not limited to options for increasing outreach specialised gynaecology services to Aboriginal women within SESLHD and in rural and remote areas (eg Moree)
- Scale and spread the 'Malabar model' for women who are homeless, drug and alcohol affected, or sex workers
- Increase the number of targeted community care workers
- Support place-based initiatives designed to reduce health inequities, build community resilience and improve health and wellbeing
- Ensure that all pregnant women who smoke are offered high quality and culturally appropriate cessation support as part of routine care throughout their pregnancy
- Provide advanced practice models for Allied Health in outpatient settings
- Develop and implement a standalone Women's Assessment Service. The service will provide internal and primary care referral pathways to a rapid access triage and assessment tertiary/specialist gynaecology review for medically stable women who have early pregnancy and benign gynaecological conditions, with direct admission capability
- Provide affordable access to:
    - a world class Fertility Preservation practice and research for young women (and young men) with cancer and non-cancer conditions where their fertility may be affected by treatment, working with SCH, POWH and UNSW
    - Fertility Preservation, aimed primarily at male and female patients diagnosed with cancer or conditions that require chemotherapy, radiotherapy or stem cell transplant
    - Assisted Reproduction, offering a clinical service for eligible women and their partners
    - genetic condition testing and counselling for parents, clinical genetic testing of embryos for patients with known single gene mutations and screening for chromosome abnormalities
    - reproductive choice for women, including provision of terminations for psychosocial reasons in accordance with NSW legislation
- Lead complex specialised gynaecology services across surgical, inpatient and outpatient settings, including establishment of a National Centre for Adolescent Gynaecology
- Increase awareness of services available to support management of menopause and expand research in menopause and its effects encompassing comprehensive older women's gynaecology services
- Improve access to psychology services, including in partnership with non-government, community based organisations and primary care allied health providers
- Expand The Royal's Perinatal and Women's Mental Health Service from its current Maternity focus to provide psychological services across The Royal, including partnership with ESMHD Consultation-Liaison psychiatry
- Develop a comprehensive Perinatal and Infant mental health service, in partnership between the RHW, Eastern Suburbs Mental Health Service and other organisations such as Karitane and the Gidget Foundation

Recommendations for the future

- Develop a comprehensive breast services centre operating Monday to Friday, providing screening and assessment, high risk genetic screening breast cancer management, breast surgery and reconstruction services
- Develop gynaecological oncology services as a clinical and academic comprehensive centre of excellence and as a hub for gynaecological oncology in SESLHD and NSW
- Focus on cancer survivorship programs and services in collaboration with POWH
- Provide advanced practice models in outpatient settings, increasing consideration of biopsychosocial models of healthcare and translational research, reducing inpatient admissions and shifting the balance toward ambulatory and community care
- Improve outpatient pre-admission services, inclusive of anaesthetic consultants, to improve operating theatre utilisation and improve patient safety and recovery.

2.4 Infrastructure development and capital implications

Goals

- A new purpose built facility to meet future demand and provide for new evidence based models of care, on the Randwick Health and Education precinct
- Access community based facilities that better support women to keep well in their community and enable them to receive our expert care when needed
- Explore options for family accommodation in proximity to the hospital.

As one of the hospitals on the Randwick Health and Education Precinct, the Royal Hospital for Women was included in the Greater Randwick Integrated Health Services Plan 2016 (GRIHSP) which was submitted to, and approved by, the SESLHD Board of Directors and the NSW Ministry of Health. The GRIHSP outlined the Royal's requirements, but did not present a detailed analysis. This current Royal Hospital for Women Integrated Health Services Plan is a comprehensive adjunct to the GRIHSP, describing models of care and detailed analysis of service, infrastructure and capital implications.

Twenty two years after moving to Randwick from Paddington, ageing infrastructure has a significant impact on The Royal's capacity to meet community expectations. Specifically, insufficient space for newborn care, outdated birthing facilities, a lack of single inpatient rooms and insufficient and outdated layout of clinical spaces limit the ability to introduce new models of care and raise concerns with safety, quality and efficiency of care.

SESLHD's clinical service planning continues to challenge the way health care services are delivered. There is recognition that we are currently on an unsustainable path of ever increasing demand for emergency services, hospital beds, outpatient and community services and bigger expenditure. In seeking to address this, "turning the curve" we undertake extensive consultation with clinicians, consumer consultation, literature reviews, benchmarking with other facilities, analysis of patient flows over a 15 year period and test our assumptions in order to determine the optimal result for the community we serve. We apply the Ministry of Health planning tools to identify the "base case projections" and undertake scenario analysis applying multiple strategies aiming to create sustainable, high quality compassionate care.

The scenario analyses undertaken for the *Royal Hospital for Women Integrated Health Services Plan* included:

- rebasing projections to account for more recent inpatient trends and increased day only activity
- sustaining a shorter length of stay for select SRGs and ESRGs
- accounting for increasing complexity and for newborn survival trends
- introducing a proportion of patients in newborn care using Hospital in the Home
- inflows and outflows, taking into account expected catchment
- reducing avoidable admissions e.g. rapid access clinic and more outpatient and community based activity
- increasing capacity to provide new models of care e.g. more multidisciplinary / multispecialty clinics and nurse or allied health led clinics
- increasing capacity of services to provide care that is anticipatory and predictive.

Detailed explanations of the scenario modelling may be found in Appendix 3 through to 3.8.4.7.

Planning for Sydney Children's Hospital Stage 1 capital development on the Randwick campus has commenced. The Royal is a key stakeholder in that planning. Consideration should be given to the proximity of services between the SCH and The Royal.

We acknowledge that not everyone needs hospital based care. The *SESLHD Journey to Excellence Strategy 2018-2021* notes the change we want to see is to think beyond hospital walls - the priorities highlighting that care should be provided either at home, or as close to home as possible, as well as the need to shift care into the community or outpatient settings.

Our *Royal Hospital for Women Integrated Health Services Plan* follows through on the Strategy with scenario modelling focusing where advised by clinicians on shifting care from inpatients to outpatients, community health centres and home based care.

Recommendations for the future

2.4.1 CAPITAL DEVELOPMENT PRIORITIES

During consultations for the development of this Plan, a number of capital development priorities were identified for The Royal on the Precinct:

1. Newborn Care Centre (NCC)
2. Birthing Suite
3. Women's Assessment Service
4. Breast Service and NSW BreastScreen
5. Ambulatory Care Centre
6. Perinatal and Infant Mental Health facility.

These are outlined below, and further detail may be found in the Consultation Reports found in the appendices, while projected bed and clinic space requirements are quantified in sections 2.4.3 and 2.4.4.

1. **Newborn Care Centre** redevelopment to accommodate medical and surgical needs of newborn babies with complex needs, improve safety and meet contemporary standards. Additional beds are required to meet current and future demand, taking into account increased survival rates of very sick newborns and extremely low gestation newborns. The functionality of the design should allow for Family Integrated Care (first introduced in Australia at The Royal) allowing opportunity for parents to stay with their baby throughout the duration of stay, enhanced lactation support services and improved palliative care. The Centre should be located adjacent to the birthing suites and operating theatres, ideally in close proximity to the Sydney Children's Hospital's Operating Theatre with resultant proximity to the Child Intensive Care Unit to optimise potential to leverage expertise, resource, training and equipment requirements and maintain working relationships between services. Note that there is very little patient movement between NCC and CICU. Patient movements are between The Royal's birthing suite and operating theatre and SCH operating theatre (which is currently also in close proximity to CICU). Patient movements are between The Royal's birthing suite and operating theatre and SCH operating theatre (which is currently also in close proximity to CICU). Modelling for the NCC takes into account provision of a residential transitional care program and Hospital in the Home, with follow-up and ongoing care after discharge which may facilitate earlier discharge. The proposed model of care may include telehealth, outreach community care, and a "drop-in" outpatient clinic.

2. **Birthing Suite** redevelopment to accommodate specific clinical and personal needs of women, with an emphasis on a comfortable and calming space during labour and at the time of birth. All-purpose well equipped rooms including birth pools for all risk women. A high risk room within the birthing area. A co-located bereavement area is also recommended. The Birthing Unit must be co-located with The Royal's general operating theatres to enable overflow capacity and rapid deployment of anaesthesia staff to support emergency situations. The operating theatres should include a hybrid theatre supporting radiology services. The existing location of operating theatres is ideal as it is close to both the Birthing Suite and NCC. Access to a dedicated emergency theatre for obstetrics is recommended.

3. **Women's Assessment Service (WAS)**: a new development comprising an acute gynaecology unit and an enhanced Early Pregnancy Assessment Service for women with obstetric complications during pregnancy. For practical purposes, to facilitate access to staff over extended hours and to diagnostic equipment, it is suggested that the WAS be accessed from a triage area, adjacent to but not within the Birthing Suite and the design may incorporate triage functionality together with antenatal presentations to the Birthing Suite. The WAS will provide a streamlined model of care, with appropriate resources including triage and consult rooms, access to imaging, and appropriate spaces for pregnancy loss and bereavement. Women can be rapidly assessed and treated and either admitted for further treatment or discharged with a personalised care plan and community service support. Care will be coordinated and executed in collaboration with the General Practitioner and other community partners An objective of the WAS is to provide an alternative to, or fast-track from, the POWH Emergency Department into a more appropriate care setting. See also 2.3 for further outline of proposed model of care and Consultation Report in appendices.

4. **NSW Women's Breast Centre and NSW BreastScreen** to be provided with separate clinic spaces to enable expansion for both services to 5 days per week operation. Currently space is shared. The Breast Centre operated by The Royal would comprise clinic rooms for assessment and counselling, pre-operative assessment and post-operative review, pathology, treatment, mammogram and ultrasound. Similarly, 5-7 spaces would be required for NSW BreastScreen with confirmation of this in the facility planning phase.

5. **Ambulatory Care Centre (ACC):** Develop a community facing ACC that integrates a range of primary contact and specialist outpatient services, focusing on preventative healthcare through to chronic condition management. The ACC will provide integrated spaces for multidisciplinary care including access to multipurpose outpatient clinic rooms, procedure rooms, large group rooms for health promotion and community education, teleconferencing facilities, clinical gymnasium, and meeting spaces for clinicians and families. The objective of the unit is to increase access to outpatient services and reduce admissions to hospital by enabling a shift from acute tertiary service management to a community integrated outpatient approach. It will promote the redirection of healthcare away from surgical and medical intervention toward consumer-driver conservative management with a focus on self-management. Advanced models of care and specialist multidisciplinary clinics will enhance access and utilisation across Gynaecology, Maternal Fetal Medicine, Obstetric and New Born Care services and some allied health clinics which would be accommodated in the ACC.

6. **Perinatal and Infant Mental Health facility** developed in close proximity to The Royal and in conjunction with ESMHS and NGOs. This step-up/step-down facility will house outpatient clinics, day stay and 8 public mother-baby psychiatric beds with potential as a shared model with community organisations and a privately funded mental health service. The facility will consolidate the Perinatal and Women's Mental Health Service in one location, provide a centre of excellence for teaching, research and clinical care in association with the UNSW Perinatal and Women's Health Chair. The concept of step-up/step-down offers the opportunity to include a mother-baby facility for parenting and women with moderate mental health conditions and outpatient clinics provided by NGOs for example Karitane and the Gidget Foundation. The purpose is to increase access for women and their partners to integrated perinatal mental health service tailored to their needs and severity of needs, operating across the continuum of care.

2.4.2 OTHER INFRASTRUCTURE AND CAPITAL DEVELOPMENT RECOMMENDATIONS

- Provide a gynaecological oncology comprehensive care centre, incorporating outpatient, ambulatory therapeutic and procedural and inpatient facilities
- Increase the size and proportion of single antenatal rooms to enable more partners to stay overnight
- A significant proportion of rooms to have sufficient dimensions to facilitate bariatric care
- Reconfigure ward alignments so that there is separation between antenatal, postnatal, and pregnancy loss and bereavement bed spaces
- Provide private meeting/counselling spaces on each ward/clinical area
- Provide an Aboriginal specific room for families
- Breastfeeding room on every floor with adjacent bathroom utilised for staff and visitors
- Improved fetal and gynaecological imaging services and equipment
- Increased access to MRI and/or HIFU (High Intensity Focused Ultrasound)
- Non-clinical spaces to support staff and wellbeing at work including quiet spaces, “wellbeing” spaces, lounges, on-call rooms, places for exercise and quiet space for mindfulness
- Secure off-campus rooms for antenatal education and postnatal support groups
- Explore opportunities for affordable family accommodation in close proximity to or on the campus
- Explore arrangements for securing off-campus rooms and community-based venues for antenatal education, antenatal and postnatal appointments, postnatal support groups, pelvic floor clinics and health promotion activity.

2.4.3 CURRENT AND FUTURE SPACE REQUIREMENTS

Quantifying the impact of scenarios on future bed and clinic space requirements is summarised in Table 6, followed by detailed scenario projections and in the Tables below.

TABLE 6: Current and future space requirements

CLINICAL DESCRIPTION	2019 PHYSICAL BEDS	2019 AVERAGE AVAILABLE BEDS (FUNDED BEDS)	PROJECTED (2021)	PROJECTED (2026)	PROJECTED (2031)
ACUTE					
Acute (including gynaecology) - Day Only	24	24	6	7	8
Acute (including gynaecology) - Overnight			20	20	22
Acute Sub Total			26	27	30
OBSTETRICS					
Obstetrics - Day Only	66	50	9	10	11
Obstetrics - Overnight			55	55	57
Obstetrics Sub Total			64	65	68
NEWBORN CARE CENTRE					
Neonatal Intensive Care **	19	19	23	27	32
Special Care Nursery ***	25	25	33	34	35
NCC Sub Total	44	44	56	61	67
Close Observation Unit	5	4	4	5	5
Grand Total	**139**	**122**	**150**	**158**	**170**
INTERVENTIONAL AND MEDICAL IMAGING					
Delivery Suite/Birthing Room	13	13	14	15	16
Ultrasound	5	5	7	7	7
Maternal Fetal Medicine (procedures)	2	2	2	2	2
NON ADMITTED					
Outpatient Clinic Rooms*	65	65	87	91	94

* The breakdown of the allocation of clinics between the clinical groups is located in section 2.4.4.6

** Please note only 16 beds are funded in NICU with the remaining unfunded

*** The SCN projections above exclude introducing HITH model of care resulting in a 'savings' of 3.5 projected SCN beds by 2031.

2.4.4 SCENARIO ACTIVITY PROJECTIONS

Base case projections are a requirement of the NSW Government for capital projects. The projections take account of population growth and ageing, 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, supply pattern) to develop the base case projections. Scenario analysis is a process of analysing possible future events by challenging the base case and considering alternative possible outcomes which must be quantifiable.

2.4.4.1 OBSTETRIC PROJECTIONS

TABLE 7: Scenario projections for obstetrics activity, Royal Hospital for Women, 2015/16 to 2031

DATA	2015/16	2016/17	2017/18	2021	2026	2031
DAY ONLY						
Separations	3,064	3,230	3,385	3,780	3,938	4,102
Beds required	8	9	9	9	10	11
OVERNIGHT						
Separations	5,062	4,944	4,750	5,393	5,541	5,737
Bed days	17,413	16,624	16,105	16,566	15,447	16,899
Av LOS	3.5	3.4	3.4	3.1	3.0	2.9
Beds required	60	57	55	55	55	57

Source: HealthAPP, Flowinfo V17.0

Exclusions: ED only

Inclusions: Obstetrics ESRGs

Overnight beds required is based on an 80% occupancy rate

Day only beds required is based on an 160% occupancy rate

Note: day only vaginal deliveries activity (4%) is included in overnight data (both projected and historical) but the Av LOS is calculated based on the overnight average Av LOS

Key Points:

- The number of births increased from 2001/02 to 2008/09, but has declined since 2008/09. This is consistent with the decline in the NSW birth rate and of our local population. The birth rate is projected to increase from the current rate but the increase will be similar to rates in the mid 2000's. Botany Bay rate is projected to increase the most and above the NSW average, and not surprisingly has the highest growth rate of women aged 16-44 (1.8%), which is well above the state average of 0.8% per year growth
- Most separations come from our local SESLHD population at 82% followed by SLHD (11%). Inflows have declined over a 15 year period particularly from SLHD and NSLHD. This flow pattern has been reflected in the projections
- It is important to note for the projections, there has been recent growth in activity and change in flow pattern for the following ESRGs:
  - ESRG 721 day only antenatal admissions - there has been significant growth in day only antenatal activity which has more than doubled over 15 years (117% increase). The data shows separations have increased slowly from 2001/02 to 2014/15 period, however since 2014/15 separations have increased significantly with a 23% increase in activity which is above the predicted trend. The recent increase in activity is due to an increase in separations from the local catchment population
  - ESRG 724 overnight post-natal admissions – there has been significant increase in activity between 2011/12 and 2014/15 period due to increasing flows from Randwick (in one year separations increased by 40%), Botany Bay, Sutherland Shire LGAs and ISLHD. Since 2015/16 separations have stabilised
  - The increase in activity as specified above have been reflected in the scenario projections.

- Day only antenatal admissions are projected to grow at 2.2% per year to 2031 and overnight antenatal admissions are projected to grow at 1.0% per year to 2031. Overnight post-natal admissions are projected to grow at 1.9% per year to 2031
- Deliveries are projected to grow at 1.6% per year to 2031, with vaginal deliveries projected to have the highest growth rate at 1.7% per year and caesarean sections at 1.4% per year
- More recent data shows that LOS decline is slowing considerably compared with data from 2001-2012. This is consistent across the state for most clinical groups. For example, for caesarean sections from 2001-2011 there was a 14% reduction in LOS (6.3 days to 5.4 days). Since 2012, some small reduction in LOS has occurred but has remained around 5.0-5.3 for the previous 4-5 years
- Comparing the Av LOS of other hospitals who have similar NICU hours and demographics, the data showed the The Royal has the same Av LOS for vaginal deliveries but was higher than the average for caesarean sections by 0.2 of a day. The higher LOS is due to the age cohort as there is a higher proportion of older women birthing at The Royal and additionally a higher proportion of complex caesarean deliveries at 17% (O01A - Caesarean Delivery, Major Complexity) than its peers (10%)
- The scenario Av LOS is projected to decline to 4.6 days by 2031 for caesarean sections and for vaginal deliveries the scenario Av LOS is projected to decline to 2.6 days by 2031
- The scenario Av LOS is projected to decline to 1.9 days by 2031 (from 2.2 days) for overnight antenatal admissions and for overnight post-natal admissions the scenario Av LOS is projected to decline to 2.7 days (from 3.1 days) by 2031
- Please note: in the projections for perinatology, outflows were reversed for SESLHD residents including ISLHD flowing to Liverpool Hospital, Nepean Hospital, Royal North Shore Hospital and Royal Prince Alfred Hospital. Reversing these perinatology outflows also impacts on the projected obstetrics separations. As such, the identical volume of projected separations were reversed for obstetrics (and allocating the mode of delivery of the reversed outflows was based on clinical advice). Reversing the flows resulted in an additional 1.5 obstetric beds by 2031
- It is important to note that the close observation unit bed days have been removed in the overnight projections by ESRG in the final calculation of the projected beds (but not removed in the projected bed days in the table above to ensure a consistent representation of the Av LOS trends).

2.4.4.2 GYNAECOLOGY PROJECTIONS

TABLE 8: Scenario projections for gynaecology acute activity, Royal Hospital for Women, 2015/16 to 2031

DATA	2015/16	2016/17	2017/18	2021	2026	2031
DAY ONLY						
Separations	1,586	1,563	1,522	1,895	1,960	2,029
Beds required	4	4	4	5	5	6
OVERNIGHT						
Separations	1,218	1,214	1,232	1,476	1,569	1,647
Bed days	3,521	3,941	3,976	3,946	4,099	4,149
Av LOS	2.9	3.2	3.2	2.7	2.6	2.5
Beds required	11	13	13	12	12	13

Source: HealthAPP, Flowinfo V17.0
Exclusions: ED only
Inclusions: Gynaecology ESRGs
Overnight beds required is based on an 85% occupancy rate

Key Points:

- Overall 62% of separations came from SESLHD. There is however significant variation regarding the inflow proportions within the 8 gynaecology ESRGs
- It is important to note for the projections, there has been recent changes in the flow pattern for the following 3 gynaecology ESRGs:
  - ESRG 717 Non-procedural gynaecology - increasing inflows primarily due to DRG N62B Menstrual and other Female Reproductive System Disorders, Major complexity particularly residents coming from Southern NSW, HNELHD and SLHD (as well as local residents).These inflows have contributed to the LOS increasing recently. Additionally, there has been significant growth since 2014/15 in both day only and overnight non-procedural gynaecology, particularly for DRG N62B Menstrual and other Female Reproductive System Disorders Minor Complexity. This growth is due to local residents and is above the predicted trends
  - ESRG 718 Gynaecology oncology – significant increase in inflows particularly from ACT and ISLHD and is above the predicted trends. 75% of separations are inflows
  - ESRG 712 Endoscopic procedure for female reproductive system - since 2013/14 the number of inflows has stopped declining and has stabilised. This change in trend is also reflected in the average NWAU which has also increased
  - The recent changes in flow pattern as specified above have been reflected in the scenario projections.
- There has also been a change in the complexity of separations for ESRG 719 other gynaecological surgery due to rural inflows from Southern NSW and ISLHD for cancer surgery who have had very long lengths of stay i.e. 30 days, 60 days, 1 patient stayed for 90 days etc. This has also contributed to the LOS increasing recently
- Overall the gynaecology scenario projections show some clinical groups are projected to stablise with no significant increases projected. ESRGs Non procedural gynaecology, gynaecological surgery and gynaecology oncology are projected to increase the most. Overall, gynaecology is projected to grow at 2.4% per year from 2017/18 to 2031
- Similar to obstetrics, the Av LOS rate of decline is slowing considerably in more recent years particularly for ESRG 717 - Non-procedural gynaecology and ESRG 718 - Gynaecological oncology where increasing inflows and complexity has impacted on the LOS decline. This has been reflected in the scenario projections
- Projected activity was reversed from POWH for ESRG 717 - Non-procedural gynaecology, ESRG 718 - Gynaecological oncology and 719 - Other Gynaecological Surgery. This resulted in an additional 0.3 of an overnight bed by 2031 and 0.3 of a day only bed by 2031
- The impact on gynaecology beds due to the potential expansion of the Fertility Research Centre has been taken into account, specifically increased separations for fertility preservation for young cancer patients and other IVF related gynaecological complications, particularly ectopic pregnancies. This had minimal impact on beds, with an additional 0.3 of a day only bed and 0.2 of an overnight bed by 2031. The assumptions that underpin the projections are sourced from Fertility and Research Model of Care paper submitted to MoH in 2019, Australian New Zealand Reproductive Technology national report published in December 2018 reporting ectopic pregnancies rates in the IVF population and the UNSW Perinatal Epidemiology and Statistics Unit (IVF success rates)
- It is important to note that the close observation unit bed days have been removed in the overnight projections by ESRG in the final calculation of the projected beds (but not removed in the projected bed days in the table above to ensure a consistent representation of the Av LOS trends). The projected beds have not increased from the historical data as the historical data contains close observation bed days, and gynaecology oncology and gynaecology surgery within this ESRG (but mostly gynaecology oncology) have a high proportion of patients that are admitted into the close observation unit. On average gynaecology patients occupy 1.5 of the 5 close observation unit beds.

2.4.4.3 NEONATAL INTENSIVE CARE AND SPECIAL CARE NURSERY PROJECTIONS

TABLE 9: Scenario projections for neonatal intensive care and special care nursery, Royal Hospital for Women, 2015/16 to 2031

DATA	2015/16	2016/17	2017/18	2021	2026	2031
Separations	1,160	1,071	1,071	1,416	1,446	1,473
NICU Beds required				23	27	32
SCN Beds required				33	34	35

Source: HealthAPP, Flowinfo V17.0
Exclusions: ED only
Inclusions: Perinatology and qualified neonate ESRGs
Beds required is based on an 70% occupancy rate

Key Points:

- Improved survival of the very sick newborns, particularly the extremely low gestation infants, has resulted in exponential growth in demand for neonatal care resources and occupancy. These infants are driving the demand for NICU beds and account for 77% of total NICU hours but represent only 13% of separations
- SCN hours have fluctuated over the period. There appears to be more stability in the data in the last 6 years with the number of SCN hours declining due to NICU babies spillage into SCN and promoting a LHD network approach in facilitating efficient back transfer of referred sick infants to district neonatal units for convalescence and ongoing care of prematurity, particularly in the last 3 years
- It is important to note for the projections there have been recent changes in trends for perinatology, with increasing separations from Randwick LGA and ISLHD residents
- To enable care to be provided close to home, outflows for SESLHD residents (including ISLHD) were reversed. Projected activity was reversed from Liverpool Hospital, Nepean Hospital, Royal North Shore Hospital, Royal Prince Alfred Hospital and a small proportion of Sydney Children's Hospital (9%). In total 75 perinatology separations were reversed by 2031. Please note 9% of projected activity was reversed from SCH, this is based on analysis of SCH perinatology data (via the DRG) and based on advice from clinicians that babies under 2.5kg are better managed at The Royal rather than SCH
- The projection methodology was also adapted to ensure the increasing NICU hours due to very preterm babies is reflected appropriately. It is projected the average hours of planned NICU separations will increase and this increase in average hours is driving the increase in the NICU projections
- The projections for SCN include introducing HITH model of care. It is estimated that this model of care could be delivered to 3-5 babies at any time in the SCN (transitional care) and will reduce the average length of stay by 3-5 days for residents living in the northern sector of SESLHD. The SCN projections show that 38 SCN beds are required by 2031 however, with the introduction of the HITH model of care, the projections show that 35 beds are required by 2031, a saving of 3 beds by 2031 and importantly improving maternal and infant well-being.

2.4.4.4 CLOSE OBSERVATION UNIT PROJECTIONS

TABLE 10: Scenario projections for Close Observation Unit activity, Royal Hospital for Women, 2015/16 to 2031

DATA	2015/16	2016/17	2017/18	2021	2026	2031
COU Bed days	971	1,001	1,030	1,099	1,156	1,235
COU Beds required				4	5	5

Source: HealthAPP, Flowinfo V17.0
Beds required is based on a 75% occupancy rate.
Exclusions: ED only

Key Points:

- It is important to note that the close observation unit bed days have been removed in the overnight projections by ESRG in the final calculation of the projected beds
- The projections show that gynaecology oncology, caesarean sections and vaginal deliveries will continue to be the highest users of close observation beds.

2.4.4.5 OTHER ACUTE ACTIVITY PROJECTIONS

TABLE 11: Scenario projections for other inpatient acute activity, Royal Hospital for Women, 2015/16 to 2031

DATA	2015/16	2016/17	2017/18	2021	2026	2031
DAY ONLY						
Separations	257	290	275	403	459	508
Beds required	1	1	1	1	2	2
OVERNIGHT						
Separations	404	432	439	599	635	713
Bed Days	1,619	1,797	2,034	2,579	2,700	3,106
Average Length of Stay	4.0	4.2	4.6	4.3	4.3	4.3
Beds required	5	6	7	8	8	9

Source: HealthAPP, Flowinfo V17.0
Exclusions: gynaecology, obstetrics, perinatology, qualified neonates and unqualified neonate, chemotherapy, renal dialysis, psychiatry, ED only
Beds required is based on an 85% occupancy rate

The above data excludes gynaecology, obstetrics, perinatology, qualified neonates and unqualified neonate, chemotherapy and renal dialysis.

Key Points:

- Day activity has tripled over the period from 13% to 39% of total separations
- 66% of separations come from SESLHD followed by ISLHD (9%) and SLHD (7%)
- Breast surgery, general surgery (particularly for abdominal pain) and general medicine (surgical follow up) are projected to grow the most
- The average overnight length of stay has declined but overall there has been significant fluctuation year to year. The overnight Av LOS is projected to decline to 4.3 days by 2031

- Reversed flows from POWH for Breast Surgery. This resulted in an additional 0.5 of an overnight bed and 0.3 of a day only bed by 2031
- It is important to note that the close observation unit bed days have been removed in the overnight projections by ESRG in the final calculation of the projected beds (but not removed in the projected bed days in the table above to ensure a consistent representation of the Av LOS trends).

2.4.4.6 NON-ADMITTED PROJECTIONS

There has been significant work in SESLHD to improve non-admitted patient data management and recording in recent years. However, valid and reliable trends are currently not possible to elicit from current non-admitted data. As such, the projections use the following methodology and assumptions:

- Baseline outpatient data sourced from EDWARD
- Projection methodology: mapped each Clinic Class to inpatient SRG. Applied projected growth rate of The Royal scenario inpatient SRGs to current activity for each Clinic Class. The advantage of this approach is that it takes into account population growth and disease patterns
- Assumes only face to face activity requires a clinic / treatment room, all other activity would be delivered from staff office / workstation
- The current operating hours of the clinics have been projected to continue into the future e.g. Gynaecological Oncology, with exception of Breast Services
- The assumptions applied to the projections relate to the days and hours available and the average clinic duration. The average clinic duration varies from 20 min to 1 hour appointments (mental health, lymphedema). The assumptions applied in the projections were sourced from the clinical consultation
- Allied Health clinics have been mapped into the appropriate aggregate grouping of gynaecology, midwifery and maternity, MFM etc. where directed to do so by The Royal
- Chemotherapy and clinics located within the Fertility Research Centre have been excluded in the projections. The Fertility Research Centre is a new service, with a proposed model of care that predicts 750 patients by year 5, and currently has 6 consulting rooms which are shared
- There are 74 clinics in total and the projections have been grouped into the following categories: Gynaecology, Midwifery and Maternity, Gynaecology/Oncology, Maternal Fetal Medicine, Breast Services, Mental Health and Other (some allied health, Newborn Care Centre), Ward based clinics (e.g. pregnancy day stay unit).

The information that determined the scenarios was sourced from clinical consultation, i.e. where clinicians reported issues accessing clinic space, increasing capacity in growth areas, significant wait lists and where gaps in services were identified. The clinics identified below have been increased accordingly.

GYNAECOLOGY

- Early Pregnancy Assessment Service
- Menopause
- Pain Management
- Pelvic Floor
- Uro-gynacology

GYNAECOLOGY ONCOLOGY

- Gynaecology Oncology Colposcopy
- Medical Oncology
- Gynaecology Colposcopy

MATERNAL-FETAL MEDICINE

- Perinatal Infections
- Preconception multidisciplinary
- MFM Multidisciplinary
- MFM Genetics

MIDWIFERY AND MATERNITY

- Antenatal diabetes education
- Diabetes in Pregnancy
- Next Birth after caesarean section
- Lactation
- Midwifery and maternity
- Obstetric Medicine

OTHER

- Newborn Care Centre
- Growth and Development
- Lymphoedema
- Perinatal Mental Health
- Pregnancy Day Stay
- Breast Clinic
- Newborn Care Centre (community)

Table 12: Scenario projections for non-admitted patients, 2017/18 to 2031

DATA	2017/18	2021	2026	2031
OUTPATIENT ACTIVITY PROPOSED IN AMBULATORY CARE PRECINCT				
Occasions of Service	46,062	67,707	74,354	82,232
Clinics	42	54	56	58
OUTPATIENT ACTIVITY PROPOSED IN GYNAECOLOGY ONCOLOGY PRECINCT				
Occasions of Service	7,213	10,742	11,613	12,173
Clinics	6	12	12	12
BREAST CENTRE ACTIVITY PROPOSED IN BREAST CENTRE NSW				
Occasions of Service	6,571	7,944	8,734	9,139
Clinics	7	8	8	8
WOMEN'S ASSESSMENT SERVICE*				
Occasions of Service	7,827	10,014	11,330	12,819
Clinics	10	13	15	16
TOTAL OOS	67,623	96,407	106,030	116,507
TOTAL CLINICS	65	87	91	94
COMMUNITY ACTIVITY/ HOME BASED				
Occasions of Service	3,981	4,878	5,276	5,476

Source: EDWARD, Methodology developed by SESLHD

Inclusions: face to face activity only. Exclusions: chemotherapy OOS and Fertility Research Centre, imaging

* WAS includes the ward based clinics (i.e. pregnancy day stay clinic), EPAS and reversing projected pregnancy related and gynaecological POWH ED presentations

2.4.4.7 OPERATING THEATRES SCENARIO PROJECTIONS

The main theatre complex at Prince of Wales Hospital is a shared facility which also accommodates patients from The Royal, SCH, Eastern Heart Clinic, and Prince of Wales Private Hospital. Projections for the Operating Theatres were undertaken for the *Greater Randwick Integrated Health Services Plan 2015* and extracts from that plan are reproduced here.

Table 13: Scenario projections for operating theatres/procedure rooms, Randwick Hospitals Campus, 2013/14 to 2031

	POWH	RHW	SCH#	CARDIOTHORACIC^	TOTAL
2013/14					
Emergency operating theatres	2.5	1.0	1.5	0.5	5.5
Other operating theatres	8.5	2.5	3.5	2.5	17
HVSS, Day Only, Extended Day Only					0
All other planned					0
Procedure rooms*	3.0				3
Interventional Suites / DSA^^	0.0				0
Total	**14.0**	**3.5**	**5.0**	**3.0**	**25.5**
2021					
Emergency operating theatres	3.5	1.0	2.0	0.5	7.0
Other operating theatres					0
HVSS, Day Only, Extended Day Only	6.0	2.5	2.5		11
All other planned	2.5	0.5	2.0	3.0	8
Procedure rooms*	3.0				3
Interventional Suites / DSA^^	2.0				2.0
Total	**17.0**	**4.0**	**6.5**	**3.5**	**31.0**
2026					
Emergency	4.0	1.0	2.0	0.5	7.5
Planned					0
HVSS, Day Only, Extended Day Only	7.0	3.0	2.5		12.5
All other planned	3.0	0.5	2.0	3.5	9
Procedure rooms*	3.0				3
Interventional Suites / DSA^^	2.0				2.0
Total	**19.0**	**4.5**	**6.5**	**4.0**	**34.0**
2031					
Emergency	4.0	1.0	2.2	0.5	7.7
Planned					0
HVSS, Day Only, Extended Day Only	7.5	3.0	2.7		13.2
All other planned	3.0	0.5	2.7	3.5	9.7
Procedure rooms*	4.0				4
Interventional Suites / DSA^^	2.0				2.0
Total	**20.5**	**4.5**	**7.6**	**4.0**	**36.6**

Notes:

* Procedure Rooms based on Billington Centre

^^ Interventional suites / DSA (for therapeutic interventional radiology including interventional neuroradiology) are included in operating theatre projections as these rooms are physically located in the operating theatre complex but managed by Medical Imaging. Note an additional Interventional Suite (for diagnostics) is located in Medical Imaging. For information relating to the projection methodology for interventional radiology refer to Medical Imaging projections

SCH projections were developed by Sydney Children's Hospital Network as part of the Draft Masterplanning for Operating Room Services Randwick Hospitals Campus, May 2015. These projections, will be confirmed in the SCH Health Services Plan

^ Cardiothoracic projections include POWH public patients and an estimate of private patients (see projection methodology). It does not include SCH projected activity as it is assumed this is included in SCH projections.

Key Points:

- Baseline case numbers and average room duration sourced from Surginet
- 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%
- Inpatients (POWH and The Royal): determined procedure rate by SRG for emergency and planned cases, applied this rate to projected inpatient separations using aIM2012 and SiAM2012, multiplied by the average room duration by SRG and urgency
- Calculated high volume short stay and day only activity by determining proportional split of planned surgical / procedural separations which were day only plus overnight with DRGs suited to HVSS in 2013/14 data (FlowInfo), applied this split to projected planned surgical separations, assumed 230 operating days with 6 cases per operating day
- 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.

2.4.4.8 MEDICAL IMAGING ULTRASOUND PROJECTIONS

Prince of Wales Hospital provides a shared medical imaging service for the Randwick Campus. It provides a comprehensive range of diagnostic, consultative and interventional services to POWH, The Royal and SCH 24 hours per day. Projections for the Medical Imaging were undertaken for the *Greater Randwick Integrated Health Services Plan 2015* and extracts from that plan are reproduced here.

Table 14: Current and Projected Medical Imaging requirements, Randwick Hospitals Campus, 2015 to 2031

TREATMENT MODALITY	2015	2021	2026	2031
Ultrasound	5	7	7	7

Source: RHW Medical Imaging Department, 2015. SESLHD Strategy and Planning Unit (methodology)

Key Points:

- Trend analysis between 2010/11 and 2014/15 segmented by inpatients/outpatients
- Outpatient projections are based on the availability of 8 hours per day and 240 days per year. Inpatient projections are based on the availability of 12 hours per day and 336 days per year
- 85% occupancy is applied
- In 2019, 5 ultrasound systems are available to the Royal Hospital for Women, as advised by the Director of The Royal's Department of Medical Imaging
- In the 2019 consultation process The Royal's Director of the Department of Medical Imaging suggested expansion of the ultrasound capability and increase of available ultrasounds to between 8-10 (see Consultation Report)
- Subject to the provision of activity data to the SESLHD Strategy and Planning Unit, projections may be revised for medical imaging.

Recommendations for the future:

- Review and revise the Medical Imaging projections contained in the 2014 GRIHSP prior to capital and facility planning to account for current activity and demand forecast, take account of emerging planning methodology for medical imaging and potential to streamline services with partners.

Nuclear Medicine is a shared service for POWH and SCH, and also provides services to the other hospitals on Randwick Campus (The Royal and Prince of Wales Private Hospital), as well as for Sydney/Sydney Eye Hospital, War Memorial Hospital Waverley and Justice Health.

2.5 A skilled workforce

Goals

- Provide strong clinical leadership, with commitment to high quality gender-based and culturally appropriate care, advancing evidence-based decision-making and innovation, and rapid translation of research findings into clinical practice, population health programs and service models
- Support an environment where our people can be accountable, happy and well, and supported to reach their potential.

What we are doing well:

- Many clinicians at The Royal are recognised international or national leaders in their field, engaged in advising on clinical practice guidelines, national and state strategies and plans, chairing clinical quality and safety committees and introducing and trialling new models of care
- A new program designed to increase the number of Indigenous midwives in the health system and improve health outcomes for Indigenous mothers and babies has commenced at The Royal. In partnership with NSW Health, TAFE NSW and the Poche Centres for Indigenous Excellence at the University of Sydney, the program includes five days a fortnight paid work at The Royal, plus study at TAFE before the university degree. It has allowed two local Aboriginal women to train who would not have been able to study midwifery without the program.

"I've always wanted to do it, but I didn't finish year 12, so I don't have that HSC first off and I never went to TAFE, I was just raising my kids…They have such good support, not only the Poche program but with the Hospital which has tailored my hours to fit my family and without them doing that, I wouldn't be able to do it…To get this kind of qualification and to be supported, and being specifically educated around Indigenous women and families within a group of other Indigenous people, is quite empowering"

Aboriginal participant.

The program was featured in the Sydney Morning Herald in June 2019.


The Sydney Morning Herald

'Empowering': new program aims to boost numbers of Indigenous midwives

Medical student in the Antenatal Clinic:

"I've had a great time here at The Royal, I've learnt so much and you are all so friendly."

Recommendations for the future

- Develop a succession strategy for senior clinicians across all clinical disciplines
- Increase the Allied Health workforce across all disciplines, and introduce occupational therapy into multidisciplinary practice
- Build the skills of junior doctors through broader engagement across services at The Royal
- Improve data management to support service evaluation, improvement and research by sourcing access to resources and training at The Royal and in collaboration with the Directorate of Strategy, Innovation and Improvement
- Build on our relationships with UNSW and the University of Technology with professorial appointments
    - secure employment of a Professor of Midwifery and Women's Health
    - secure employment of a Professor of Gynaecological Oncology
- Strengthen the engagement of universities in priority and/or emerging areas for The Royal, with support for conjoint academic positions and researchers
- In partnership with the Sydney Children's Hospital and the Prince of Wales Hospital, develop clear processes and agreements to enhance access at RHW to a range of allied health disciplines and skill sets, incorporating opportunities for specialised allied health skills development
- Introduce a full-time Aboriginal Health Liaison Officer position to cover all RHW
- Partner a Clinical Midwife Consultant Grade 1 position with the Cross Cultural Worker and provide care navigation for women from a CALD background
- Build professional development, clinical supervision and support for women's and newborn's clinical services across NSW including developing The Royal's role as a visiting centre for rural and regional specialists in support of The Royal's statewide role
- Develop and establish educator roles across Medicine, Nursing and Allied Health
- Contribute to SESLHD's workforce strategy identifying priority staff establishment increases to accommodate new clinical services, service gaps and capital enhancements.

2.6 Genetics and Genomics

Goal

- Lead the application of genomics and genetic determinants of health to tailor diagnosis, support and health care provision in women's health and pre-conception

The vision for NSW Health genomics, outlined in the NSW Health Genomics Strategy (June 2017) [73] is that by 2025, NSW Health will be recognised as a leader in the development and use of appropriate genomic technologies in healthcare and public health for the benefit of the NSW population.

The Randwick campus partners are well placed to play a significant role in NSW's healthcare genomics, bringing together expertise in clinical genomics at POWH and SCH, with NSW Health Pathology and UNSW's Ramaciotto Centre for Genomics.

Incorporating genetics and genomics into all elements of healthcare for women and newborns will ensure The Royal remains at the forefront of healthcare delivery. Already of significance in breast cancer and gynaecological oncology as well as pregnancy and neonatology, genetics and genomics will increasingly be applicable to other areas of women's health.

The Royal has the potential for a leadership role in preconception and reproduction genomics in partnership with UNSW's Ramaciotto Centre for Genomics, and with SCH, where there are well established clinical genetics and molecular and biochemical genetics services. Implementing pre-conception genetic testing, as outlined in Mackenzie's Mission, and subsequent genetic counselling and healthcare management of couples and their babies would see The Royal leading in this field.

Health care for all persons will increasingly include genetic and genomic information along the pathways of prevention, screening, diagnostics, prognostics, selection of treatment, and monitoring of treatment effectiveness.

Elizabeth is a 27 year old women who was diagnosed with epilepsy 5 years ago. After trying a number of medications, Elizabeth's epilepsy is now well controlled and she is planning for pregnancy. Her GP referred her to MotherSafe for review and advice. At a face to face counselling session with MotherSafe, Elizabeth was able to receive advice regarding the risks of taking or not taking her epilepsy medication, potential genetic and other testing she could undertake, as well as nutritional advice, to ensure her health is optimized for pregnancy.

Some examples of incorporating genetic and genomic information into practice include:

- recognising a newborn at risk for morbidity or mortality resulting from genetic metabolism errors
- identifying an asymptomatic adolescent who is at high risk for hereditary colon cancer
- identifying a couple at risk for having a child with a genetic condition
- guiding interventions for the prevention of cardiovascular disease in young adults.
- facilitating drug selection or dosage in treatment of an adult with cancer based on molecular markers
- promoting informed consent that includes the risks, benefits, and limitations of participation in genetic research
- assisting anyone having questions about genetic and genomic information or services.[74]

The past decade has delivered major advances in our understanding of the human genome and the association between genetic variation and disease. Through advances in methods and tools, the cost of testing has fallen dramatically. This, coupled with the availability of high speed computing to support sophisticated analysis, is making it feasible for genomics to become a part of routine healthcare. Genomic testing is a clinical reality in health care today, as people with risk for disease or simply a curiosity about their genetic information, are having their genomes analysed.

Designing a health plan for a woman based on her anticipated risks for disease and response to treatment is called personalized or precision health care. Many personalized health care plans include a genetic or genomic profile to complement knowledge about ancestry, family and personal medical history. Improved precision in care may avoid unnecessary treatments, improve treatment outcomes and provide savings for the healthcare system and the economy at large.

Definitions

Genetics is the study of general mechanisms of heredity and variation in inherited traits.

Genomics is the study of the function of all nucleotide sequences present within the entire genome of a species, including gene and nongene areas of the DNA.

The main difference between genomics and genetics is that genetics scrutinizes the functioning and composition of the single gene, whereas genomics addresses all genes and their interrelationships in order to identify their combined influence on the growth and development of the organism.

(Beery T & Workman L. Genetics and Genomics in Nursing and Health Care 1 Ed Dec 2011)

Pharmacogenomics is the study of how genes affect a person's response to drugs. Researchers are learning how inherited differences in genes affect the body's response to medications. These genetic differences will be used to predict whether a medication will be effective for a particular person and to help prevent adverse drug reactions.

The field of pharmacogenomics is still in its infancy. Its use is currently quite limited, but new approaches are under study in clinical trials. In the future, pharmacogenomics will allow the development of tailored drugs to treat a wide range of health problems.

(Genetics Home Reference, National Institutes of Health - National Library of Medicines (USA), 2014)

Recommendations for the future:

- Ensure provision of education accessible to all clinicians at The Royal to increase skill and knowledge in the fundamentals of genetics and genomics
- Provide leadership in genomics as part of routine healthcare.

2.7 Healthcare enabled by systems and technology

Goals

- Access the right information at the right time from anywhere, on any device
- Transform the way healthcare is delivered to improve access, enhance self-management and clinical decision-making.

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.

In the future we will see

When Sara and Charlie first found out they were 8 weeks pregnant they were overjoyed and scared.

Googling, there was too much information until they found The Royal's website and downloaded the APP finding a tab - "what to do now I'm pregnant". A check list with links to evidence helped them make informed decisions before getting a hospital appointment. Once they had seen their GP, the test results were uploaded online into their profile. They chose online the best day and time for their first appointment at The Royal. Sara didn't have Medicare, so she was prompted to enter her insurance details and was informed that at the first visit the booking office would explain all the costs involved and then she would get an automated email with the cost information. Sara also noticed that she was able to change the language to Spanish to help her understand some of the medical words.

Taking them to a page that explained all the differing ways that they able to have their antenatal care, the APP asked Sara and Charlie to enter their preferences – it also stated that they, even if they needed medical care, would get a named midwife for guidance, continuity and midwifery appointments.

On arrival at the hospital they self-registered and presented to the clinic. They were greeted by a midwife – April - who was able to access Sara and Charlie's information, explain the appointment and what would happen. The appointment was long – very comprehensive and informative, including information sourced on The Royal's website, reinforcing the importance of researching and getting information from reliable sources. April stated that as they had nominated GPSC/MAPS as first preference when they booked online, she would be their midwife. She explained all the contact numbers and that, as Sara had a 'higher BMI', she would need to consult with the medical team. Together they logged in and booked all the appointments – Sara knew that she could change these anytime with the online system. It did however alert the midwife/Doctor whenever she changed one – to ensure there was appropriate follow up happening.

Sara and Charlie were then encouraged to look at the antenatal information tab on the website to see the "usual" schedule of visits for a healthy first time mum. There was a link to the antenatal education classes and a free information factsheet on usual pregnancy discomforts and complaints, with lots of "get healthy in pregnancy" videos and plans.

April explained that the online profile/file is something that all midwifery/obstetric/GP (nominated) and Sara can access it at any time to check and see what the plan is, what time her next appointment is or if the blood results or Ultrasound scans have been uploaded into her profile.

At 19 weeks pregnant Sara received a text reminder that her appointment with the Obstetric team was the next week - and for her to confirm it. It also reminded her to upload her Morphology scan results to her profile, prior to the appointment, for easy access at the appointment.

On the day of the 20 week appointment, Sara received a text reminding her that her appointment was in 2hrs, and currently there is no wait time. When she and Charlie arrived at the hospital she scanned in and was prompted by the self-check in machine to go and pay the required - pre-informed price (as she is Medicare ineligible). Once that was done it registered Sara and they sat and waited to be called. It was a seamless visit with the obstetrician. The obstetrician had all the information from her first visit with April and could easily see why April had referred Sara for an appointment. The obstetrician reassured Sara and Charlie that the GP and April would update all appointments in the profile and if anything fell outside the normal range then she and April would get an online alert to follow up. It was also reiterated that Sara could call the birthing unit 24/7 for any advice or if she was worried about the baby or her pregnancy, but if she had queries or non-urgent questions then April's mobile number could be texted or called 8am – 4.30pm.

The obstetrician also informed Sara and Charlie that April and their GP would receive an auto-generated email saying that an obstetric plan had been made.

At the 20 week appointment, Sara was prompted with a link to the antenatal education classes which encouraged booking in by 24 weeks. The link showed and explained many different types of classes, including a link to multilingual classes.

Sara and Charlie reported feeling well informed, aware and happy. Sara also felt confident knowing that all her information was being transferred and easily accessible by her nominated GP and the child and family health service – meaning no repeating of stories. When Sara visited the GP for follow-up BP check at 2 weeks after her daughter Luna had been born, she was so happy that the GP had all the information about the birth and what had happened postnatally, taking the stress out of having to remember the details.

Using innovative health technology

Innovative health technology facilitates the linking of information and services to improve patient access and efficiency, including MyHealth Record, telehealth and teleweb services, remote health monitoring and medication management technologies.

Technology can be used to support people 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; [74,75]

- 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
- 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.

2.7.1 TELEHEALTH AND VIRTUAL HEALTHCARE SUPPORT

The *SESLHD ICT Strategy*[77] 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.

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 patient's information required during clinical encounters before the actual visits and at key times following treatment.

For The Royal to be effectively digitally connected it will require:

- Core ICT infrastructure
- Service delivery platforms
- Service delivery applications
- Operational processes.

2.7.2 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. [78] 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 personalized 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", [79] with strong links to whole-of-government initiatives to drive a coordinated approach to analytics.

Recommendations for the future:

- Improve access to relevant and timely information for patients and families.
- Improve and increase telehealth capability
- Develop centralised intake systems
- Advocate for platforms that facilitate communication with GPs and other service providers.

2.8 Environmental Sustainability

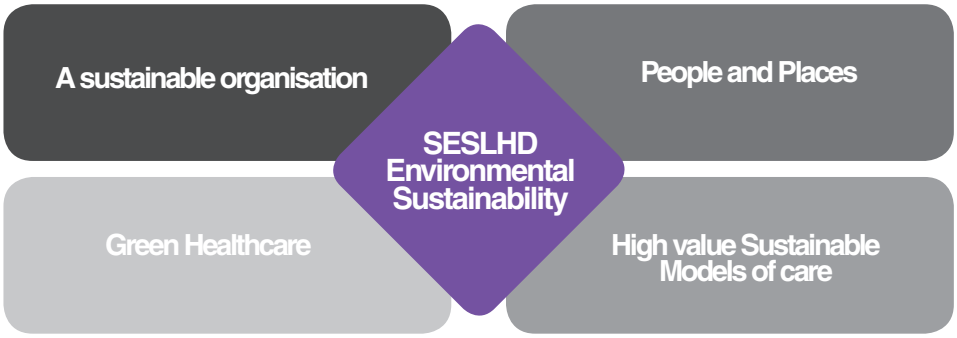
Goals

- Address our climate risk, enabling our communities to be healthy and well
- Reduce our environmental impact, reduce waste, use resources judiciously and develop a healthy and sustainable work environment for our staff.

Developing more environmentally sustainable health care and promoting a sustainable health care system which supports healthy lives and delivers exceptional care are identified strategic priorities for SESLHD. The health sector has a large carbon footprint and has a responsibility to address its own climate risk. Climate change is an issue of social justice and health equity – it will disproportionally affect babies, children, Aboriginal and low socio-economic groups.

SESLHD's *Environmental Sustainability Plan 2019-2021*[80] recognises that effective action to address environmental sustainability is aligned with our commitment to place patients at the centre of care and to focus on health, wellbeing and prevention of disease. Through the judicious use of resources our organisation can reduce our waste and continue to focus on value whilst further developing a healthy and sustainable work environment for our staff.

The following themes provide a framework for the SESLHD approach:



Ten areas aligned to the framework are defined (as illustrated in Figure 6), and can be aligned with the Sustainable Development Assessment Tool (SDAT) developed by the National Health Service in England.

FIGURE 6: Sustainable Development

The adverse effects of climate change on human health are wide ranging. Impacts such as heat waves, drought and poor air quality are already major concerns in NSW as are the effects of extreme weather on vulnerable populations and on a range of conditions such as asthma and heart disease. The adverse effects of climate change on health are both direct and indirect and are recognised at Commonwealth (Australian Government-Impacts of Climate Change) and State level (NSW-Impacts of Climate Change). Direct impacts are numerous and Australia is especially susceptible to a number of these including:

- an increase in extreme weather events such as heatwaves and drought and the associated increases in morbidity and mortality [81]
- changes in infectious disease patterns along with increases in existing vector borne diseases such as Ross River Virus are predicted to rise
- beyond the direct impacts, climate change threatens economic growth and is projected to lead to a rise in both poverty and food insecurity. [82] Reduced resources may lead to population displacement [83] and potentially increased conflict
- the health burden, both direct and indirect, will be unequally distributed. The world's most vulnerable will suffer first and suffer most severely. [84]

The traditional 'green' initiatives relating to energy, waste and transport are important and can deliver some of the change required. However, in the longer term other aspects, including a change in the way healthcare is provided, will be required if SESLHD is to fully realise its potential contribution to net zero carbon targets.

SESLHD Case Study:

The Royal Hospital for Women Recycling Programme

In an initiative lead by the Domestic Services department, a significant percentage of The Royal Hospital for Womens' PVC Intravenous (I/V) bags are now being diverted from landfill to recycling.

In collaboration with the Vinyl Council of Australia, Baxter Healthcare supports hospitals to recycle clean PVC after clinical use. This program is a cost-efficient way to dispose of recyclable materials and reduce landfill.

All ward areas now have 50 litre tubs with appropriate labelling and an initial training program has been provided to each area by a member of the Baxter Healthcare team and the Domestic Services Manager.

Once recycled, Australian manufacturers will receive the granulated PVC to make hoses, safety mats and other products. Recycling PVC also results in reduced carbon emissions. Compared with incineration for clinical waste, recycling a PVC IV bag reduces CO2 emissions by 77 per cent. When compared with general waste disposal, recycling a PVC IV bag results in a CO2 emissions reduction of up to 20 per cent.

Currently, over 55 hospitals have signed up for the PVC Recycling in Hospitals program across Australia and New Zealand.

In the development of the SESLHD Environmental Sustainability Strategy, staff and consumer representatives raised the following issues:

- **Waste:** a clear and consistent issue for staff who wish to see a reduction in waste and standardisation of processes regarding waste and recycling.
- **Plastic:** staff expressed concerns relating to single-use items, gloves and in general the large amount of plastic used in our activities.
- **Sustainable travel:** it was suggested that all facilities should have a plan to encourage more active travel and end-of-trip facilities to support a shift in travel mode.
- **Green space:** maximising the available green spaces was highlighted as positive for staff and consumer wellbeing as well as having environmental benefits.
- **Purchasing:** staff noted that there may be opportunities for greater consideration of environmental sustainability through different procurement models.
- **Recognition:** there was support for sustainability initiatives/champions to be recognised in District and facility award schemes.
- **Ongoing emphasis:** there was recognition that ongoing communications around this topic would be helpful including taking advantage of opportunities such as World Environment Day and No Car Day.
- **Measurement:** standardised metrics would allow meaningful comparisons across facilities and activities.
- **Accountability:** staff consistently queried how SESLHD would take action to progress the sustainability agenda.

Recommendations for the future:

- Continue to support sustainability champions through regular training and information
- Actively participate in the SESLHD Environmental Sustainability Strategy.

2.9 Providing world class research, teaching and education

Goals

- As a learning organisation, foster research, teaching and education to advance best practice; deliver better outcomes and equip the current workforce, future clinicians and other health professionals for life-long learning
- Build translational research capacity and capability in women's health, and contribute to international knowledge.

2.9.1 RESEARCH

Research at The Royal is consistent with the *SESLHD Research Strategy 2017-2021*, [85] 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.

The Royal has a proud history of research and innovation as a leading provider of women's health services. Several of the medical staff have professorial appointments with the UNSW and other medical staff are associated with the University of Sydney.

The Midwifery and Women's Health Research Unit was a joint initiative between the University of Sydney and the Royal Hospital for Women with support from the Royal Hospital for Women Foundation.

As a partner in the Randwick Health and Education Precinct, The Royal is well placed to strengthen its research capacity and capability.

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.

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

As part of SESLHD, staff at The Royal 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.

The Royal is well placed to contribute to the National Women's Health Strategy 2020-2030 agenda for research which is to:

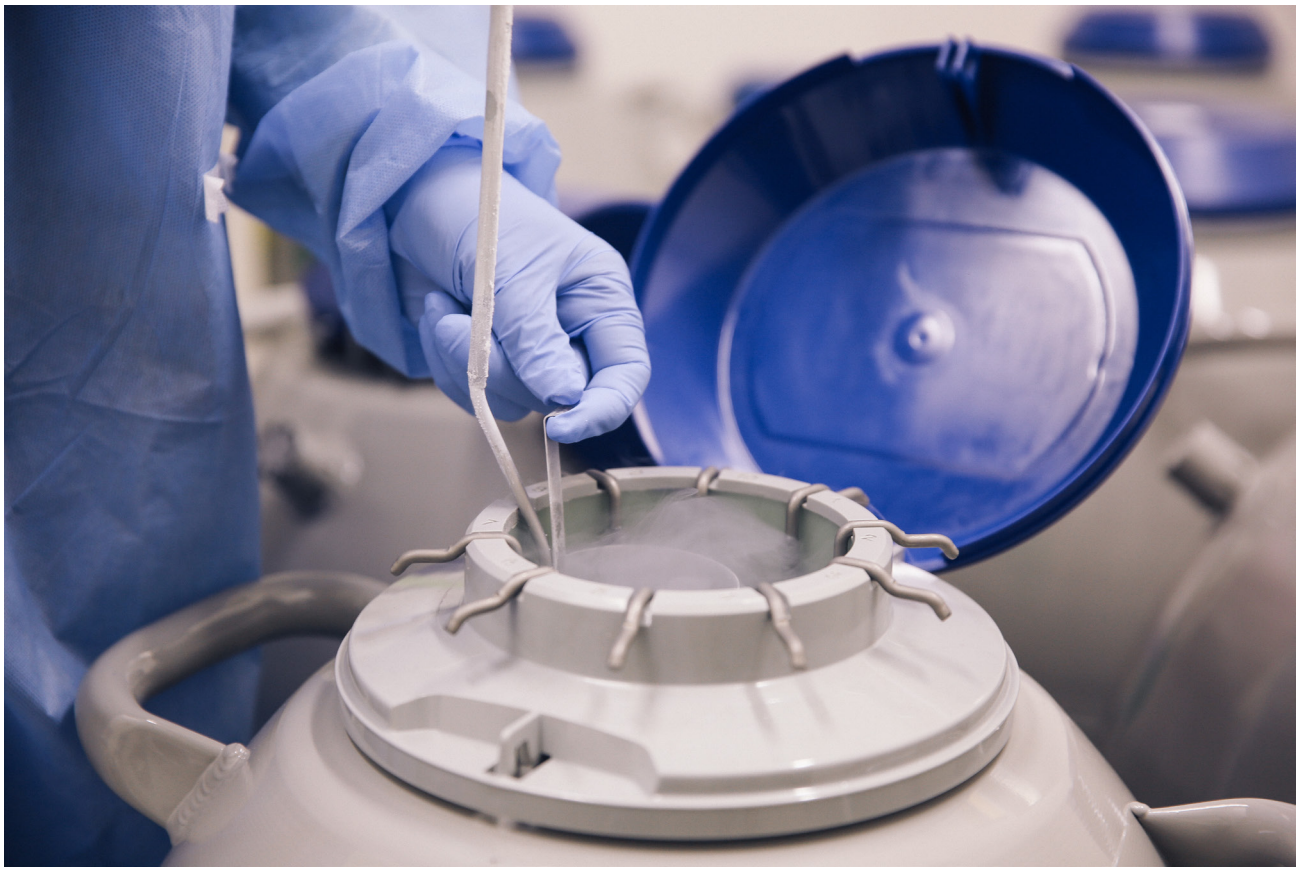
- Increase and support the number of research-focused clinicians and social scientists working to solve health problems specific to women and girls
- Create pathways to engage and support more women working as researchers in women's health
- Increase support for Indigenous researchers, ensuring Aboriginal and Torres Strait Islander identified research positions are built into research studies involving Indigenous participants.

It includes, of particular relevance to The Royal's role:

- "Strengthen the national research agenda for endometriosis and associated chronic pelvic pain to enable: more accurate quantification of disease burden; investigation of causes; and increase the potential for finding a cure." [86]
- "Maintain awareness of the outcomes of research undertaken through the $500 million Australian Health Genomics Futures Mission and implement new technology to improve access to early diagnosis and prevention of disease in women and girls"
- "Increase data and research relating to the risk factors affecting pregnancy and pregnancy complications"
- "Commission research on maternal anxiety and depression, stillbirth, miscarriage, pregnancy complications, and obesity during pregnancy"
- "Support research which examines the impacts of infertility treatment outcomes on mental health and productivity, and seeks to mitigate causes of infertility"
- "Commission further research into the impact of menopause"
    - "Examine the impact of early or medically-induced menopause on mental and physical health as well as the overall impact of menopause on work"
    - "Consider research into women's experiences of menopause alongside its economic impact." [87]

Recommendations for the future:

- Strengthen the engagement of universities in priority and/or emerging areas for The Royal including the national agenda, eg endometriosis and pelvic/chronic pain, women's mental health, perinatal mental health, fertility and reproduction, menopause, obstetric medicine
- Secure investment in clinical leads for research and build succession planning and capacity across the breadth of The Royal's specialties



2.9.2 TEACHING AND EDUCATION

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.

The Royal is a teaching hospital of the UNSW for obstetrics, gynaecology and neonatology. It provides clinical education for first to sixth year undergraduate medical students and post graduate students from both the UNSW and the University of Sydney. 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. 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, lectures, clinical skills training, simulation lab and on-line education e.g. HETI modules.

The Royal has the Women's Health Institute located within the facility. Adjacent to the Institute is a lecture theatre and several tutorial rooms. There are, however, a limited number of teaching spaces across the Randwick campus.

A variety of educational and advanced training opportunities are also available for staff from the NSW Health Education and Training Institute (HETI).

Recommendations for the future:

- Provide statewide leadership of education and professional development in women's and newborn health
- Provide flexible training arrangements for staff and trainees, including simulation and point of care education.

3. Partners in care

3.1 South Eastern Sydney Local Health District

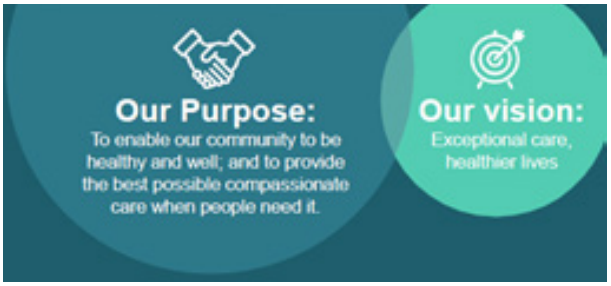
SESLHD serves an estimated residential population of approximately 930,000 people, extending from Sydney's Central Business District to the Royal National Park in the south. It has a complex mix of highly urbanised, industrialised through to low density suburban development areas and supports a culturally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

The Royal Hospital for Women is one of six public hospitals with associated health services operated by SESLHD. The others are Prince of Wales Hospital, St George Hospital, Sutherland Hospital, Sydney / Sydney Eye Hospital and Gower Wilson Memorial Hospital on Lord Howe Island.

SESLHD 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.



3.2 Randwick Hospitals and Community Health Services

Buildings were first established on the Randwick campus in the 1850s, being converted to a hospital in 1915. Today, the Campus includes:

- Royal Hospital for Women
- Prince of Wales Hospital and Community Health Services
- SCH, Randwick (managed by SCHN)
- Prince of Wales Private Hospital (operated by Healthscope).
- Eastern Suburbs Mental Health Service
- Other facilities and providers of healthcare and research.

In addition, partnerships with research, education and health facilities on campus include:

- Neurosciences Research Australia (NeuRA), an integrated clinical research and teaching facility
- The Bright Alliance, including the Nelune Comprehensive Cancer and Blood Disorders Centre and University of New South Wales' Scientia Clinical Research, which will consolidate cancer services on the Randwick Campus.

In November 2016, the Chief Executives of South Eastern Sydney Local Health District, Sydney Children's Hospital Network and the Vice Chancellor of the University of New South Wales endorsed a Randwick Health Collaboration Collaborative Framework for the Greater Randwick Urban Masterplan. The framework outlines a shared vision, aspirations and governance structure that will support the development of the precinct in a collaborative manner.

The NSW Government has committed an investment of $720 million to deliver a major upgrade of the Prince of Wales Hospital and its shared services and transform the existing Campus' standing as one of Australia's leading providers of health and medical research services.

3.2.1 PRINCE OF WALES HOSPITAL AND COMMUNITY HEALTH SERVICES

Prince of Wales Hospital and Community Health Services is a major metropolitan teaching hospital and tertiary referral centre, providing a wide range of services to adolescents and adults to residents of south eastern Sydney and specialist health and medical services to NSW. Services provided include emergency, medical and surgical services, aged care, rehabilitation and outpatient services, and specialist services including for spinal injury, neurosurgery and renal transplant.

The hospital is affiliated with various Universities and premier medical teaching facilities which enables staff to provide excellence in healthcare in conjunction with a commitment to quality clinical teaching and leading medical research.

Prince of Wales Community Health Services provide a range of services locally for older people, disabled people and those at risk of loss of independence, within the community and at home. Services provided include Aboriginal Health, community exercise classes, dementia respite care, Community Health Assessment & Treatment Team, Continence Service, Equipment Service, General Counselling, Chronic Heart Failure Collaborative Care (Heartlink), Pharmacist, Primary Care Nursing Team, Transitional Aged Care, and a Women's Health service.

The Prince of Wales Hospital shares a number of services by arrangement with the Royal Hospital for Women, including operating theatres, Clinical Engineering, Clinical Neurophysiology, Dermatology, Diabetes, Emergency Department, Gastroenterology, Infectious Diseases Services, Intensive care, Medical Imaging, Medical oncology, Medical records, Mortuary, Nuclear medicine, Operating theatres, Pharmacy and Sterilising.

3.2.2 SYDNEY CHILDREN'S HOSPITALS NETWORK (SCHN) - RANDWICK

The Sydney Children's Hospital Randwick (SCH) is a specialist paediatric hospital that provides tertiary and quaternary clinical care to children and young people. Co-located on the Randwick Precinct, the SCH is governed within the Sydney Children's Hospital Network (SCHN), which also includes the Children's Hospital Westmead. The SCHN is the largest paediatric health care provider in Australia and has state-wide responsibility for providing quaternary healthcare. It is also a leader in paediatric research and education.

On the Randwick precinct, SCH partners with The Royal across a number of clinical services including:

- Management of neonates requiring surgery immediately after birth
- Management of complex medical care in neonates
- Provision of allied health services.

3.2.3 PRINCE OF WALES PRIVATE HOSPITAL

The Prince of Wales Private Hospital (operated by Healthscope) opened on the Randwick Campus in 1996. The hospital has 168 overnight beds and specialises in maternity, cardiothoracic, neurosurgery, orthopaedic, neurology, urology, vascular and interventional radiology (mainly neuro).

It is co-located with POWH (public), The Royal and SCH which has allowed development of a cooperative relationship including shared services and a variety of agreements.

Future plans for the hospital include a significant capital expansion and to continue to work co-operatively with POWH (public), The Royal and SCH.

POW Private Hospital works closely with The Royal:

- through a long-term agreement with The Royal's neonatologists, to manage newborns in special care
- to maximise staff recruitment and retention with cross-appointments between The Royal and POWPH
- to safely manage high risk pregnancies, with access to ICU and proximity to The Royal
- with a shared breast care nurse service with The Royal.

3.2.4 EASTERN SUBURBS MENTAL HEALTH SERVICE

The Eastern Suburbs Mental Health Service delivers comprehensive public specialist mental health services to support people across the lifespan with a range of developing or existing mental health illnesses and disorders. Services are provided in inpatient, ambulatory and community settings and relate to prevention, early diagnosis, early intervention, case management, emergency response, triage, assessment, acute care and sub-acute care, in collaboration with other service providers within our geographical boundaries. In the Randwick area, services are delivered from four sites:

- Randwick Hospitals Campus (including 88 inpatient beds)
- Maroubra Community Mental Health Centre
- Bondi Junction Community Mental Health Centre
- Headspace Bondi Junction.

The Eastern Suburbs Mental Health Service provides consultation-liaison psychiatry to patients of The Royal.

3.2.5 SHARED SERVICES ON RANDWICK CAMPUS

The Randwick Health Campus has a long history of shared clinical and corporate services, which provide a cost effective and efficient use of high cost infrastructure and services.

In addition to shared services, there are contracted services (collaborative care arrangement) for invasive cardiac diagnostic and interventional procedures from Eastern Heart Clinic.

See table in Appendix 5 showing list of current shared services.

This shared approach to the delivery of clinical services has:

- Provided clinical expertise across multiple facilities
- Encouraged professional collegiality
- Ensured cost effective and efficient use of high cost infrastructure and resources.

Despite the campus's extensive experience in sharing clinical services there remain some challenges including:

- The delivery, hosting, management, funding and formalisation of these shared clinical service arrangements are varied
- Resource constraints (e.g. funding, equipment, space and/or workforce shortages) limit access, capacity and/or sustainability of some shared services
- Shared services hosted in an adult setting do not necessarily provide a physical environment suited to care of children, adolescents, and young adults nor is general adult setting not optimal for women in some circumstances.

3.2.6 NSW HEALTH PATHOLOGY

NSW Health Pathology's vision is 'Leading 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 'statewide service in support of high quality, value for money patient care'.

In addition to standard testing and pathology requirements, NSW Health Pathology performs the majority of prenatal diagnostic tests (CGH array and single gene testing to large panels of genes) for The Royal and has a close association with the MotherSafe geneticist.

3.2.7 BREASTSCREEN NSW

The BreastScreen NSW South Eastern Sydney & Illawarra screening and assessment service is coordinated 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.

The Royal is one of nine BreastScreen NSW's screening and assessment services locations. The clinical facilities and equipment the service utilises are shared with the Royal's Breast Centre. Patients screened and assessed by BreastScreen may be referred to the Royal's Breast Centre for diagnosis and ongoing management.

3.3 Directorate of Population and Community Health

From October 2019, SESLHD will have a Directorate of Population and Community Health, bringing together the Directorate of Primary, Integrated and Community Health and components of the Directorate of Planning, Population Health and Equity as a result of an organisational restructure.

This directorate manages a number of services that work with child, youth and family, adults and priority populations across the continuum from population health services to acute services that are community based. They encompass health promotion, health protection, disease prevention, diagnosis, treatment and care, and surveillance.
These include:

- The provision of Commonwealth funded community services to adults including Aged Care Assessment (ACAT), Community Packages (ComPacks), Transitional Aged Care (TACS), Commonwealth Home Support Program (CHSP) and the Community Care Supports Program
- Aboriginal Health services and programs, including clinics, workshops, education sessions and discussion forums at the La Perouse Aboriginal Community Health Centre or to individuals and families in their own homes
- Domestic violence counselling services, carers support, older adults, community women's health, a variety of community based allied health services.
- Child, Youth and Family Services, including
    - Specialist Intellectual Disability Health team (District wide and outreach to ISLHD and NBMLHD)
    - Kogarah Developmental Disability Assessment Team
    - Child and Family Health Nursing Service, Community Paediatrics and Paediatric Allied Health Services (St George and Sutherland)
    - Child and family counselling, Sexual Assault, and Domestic Violence Counselling Service (St George and Sutherland)
    - Cross Cultural workers in Maternity and Child and Family Health
- Drug and Alcohol services
- Kirketon Road Centre
- Sydney Sexual Health Centre
- Short Street Sexual Health Centre
- The Albion Centre
- the HIV and Related Programs Unit (HARP), the HIV Outreach Team (HOT), and Adahps (statewide service for residents of NSW who have HIV related cognitive impairment and complex needs)
- Oral Health
- Public Health
- Health Promotion Service and Equity Coordinator
- Services and programs that work with priority populations eg Multicultural Health, Carers' Program, Homelessness Health, Youth Health.

The Directorate's Child, Youth and Family Unit has a close operational working relationship with The Royal, and additionally has a key support role in the SESLHD Women's, Child and Family Clinical Stream which is led by a Clinical Director (appointed to The Royal) and a Nurse Manager (The Royal's Director of Nursing and Midwifery).

3.4 Clinical networking

ROYAL HOSPITAL FOR WOMEN

The Royal has a number of speciality services drawing patients from other LHDs, including:

- Neonatal Intensive Care
- Mothersafe
- Gynaecology oncology
- NSW Fetal Therapy Centre
- Reproductive Medicine – fertility services for men and women.
- Paediatric and Adolescent gynaecology.

OTHER SESLHD HOSPITALS

Residents of The Royal's local catchment LGAs access the networked services of other SESLHD hospitals, which include those on Randwick Hospitals and Health Services' Campus as well as the War Memorial Hospital Waverley, Sydney/Sydney Eye Hospital, St George Hospital, Calvary Hospital and Sutherland Hospital.

Clinical networking across SESLHD is based on role delineation and a sound understanding that maximising patient outcomes with finite resources requires a coordinated system where clinicians, patients, carers and families work together to provide high quality and appropriate services.

Most commonly, specialist care is provided by:

- Prince of Wales Hospital for specialist spinal injury, spinal neurosurgery, renal transplant and interventional neuroradiology
- Sydney/Sydney Eye Hospital for Ophthalmology and specialist hand surgery
- St George Hospital for trauma and some specialised services
- War Memorial Hospital Waverley for Aged Care Rehabilitation
- Mental Health Intensive Care Unit, a statewide networked service on the Randwick campus.

OTHER LHDS AND HEALTH CARE PROVIDERS

Clinical networks with other LHDs, private hospitals and other health care providers include:

- Some traumatic spinal cord injury (Northern Sydney Local Health District - NSLHD)
- Transplant surgery (other than renal transplant) (SLHD)
- Paediatrics (SCHN)
- Burns (SLHD)
- Palliative care (SVHN)
- Heart and lung transplant services (St Vincent's hospital Network - SVHN)
- Blood and marrow transplant services (SVHN)
- HIV/Hepatitis C services (SVHN)
- Trauma (SVHN)
- Planned surgery in multiple specialties (private hospitals)
- Interventional cardiology (Eastern Heart Clinic)
- Primary health care (Central and Eastern Sydney Primary Health Network), and
- Aged care (aged care providers including residential facilities).

For residents of northern SESLHD LGAs there are also significant flows to non-SESLHD public hospitals based on:

- Proximity of residents to the hospital (St Vincent's Hospital – Public and Sacred Heart and Royal Prince Alfred Hospital)
- Patient preference.

3.5 Private Sector Hospitals

There are eight private hospitals[i] and numerous day only hospitals in northern SESLHD including:

- Prince of Wales Private Hospital (Randwick): more than 160 beds
- St Vincent's Private Hospital (Darlinghurst): approximately 320 beds.

In general, residents from the most advantaged areas are significantly more likely to have overnight hospital admissions at private hospitals than other residents of NSW.

3.6 Central and Eastern Sydney Primary Health Network

One of the key priorities for the Primary Health Networks (PHNs) is to address health inequities and improve access for disadvantaged populations. Partnership arrangements in population health action and local health needs assessments to inform overall health planning and data sharing are key activities. The *CESPHN's Strategic Plan 2019-2021* [88] articulates how these priorities will be realised into the future.

The Central and Eastern Sydney Primary Health Network (CESPHN) provides a range of programs focused on delivering integrated care with its LHDs and specialty health networks including Aboriginal health, antenatal shared care, aged care, Health Pathways, immunisation, mental health and sexual health. SESLHD is currently exploring the potential for co-commissioning of services with CESPHN.

3.7 Universities

The Royal Hospital Women, Prince of Wales Hospital and the Sydney Children's Hospital are teaching hospitals of the University of NSW (UNSW), and any development needs to consider the Strategic Intent of the University,[89] including the health and medical research hubs associated with its clinical schools.

Objectives of the UNSW Medicine Strategy[90] 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.

The Greater Randwick Urban Masterplan (GRUM) recognises the opportunity to integrate capital developments between the University and the Randwick Hospitals and Community Health Services campus, to provide mutual benefit for all stakeholders.

It should also be noted that nursing, allied health and other 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.

3.8 Non-Government Organisations

The Royal has contact with a number of non-government organisations. The following 3 national/statewide organisations provide direct services in community education, counselling, groupwork and support to women by invitation or referral from The Royal.

3.8.1 AUSTRALIAN BREASTFEEDING ASSOCIATION

The Australian Breastfeeding Association (ABA) is Australia's largest breastfeeding information and support service, and a leading advocate for a breastfeeding inclusive society. A volunteer organisation with a focus on a peer to peer/parent to parent approach, ABA offers membership for both mothers and health professionals, a 24-hour Breastfeeding Helpline, an informative website, local support groups, antenatal classes and numerous print and digital resources.

ABA has functional links with The Royal's antenatal, maternity and lactation services, MotherSafe, and with SESLHD Child and Family services.

3.8.2 KARITANE

Karitane is a not for profit organisation committed to providing high quality, comprehensive, evidence-based parenting services for families in the first 2,000 days, including child and family health care, parenting education, therapeutic groups, toddler behaviour therapy and counselling. Karitane also provides education and training to healthcare professionals and non government organisations and has a significant academic research profile.

- Parenting centres are located in Randwick, Oran Park & Carramar
- Early Parenting Store located in Westfield, Bondi Junction
- Residential services located in Carramar and Camden.
- Toddler Clinics in Camden & Carramar
- Perinatal Infant Metal Health services – Randwick, Camden, Carramar
- Targeted early Intervention programs – Fairfield

3.8.3 GIDGET FOUNDATION

Gidget Foundation Australia is a not for profit organisation that provides education and programs to support the emotional wellbeing of expectant and new parents, and address perinatal depression and anxiety.

Services include

- Gidget House at Randwick, North Sydney, Merrylands, Wagga Wagga, The Mater and North Shore Private Hospital.
- Start Talking Telehealth
- Emotional Wellbeing Program at North Shore Private Hospital and the Mater Hospital, North Sydney (NSW).
- Bunny Books Resource for children
- Gidget Emotional Wellbeing Workplace Program
- Online information.

Appendices

Appendix 1
Consultation reports

Detailed reports of each consultation session are available in an accompanying document: "Consultation Reports".

This Plan was developed after significant consultation with staff, campus partners, external stakeholders, and women in the community. As well as one-on-one sessions with clinicians and organisational leaders, a number of special meetings were arranged and existing governance structures (such as Executive, Senior Medical Clinical Council, departmental or service or stream meetings) were visited to engage with clinical and management teams.

Service specific issues and potential solutions, changes to models of care and potential innovations, data and projection methodologies were discussed. These were documented and summarised in the Consultation Reports. Issued in draft to participants to confirm content and provide opportunity for additional information or amendment, the final drafts were submitted for approval to the director or clinical lead and subsequently to the General Manager for review.

Further consultation was undertaken by the Senior Medical Staff Council leaders, with written submissions being requested as part of this process, from The Royal clinicians and General Practice. These submissions were added to or incorporated into the Consultation Reports prior to finalization of the reports.

Two visioning workshops were held in November 2018 with multidisciplinary representation from all campus partners. These workshops focused on the vision for The Royal in 2018 and beyond, identifying the unique opportunities available on the Randwick campus and the key clinical proximities and relationships to underpin campus planning. Over 50 clinicians and managers attended, along with the co-chairs of the Community Advisory Committee and the CEO and a staff member of The Royal Hospital for Women Foundation.

Meetings were conducted with over 100 clinicians and departmental managers, most of which were individual interviews.

Two consultation sessions were held with The Royal's Community Advisory Council. Meetings/interviews held with young mothers attending the Mumsense group and with LGBTQI people arranged with the assistance of Rainbow Families.

Individual interviews were conducted with shared care General Practitioners, with the Manager of BreastScreen NSW, with Karitane, Tresillian, the Gidget Foundation and with representatives of the Australian Breastfeeding Association.

Over 650 recommendations from the Consultation Reports were collated, reviewed and prioritised through a series of meetings with a large Planning Advisory Group and a smaller representative group. Further review occurred in the draft Plan distribution, and in consultation with the General Manager, Director of Strategy, Innovation and Improvement and the Chief Executive.

Nominated SESLHD Board representatives followed by the whole Board were consulted on the penultimate draft, prior to finalisation and submission of the Plan to the Board for approval.

Appendix 2
List of contributors

Many individuals have been consulted with or have provided comments so far. These include

Alex Matthews
Alison Sneddon
Amanda Beech
Amanda Webster
Andrew Bisits
Anne Lainchbury
Anne Wand
Annette Wright
Antonia Shand
Antoinette Anazodo
Arabella Gibson
Archana Rao
Bill Ledger
John Eden
Bill Ledger
Bobby Teoh
Cath David
Catherine Zammit
Chantelle Smith
Charlotte Walter
Christopher Matthey
Claudelle Miles
Danny Challis
David Mowatt
Deb Matha
Debra Kennedy
Dee Turner
Donna Slack
Elaine Charles
Elise Jennings
Ellen Barlow
Fiona Donovan
Fiona Kilponen
Gayle Green
Galuh Laksmi Sapthari
Gill Neil
Glenn McNally
Grainne O'Loughlin
Hannah Graetz
Helen Concon
Helen Jarman
Helen McCarthy
Jack Roach
Jan Dudley
Jane Svensson
Janet McDonald
Jasmine Hancock
Jason Abbott
Jason Chow
Jeanie Thomas
Jennifer Duggan
Jennifer Morrissey
Joanne Blaeck
Joanne Coleman
John Eden
John Smyth
Joy Wilson
Julee Oei
Julie Dixon
Justine Darling
Kate Charlesworth
Kate Dyer
Kate Moore
Keerthana Puthur
Kei Lui
Kimberley Booth
Kim King
Kwee Bee Lindrea
Leila Forde
Leo Leader
Leon Betes
Leonie Watterson
Lesley Andrews
Lisa Altman
Louise McDonald
Lucy Bowyer
Madeleine Berry
Margaret Broadbent
Maria Fenn
Marie-Paule Austin
Megan Wyrzykowski
Melinda Temple
Meredith Ward
Michael Chapman
Michael Jackson
Michelle Jubelin
Mike Gatsi
Minke Burke
Miriam Van Roojien
Mumsense Mums
Nadya Chami
Naomi Ford
Natasha Culjak
Nehmat Houssami
Nerida Russell-Green
Neville Hacker
Parag Mishra
Patricia Everitt
Paul Crowe
Rahul Sen
Rebecca Deans
Rainbow Families' Members
RHW Community Advisory Committee
Richard Maynard
Robert Clark
Robbie Solomon
Robyn Schubert
Rodney Phillips
Sally Watts
Sally Wise
Sandra Lowe
Sarah Burnett
Sarah Clements
Sharon Miskell
Srinivas Bolisetty
Stephanie Chilko
Stephen Coogan
Stephen Horrowitz
Sue Rawlinson
Tobi Wilson
Tim Schindler
Trish O'Brien
Trudy Allende
Vanessa Madunic
Vicki Sharpe
Vivek Arora
Wendy Hawke
Wendy Uptin
Wendy Vincent

Appendix 3
Projection 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.

ACUTE 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.

GYNAECOLOGY PROJECTION METHODOLOGY

This scenario revised trends to account for an increase in day only and overnight non-procedural gynaecology activity, gynaecology oncology, endoscopic procedures of female reproductive system and reversed flows from POWH.

The steps involved in this scenario:

1. The MoH HealthAPP planning tool was used to adjust the relative utilisation for the appropriate LGAs where the significant increases or changes in flow pattern has occurred for the following ESRGs: 717 Non-procedural gynaecology, 718 Gynaecology oncology and 712 Endoscopic procedures of the female reproductive system
2. The average overnight length of stay was also adjusted for ESRG 718 Gynaecology oncology and 717 Non-procedural gynaecology. The scenario projections show that the average length of stay is declining (and efficiencies are modelled in the projections) but the rate of decline is slowing, which is consistent with more recent data for the ESRGs specified above
3. The above adjustments are saved in HealthAPP scenarios 'RHW New Scenarios'
4. Reversed flows from POWH for 717 Non-procedural gynaecology, 718 Gynaecology oncology and 719 Other gynaecological surgery. The projected activity (sourced from HealthAPP base case) that was reversed from POWH resulted in 0.3 additional overnight beds by 2031 and 0.3 of a day only bed by 2031
5. The impact on gynaecology beds due to the potential expansion of the Fertility Research Centre has been taken into account, specifically increased separations for fertility perseveration for young cancer patients and other IVF related gynaecological complications particularly ectopic pregnancies. This resulted in an additional 0.3 of a day only bed and 0.2 of an overnight bed by 2031. The assumptions that underpin the projections are sourced from Fertility and Research Model of Care paper submitted to MoH in 2019 (the number of patients), Australian New Zealand Reproductive Technology national report published in December 2018 reporting ectopic pregnancies rates in the IVF population (average 1.3%) and the UNSW Perinatal Epidemiology and statistics Unit (IVF success rates average 26.2%)
6. The projected COU bed days were removed by ESRG.

Source: HealthAPP (RHW scenario). Please note flow reversals were done outside of HealthAPP as there were stability issues at the time

OBSTETRICS PROJECTION METHODOLOGY

This scenario revised trends for antenatal admissions, overnight postnatal admissions.

The steps involved in this scenario:

1. The MoH HealthAPP planning tool was used to adjust the relative utilisation for the appropriate LGAs where the significant increases or changes in flow pattern has occurred for the following ESRGs: 721 day only Antenatal admissions and 724 overnight Postnatal admissions
2. The average overnight length of stay was also adjusted for ESRGs 722 - Vaginal delivery and 723 - Caesarean delivery and 724 – Postnatal admissions. The scenario projections show that the average length of stay is declining (and efficiencies are modelled in the projections) but the rate of decline is slowing which is consistent with more recent data for the ESRGs specified above
3. The above adjustments are saved in HealthAPP scenarios 'RHW New Scenarios'
4. In the projections for perinatology, outflows were reversed for SESLHD residents including ISLHD flowing to Liverpool Hospital, Nepean Hospital, Royal North Shore Hospital and Royal Prince Alfred Hospital. Reversing these perinatology outflows also impacts on the projected obstetrics separations. As such, the identical projected volume of separations were reversed for obstetrics (79 separations were reversed by 2031). For birthing it is assumed that 60% would be delivered via caesarean section. Reversing the flows added 1.5 beds by 2031. See NICU/SCN projections for more information.
5. The projected COU bed days were lastly removed by ESRG.

Source: HealthAPP (RHW scenario). Please note flow reversals were done outside of HealthAPP as there were stability issues at the time

ACUTE ACTIVITY PROJECTION METHODOLOGY

Reversed flows from POWH for ESRG 411 Breast Surgery. The projected activity (sourced from HealthAPP base case) that was reversed from POWH. This resulted in 0.5 additional overnight beds by 2031 and 0.3 of a day only bed by 2031. The projected COU bed days were also removed by ESRG.

Source: HealthAPP (RHW scenario). Please note flow reversals were done outside of HealthAPP as there were stability issues at the time

NEONATAL AND SPECIAL CARE NURSERY PROJECTION METHODOLOGY

The projections are calculated by using the scenario HealthAPP activity projections and the application of average NICU and SCN hours to each ESRG and by urgency of admission (NICU and SCN calculated separately). The application of the average hours was considered appropriate for most of the projections as the hours fluctuated, except for planned NICU hours where the trends show increasing NICU hours which must be reflected appropriately in the methodology.
The following projection methodology was adapted to reflect the increasing hours for planned NICU beds:

1. Time series regression was applied to 7 years of data of total planned NICU hours. 7 years was selected as the data showed the most consistency. In the application of the time series regression the NICU hours was smoothed by applying moving averages and then applying the average centred mean (on the moving averages) of the total planned NICU hours
2. The regression was then applied to the smoothed data and time period using the regression function in excel resulting in the output which contained the coefficient variables used in the projection of planned NICU hours. The following calculation was applied: intercept + x variable * time period
3. The projected planned separations are then divided by the projected planned NICU hours to ascertain the average projected planned NICU hours and then applied the average hours to the projected planned separations to get the projected NICU hours

4. Projected perinatology activity was also reversed from Liverpool Hospital, Nepean Hospital, Royal North Shore Hospital, Royal Prince Alfred Hospital and a small proportion of Sydney Children's Hospital (9%). In total 75 perinatology separations were reversed by 2031 which was sourced from the HealthAPP base case. Please note 9% of projected activity was reversed from Sydney Children's Hospital based on clinician advice that infants under 2.5kg are better managed atThe Royal rather than SCH. The 9% were sourced from flowinfo activity by perinatology SRG via the DRG for the infant's weight as a total proportion. The data showed the proportion was consistent and applied the 9% to the SCH projections

5. The reversed activity was then split into unplanned and planned proportional split based on the previous 3-year averages for the relevant hospitals and then the projected outflows were added to the projections based on proportional split of unplanned and planned

6. A 70% occupancy rate has been applied to NICU and SCN asThe Royal is a tertiary referral maternity and neonatal hospital which provides highly specialised care for sick newborn infants both medical and surgical. This requires greater flexibility in being able to respond to unexpected surges in demand from within and outside the District.

The introduction of the HITH model of care resulted is a saving of 3 projected SCN beds by 2031. The following assumptions and method were applied:

1. The clinicians noted that at any one time 3-5 babies are eligible for HITH in SCN. This equates to 19% or 4 from 21 babies are eligible at 75% occupancy. The clinicians expect that the length of stay will reduce around 3-5 days for eligible babies. The current length of stay of SCN babies is 13 days, reducing the LOS by 4 days (mean) equates to 31% reduction in LOS

2. Applied the assumption that 19% of projected separations would eligible for HITH in the future and then applied a 31% reduction in average hours of SCN patients for those eligible patients. No occupancy was applied

3. The SCN projected hours for HITH was then removed from the final SCN projections.

Source: HealthAPP (RHW scenario). Please note flow reversals were done outside of HealthAPP as there were stability issues at the time
Inclusions: Perinatology and qualified neonate

CLOSE OBSERVATION UNIT PROJECTION METHODOLOGY

The projections are calculated by using the HealthAPP activity projections and the application of average COU hours to each ESRG and by urgency of admission. The average COU hours is based on the previous averages. A 75% occupancy rate has been applied.

Source: Flowinfo V17.0 HealthAPP (RHW scenario)
Exclusions: ED Only

BIRTHING ROOM PROJECTION METHODOLOGY

A rate was calculated per 1,000 population for females aged between 16-44 years for the previous 6 years using ward level activity (via the HIE) and the Estimated Resident Population. Rates were plotted and a forwards linear projection calculated. The resulting gradient was then used to calculate the incremental growth for the projected years. The projected rate was then applied to the projected population for the year of interest to obtain the number of stays per 1,000 population. The Residents from the Northern Sector LGAs: Botany Bay, Randwick, Sydney East & Inner, Waverley and Woollahra are the defined catchment for calculating the rates.

The average length of stay was calculated to understand the throughput of the room. The average length of stay is based on the previous two year averages (2015/16 – 2017/18).The average throughput is calculated by dividing the session length (i.e. hours available) by the average time spent in a birthing room. The projected activity is then divided by the throughput and days available in a year and then applying an occupancy rate. The planning assumptions utilised are that birthing rooms are available 18 hours a day 365 days a year. A 75% occupancy rate has been applied.

Source: HealthAPP (RHW scenario), NSW Department of Planning and Environment 2016 Edition, Estimated Resident Population (ABS), Strategy and Planning Unit (methodology)

NON ADMITTED PROJECTION METHODOLOGY

The steps involved in this scenario:

1. Baseline used 2017/18 data sourced from OrBiT. Supplied by Performance Unit, SESLHD
2. Mapped each Clinic Class (tier 2 clinics) to inpatient SRG. Applied projected growth rate of inpatient SRGs to current activity for each Clinic Class. Until the data improves enough to use trends this is the best approach as it takes into account population growth and disease patterns
3. Assumes only face to face activity requires a clinic / treatment room, all other activity would be delivered from staff office / workstation
4. The current operating hours of the clinics have been projected to continue into the future e.g. Gynaecological Oncology, with exception of Breast Services
5. The assumptions applied to the projections relate to the days and hours available and the average clinic duration. The average clinic duration varies from 20 min to 1 hour appointments (mental health, lymphedema). The assumptions applied in the projections were sourced from the clinical consultation
6. There are 74 clinics in total and the projections have been grouped into the following categories: Gynaecology, Midwifery and Maternity, Gynaecology/Oncology, Maternal Fetal Medicine, Breast Services, Mental Health and Other (some allied health, Newborn Care Centre), Women's Assessment Service (WAS) e.g. pregnancy day stay unit, EPAS and projected POWH ED presentations
7. Allied Health clinics have been mapped into the appropriate grouping of gynaecology, midwifery and maternity, MFM etc. where directed to do so by The Royal

Sources: EDWARD, HealthAPP, clinician's advice, Victorian Health space requirement benchmarks

TABLE 16: Scenario development for The Royal non-admitted activity

SCENARIO	TIER 2	GROUPING	DISCUSSION	METHOD
Enhanced Services	20.03 Pain Management	Gynaecology	Increase in activity for the pain management clinic is estimated due to greater awareness of pelvic pain and improved management, including pain from endometriosis. Current wait list 3 to 6 months	= F2F OOS x 20%
Enhanced Services	20.38 Gynaecology	Gynaecology	Reduce the wait list for menopause clinic (current wait list is 6 months)	= F2F OOS x 15%
Enhanced Services	40.49 Gynaecology	Gynaecology	Increasing capacity of the Pelvic Floor Clinic as the demand for pelvic floor services is increasing as the prevalence of incontinence, prolapse and sexual dysfunction increases with increasing age, parity and rates of obesity. A dedicated pelvic floor service would be able to service this demand. The nearest public pelvic floor unit at St George Hospital which has a very large waiting list	= F2F OOS x 40%
Enhanced Services	40.32 Continence	Gynaecology	Increasing capacity of the Physiotherapy Pelvic Floor Clinic to support the increases in the pelvic floor clinic above. The model of care for incontinence and prolapse state the first line of management for these conditions should be conservative and lifestyle management, which includes pelvic floor physiotherapy	= F2F OOS x 40%
Enhanced Services	20.34 and 40.46 Endocrinology	Midwifery and maternity	Capacity was increased (in both diabetes clinics) as the growth in patients diagnosed with gestational diabetes has significantly increased in the past 4 years and the inpatient SRG growth rate applied is inadequate	= F2F OOS x 10%

SCENARIO	TIER 2	GROUPING	DISCUSSION	METHOD
Missing data	40.28 Midwifery and maternity	Midwifery and Maternity	Advice received from the maternity data manager indicated that the midwifery support program clinic is under reported in EDWARD	= 4,196 OOS
Enhanced Services	20.53 Obstetrics – management of complex pregnancy	Midwifery and Maternity	To enhance the Next Birth After Caesarean clinic to encourage women towards normal birth where clinically appropriate	= F2F OOS x 10%
Enhanced Services	20.38 and 20.39 Gynaecology	Gynaecology/ oncology	Increasing capacity of the Gynaecology Oncology Colposcopy Clinic and Gynaecology Colposcopy Clinic as result of changes to the cervical screening guidelines. Increasing capacity of the Medical Oncology Clinic as current clinic rooms are insufficient	= F2F OOS x 30% Oncology Colposcopy Clinic = F2F OOS x 15% Medical Oncology clinic
Enhanced Services	20.08 Genetics	MFM	Increased capacity of the Maternal Fetal Medicine Genetics Clinic to take into account the projected growth in genetic screening in pre-pregnancy Increased capacity of the Maternal Fetal Medicine Multidisciplinary Clinic	= F2F OOS x 10% = F2F OOS x 10%
New clinic	20.44 Infectious Diseases	MFM	Clinician advice: 25 OOS per year for new perinatal infections clinic. Data mapped to current Antenatal Congenital Infections Clinic	= 25 OOS/year
New procedure room	New	MFM	This would allow for laser therapy to be done in MFM. Currently provided in operating theatre and access is constrained	= 1 clinic
Enhanced Services	40.42 Circulatory	Other	Currently there is lack of/limited lymphedema service which is significant service gap for patients. 1 clinic added	1 clinic = 8 pts/day x 5 x 48 weeks. 1 hour appointment
Enhanced Services	20.45 Psychiatry	Other	Clinician advice: Increasing capacity as there has been significant growth in the number of pregnant women with complex mental health and psychosocial issues and this growth is expected to continue. In addition, the current inadequate administrative support has also contributed to the sub-optimal clinic attendance.	= F2F OOS x 30%
New clinic	20.45 Psychiatry	Other	A new clinic for a full time clinical psychologist – service beginning in 2019	200 patients per year (clinician estimate) x 2.5 appointments per patient. 1 hour appointments
Enhanced Services	20.11 Paedatric Medicine	Other (Newborn care centre)	To enhance the Growth and Development clinic as this clinic is essential to provide services for high risk newborn infants, requiring neurodevelopmental assessment, support and early intervention	= F2F OOS x 20%
Enhanced Services	20.32 Breast	Breast Centre	Increasing capacity of the clinic as is one of only a few public facilities in NSW that offers screening of women at high risk of breast cancer as well focusing on symptomatic women with benign disease, breast cancer evaluation and post-operative reviews	= F2F OOS x 30%
Enhanced Services	40.28 Midwifery and maternity	WAS	Increasing capacity of the Pregnancy Day Stay – Anti natal Clinic as the current space is insufficient and supports a model of care which avoids hospital admissions where clinically appropriate. The clinic provides closer observation of mother and baby, without the need for admission into hospital. Require a dedicated space within the WAS	= F2F OOS x 40%

SCENARIO	TIER 2	GROUPING	DISCUSSION	METHOD
Enhanced Services	40.28 Midwifery and maternity	WAS	To increase capacity for the Early Pregnancy Assessment Service to avoid admitted antenatal admissions where clinically appropriate. Require a dedicated space within the WAS	= F2F OOS x 20%
Enhanced Services	40.28 Midwifery and maternity 20.38 Gynaecology	WAS	Reviewed the POWH ED data for obstetric (882 presentations) and gynaecological related presentations (865 presentations) per year. It is envisaged that the WAS could be used for ED avoidance for obstetric and gynaecological presentations. Require a dedicated space within the WAS	= 1747 x the obstetrics/ gynaecology growth rate

Appendix 4
Strategic planning and policy context

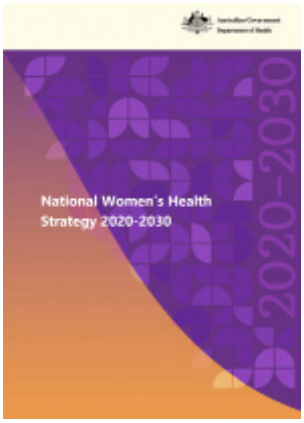
In developing an Integrated Health Services Plan, it is important to consider it within the parallel strategic planning contexts of Commonwealth and State government priorities, SESLHD strategic planning, capital planning being undertaken in the surrounding area and other health, education and research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

1. INTERNATIONAL AND NATIONAL FRAMEWORKS

BABY FRIENDLY HEALTH INITIATIVE

The baby friendly health initiative (BFHI) [91] is a joint initiative of UNICEF and the World Health Organisation (WHO), developed in 1990, that aims to give every baby the best start in life by creating health care environments where breastfeeding is the norm and practices known to promote the health and wellbeing of all women and babies are followed. BFHI provides a framework for Baby Friendly hospitals to operate within the Ten Steps to Successful Breastfeeding in hospitals, and the 7-Point Plan in community facilities. These standards, when implemented together, ensure all mothers and babies receive appropriate support and contemporary information in both the antenatal and postnatal period regarding infant feeding.

NATIONAL WOMEN'S HEALTH STRATEGY 2020-2030



In March 2018, the Minister for Health, the Hon Greg Hunt MP, announced the development of a National Women's Health Strategy 2020-2030, focusing on the health needs of women and girls in Australia over the medium term. This Strategy builds on the existing National Women's Health Policy 2010, with a focus on priority areas for action to improve health outcomes for Australian women and girls over the coming decade.

The Strategy works in tandem with the National Men's Health Strategy 2020-2030. The aim of these strategies is to acknowledge the different biological and societal factors that impact women's and men's health and wellbeing, and to strengthen and improve national approaches for both.

NATIONAL STRATEGIC APPROACH TO MATERNITY SERVICES

A National Strategic Approach to Maternity Services (NSAMS) is currently being developed by the Australian Health Ministers Advisory Council (AHMAC), and is due for completion in 2019. This will guide national maternity services policy and support best practice, evidence based maternity services for the Australian community. It will replace the Commonwealth's 2010-2015 National Maternity Services Plan.

NATIONAL BREASTFEEDING STRATEGY 2019 AND BEYOND

On behalf of the Australian Health Ministers' Advisory Council (AHMAC), the Department of Health developed a high level strategy to incorporate recent research on effective strategies to support breastfeeding that are relevant to the current environment. The Australian National Breastfeeding Strategy: 2019 and beyond (the Strategy) seeks to provide an enabling environment for breastfeeding.

The Strategy was developed in collaboration with all states and territories through the Breastfeeding Jurisdictional Senior Officials Group (BJOG), a Breastfeeding Expert Reference Group, and through public consultation. All Health Ministers endorsed the Strategy on 8 March 2019.

2. NSW GOVERNMENT PRIORITIES

NSW HEALTH STATE PLAN – TOWARDS 2021

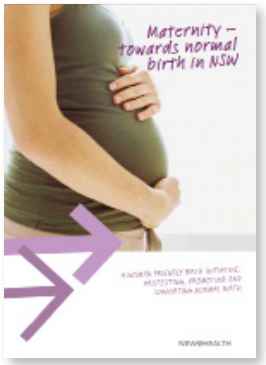
The NSW State Health Plan [92] sets out a clear framework for the future direction for our public health system to improve health services and support healthier communities for all of NSW. Its goals are to keep people healthy and out of hospital, and to provide world class clinical services with timely access and effective infrastructure.

HEALTHY, SAFE AND WELL: A STRATEGIC HEALTH PLAN FOR CHILDREN, YOUNG PEOPLE AND FAMILIES 2014–24

This plan [93] 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.

The plan provides direction to NSW Health entities and guide the collective impact of our partnerships with government and non-government organisations that have a shared responsibility for promoting the health and wellbeing of children, young people and families.

TOWARDS NORMAL BIRTH



In response to concerns about the rise in Caesarean section rates, in 2007 the NSW Maternal and Perinatal Health Priority Taskforce and NSW Health hosted a statewide multidisciplinary forum at The Royal, to inform the future policy direction for caesarean births in NSW and develop an action plan for normal birth. The 2010 *Towards Normal Birth in NSW* [94] policy continues to provide direction for NSW maternity services to decrease the Caesarean section operation rate; to develop, implement and evaluate strategies to support women and to ensure that midwives and doctors have the knowledge and skills necessary to implement this policy.

The current policy is under review and the updated policy document (due in 2019) will support high quality maternity care to meet the needs of women and their families.

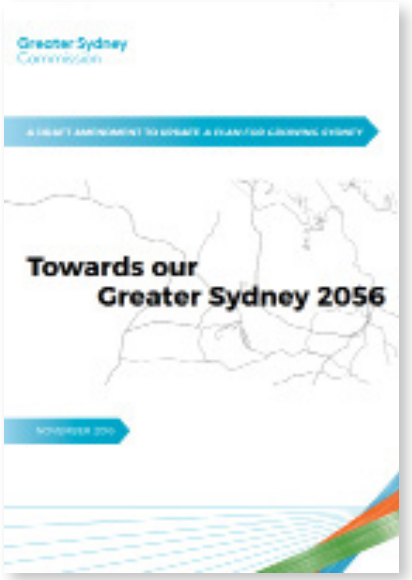
FIRST 2000 DAYS FRAMEWORK

NSW Health's The First 2000 Days Framework [95] outlines the importance of the first 2000 days in a child's life and what action the NSW Health system needs to take to ensure that all children have the best possible start in life. It recognises that through effective and collaborative support and intervention during the first 2000 days, including from organisations outside of health, there is an opportunity to give children the best possible start in life physically, developmentally, socially and emotionally, and to address the escalating prevalence of adult disease and morbidity.

The Framework has 3 strategic objectives:

- Understanding the importance of the first 2000 days – to promote the importance of the first 2000 days and the best opportunities for action
- Care and support for all – to provide care to all and work in partnership to promote health, wellbeing, capacity and resilience during the first 2000 days
- Specialised services for those who need it – to ensure specialised services are provided for those who need it, when they need it.

GREATER SYDNEY COMMISSION DISTRICT PLANS



The NSW Government's Towards our Greater Sydney 2056 [96] establishes a plan to manage growth and change for Greater Sydney. As part of this planning process, District level planning has been undertaken to connect local planning with this longer-term metropolitan planning for Greater Sydney.

The Randwick campus, part of the Central District, has been identified as a health and education super precinct, which aims to generate knowledge, innovation and economic activity through the collaboration that occurs between universities, research institutes and specialised health professionals.

As a key strategic centre, priorities for Randwick include to integrate the University of New South Wales and the Randwick campus hospitals, to direct significant improvements of the Randwick Town Centre, and to guide optimisation of NSW Government's investment in light rail with mixed-use development. A key outcome of these actions is to increase total jobs and specifically to increase health, education, knowledge and professional service jobs.

THE GREATER RANDWICK URBAN MASTERPLAN (GRUM)

The Randwick Hospitals and Health Services' Campus forms part of a specialised health and academic health sciences precinct which comprises the Randwick Campus, the University of New South Wales Kensington Campus, and the immediately surrounding areas. The specialised precinct is rapidly emerging as a leading-edge, world-class precinct which is complemented by strong commercial and mixed use activity.

The Greater Randwick Urban Masterplan (GRUM) presents an opportunity to steer capital investment in major infrastructure projects in the Greater Randwick Area to maximise whole of government and public-private cost-benefit (providing mutual benefit for all stakeholders).

The Greater Randwick Urban Masterplan (GRUM) workshop recognised consistent values across the settings, as outlined below.

	ALTRUISM	INTEGRATION	INNOVATIVE	THRIVING	RESPECTED	ENGAGING	RESILIENT
LEADERSHIP/ GOVERNANCE	Greater Good Fairness Integrity Accountability	Collaboration Unified Identity Alliance Common Purpose Coordinated Planning	Transformative Brave Risk Takers Advocates for Change	Investment Magnet Powerhouse Entrepreneurship	Thought Leadership Vision	Consultation Transparency	Custodians Sustainable Long-term Vision
HEALTH	Equity Compassion Ease	Integrated Health Care Multi-Disciplinary	Translational Research Discovery/Curiosity Disruptive Technologies Digital	Wellbeing/Wellness Preventative Health Incentivised	Centre of Excellences Exemplary Health Care	Self-Management Health Independence Personalised Participatory Workforce	Permanent Health Revolution Mental Health
EDUCATION	Our contribution to disadvantaged & marginalized communities A Just Society	Partnerships that facilitate our strategy	Leading the debate on Great Challenges	Knowledge Exchange for social progress & economic prosperity Start Up & Commercial Relationships	Research Quality – a world leader Educational Excellence	Internationally Engaged education	Operational effectiveness & Sustainability
COMMUNITY/ SOCIAL	Inclusive Non-Discriminatory	Social Inclusion Diversity	Progressive	Prosperous Economic Diversity	A Place You Want to Be Cultural Activities	Community Engagement Respectful of Community	Social Resilience
URBAN/ ENVIRONMENT	Accessible Hospitable/Welcoming Affordable Housing	Blurred Boundaries Connectivity Contextual Responses	Urban Laboratory	Active Dynamism	Quality of Environment Amazing Place of Pride	Vibrant Diversity of Experiences	Sustainable Enduring Active Transport Adaptable Built Environment

SESLHD'S JOURNEY TO EXCELLENCE AND STRATEGIC PRIORITIES

SESLHD 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 [97], 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",* delivered by a skilled and compassionate workforce.

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, [98] 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.

The development of the Royal Hospital for Women Integrated Health Services Plan will also draw upon a suite of SESLHD strategic plans[99], including the *SESLHD Equity Strategy, SESLHD Research Strategy 2017-21, SESLHD Environmental Sustainability Plan 2019-2021, SESLHD Community Partnerships Strategy* and *SESLHD ICT Strategy*

THE GREATER RANDWICK INTEGRATED HEALTH SERVICES PLAN

The *Greater Randwick Integrated Health Services Plan* [100] identifies the strategic directions chosen to meet the future health and wellbeing needs of the local and wider community serviced by the Randwick campus hospitals. This includes the introduction of new and innovative models of care to ensure that health services align and grow with changing patterns of need while making the most effective use of available and future resources, to enable the delivery of cutting-edge, compassionate and holistic health care to our community into the future.

The Plan outlines the ambitions of the Randwick campus:

- We will be a global Academic Health Science Centre renowned for excellence in Health, Teaching, Education and Research
- An investment in infrastructure will ensure staff working on this campus will continue to deliver the highest standard of care to patients in world class facilities
- People will also receive compassionate personalised care at home or in a place that is as close as possible to their home by clinicians who are informed by the latest available evidence
- People will be empowered to take responsibility for their own health and wellbeing and supported to manage periods of ill health
- We will focus on our community's assets, supporting health literacy and advocating for healthy neighbourhoods, so that the people we serve are able to maintain their health and wellbeing.

THE ROYAL FOR WOMEN STRATEGIC PLAN 2014-2020

To reflect The Royal's holistic approach to women's services, the *Royal for Women Strategic Plan 2014-2020* adopted a life course approach in setting out priorities for enhancement of existing services and development of new services, with a goal to *"influence, shape and lead the provision of health services to women of all ages across NSW"*. It focused on four main components:

- Capitalizing on The Royal's strengths in the provision of women's services co-located with a general hospital and a specialized children's hospital and health services on the Randwick campus
- Strengthening existing services
- Developing new services
- Being more outward looking: providing information and advocacy services, making greater use of telehealth and increasing outreach services.

The plan set out a series of detailed actions based on the 5 major life stages (newborn, young women, women of child-bearing age, mid-life and older women) as well as teaching and research, people and systems. It also called attention to the need for delivering programs focused on women facing violence, young women's sexual health issues, osteoporosis and continence.

Appendix 5
Shared services on campus

Randwick Hospitals and Health Services' Campus current shared clinical services

	Prince of Wales Hospital	Royal Hospital for Women	Eastern Suburbs Mental Health Service	Sydney Children's Hospital, Randwick	Prince of Wales Private Hospital	Sydney / Sydney Eye Hospital	Justice Health and Forensic Mental Health Network
Aboriginal Health Clinic	*	*		✓		*	
Anaesthetics	✓			✓			
Audiology	*			✓			
Cardiac Perfusion	✓			✓			
Child and Family (Mental Health Service)	*	*	*	✓			
Child and Family Health / Community Child Health	*	*		✓	*		
Child Protection Unit	*	*		✓			
Clinical Engineering	✓	*		*			
Clinical Neurophysiology	✓	*		*	*	*	*
Dental and Maxillofacial	✓			*			
Dermatology	✓	*					
Diabetes	✓	*					
Diving and Hyperbaric Medicine	✓	*		*			
Emergency Department	✓	*					
Forensic patients	✓						*
Gastroenterology	✓	*					
Haemodialysis	✓			*			
Infectious Diseases Services	✓	*		*		*	*
Intensive care	✓	*			*		
Interventional radiology	✓			*			
Liaison Psychiatry	*	*	✓	*			
Medical Imaging	✓	✓		*			
Medical oncology	✓	*					
Medical records	✓	*				*	
Mortuary	✓	*		*	*		
Nuclear medicine	✓	*		*		*	

	Prince of Wales Hospital	Royal Hospital for Women	Eastern Suburbs Mental Health Service	Sydney Children's Hospital, Randwick	Prince of Wales Private Hospital	Sydney / Sydney Eye Hospital	Justice Health and Forensic Mental Health Network
Operating theatres	✓	*		*	*		
Ophthalmology	✓			*			
Orthotics	*			✓			
Palliative care	*	*					
Pharmacy	✓	*		*			
Radiation oncology	✓			*		*	
Refugee Health Clinic	*	*		✓	*	*	
Spinal Monitoring	✓			*			
Sterilising	✓	*		*			
Transition of adolescent and young adults (including Trapeze)	*			✓			
Urology	✓			*			

✓ : This symbol denotes the primary service provider for the clinical service

* : This symbol denotes that the clinical service is utilised by the hospital, but is not the primary service provider.

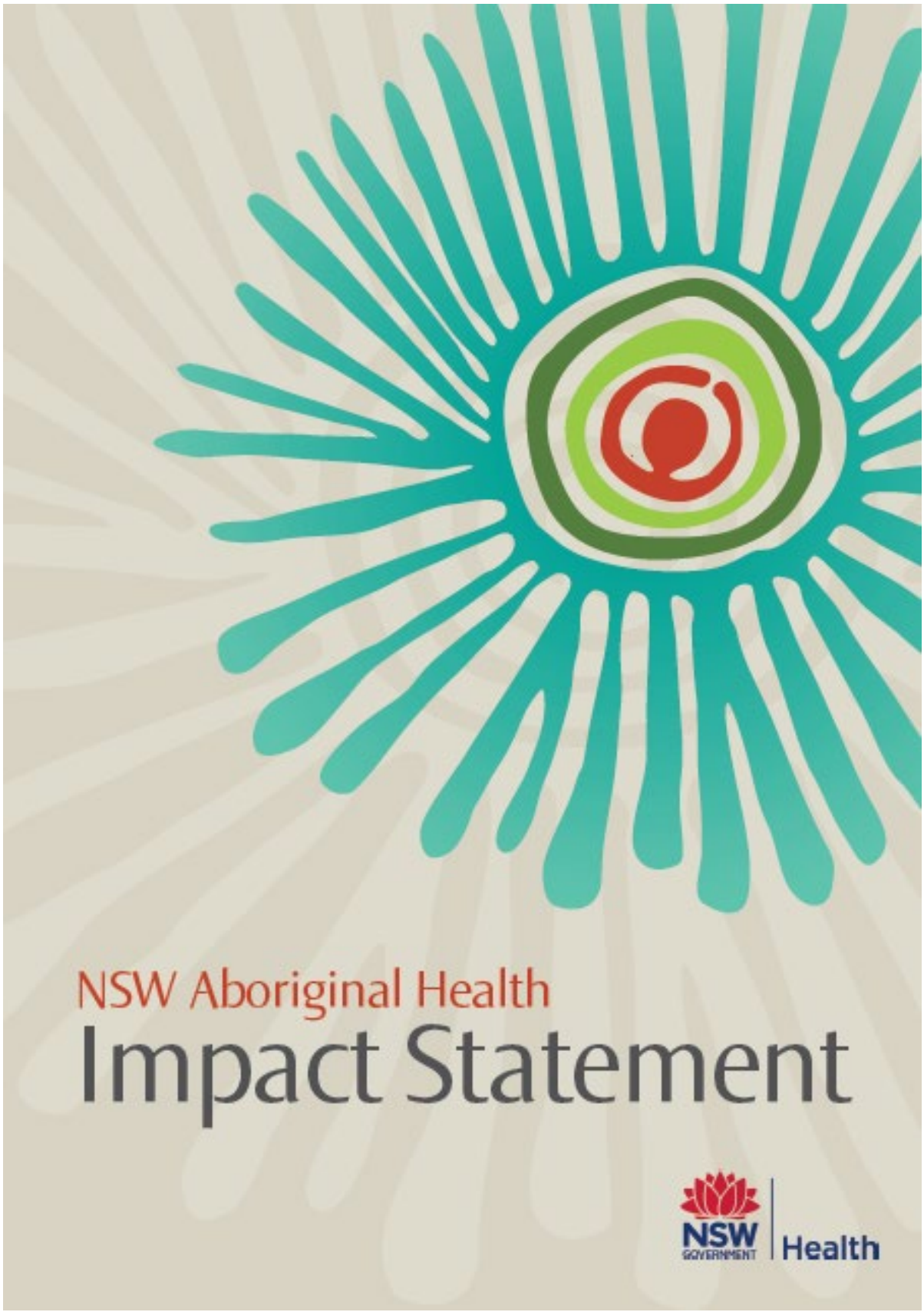
Appendix 6
Role delineation of clinical services

Role delineation is a planning tool used to describe the minimum support services, workforce and other requirements for the safe delivery of clinical services. It delineates the level of clinical services, not hospitals or health facilities as a whole. Each service standard has up to six levels of service in ascending order of complexity. The role delineation of clinical services at individual SESLHD facilities is outlined below.

SERVICE TYPE	SPECIALTY	POWH	RHW	SSEH	WMH	GW	SGH	TSH	CHCK	GC
CORE SERVICES										
	1. Anaesthesia and Recovery	6	6	4	NPS	1	6	5	NPS	NPS
	2. Operating Suite	6	6	4	NPS	1	6	5	NPS	NPS
	3. Close Observation Unit (COU)	6	4	3	NPS	NPS	4	4	NPS	NPS
	4. Intensive Care Service (ICS)	6	6	NPS	NPS	NPS	6	5	NPS	NPS
	5. Nuclear Medicine	6	6	4	NPS	NPS	6	5	NPS	NPS
	6. Radiology and Interventional Radiology	6	6	4	2	1	6	5	NPS	NPS
	7. Pathology	6	6	5	NPS	1	6	6	NPS	1
	8. Pharmacy	6	6	6	3	1	6	5	3	1
CLINICAL SERVICES										
A. Emergency Medicine	Emergency Medicine	6	NPS	3	NPS	NPS	6	5	NPS	NPS
B. Medicine	Cardiology and Interventional Cardiology	6	NPS	3	NPS	NPS	6	5	NPS	NPS
	Clinical Genetics	6	6	NPS	NPS	NPS	5	NPS	NPS	NPS
	Dermatology	6	NPS	3	NPS	NPS	6	NPS	NPS	NPS
	Endocrinology	6	6	3	NPS	NPS	6	5	NPS	NPS
	Gastroenterology	6	NPS	3	NPS	NPS	6	6	NPS	NPS
	General and Acute Medicine	6	4	4	NPS	2	6	4	NPS	NPS
	Geriatric Medicine	6	NPS	3	5	NPS	6	6	3	2
	Haematology	6	NPS	3	NPS	NPS	6	4	NPS	NPS
	Immunology	6	NPS	2	NPS	NPS	5	NPS	NPS	NPS
	Infectious Diseases	6	NPS	2	NPS	NPS	6	5	NPS	NPS
	Neurology	6	NPS	3	NPS	NPS	6	5	NPS	NPS
	Oncology – Medical	6	5	NPS	NPS	NPS	6	5	NPS	NPS
	Oncology – Radiation	6	4	NPS	NPS	NPS	6	4	NPS	NPS
	Palliative Care	6	4	NPS	NPS	2	6	3	6	3
	Rehabilitation Medicine	6	NPS	NPS	4	NPS	6	4	5	2
	Renal Medicine	6	NPS	3	NPS	NPS	6	4	NPS	NPS
	Respiratory and Sleep Medicine	6	NPS	3	NPS	NPS	6	5	NPS	NPS
	Rheumatology	6	NPS	2	NPS	NPS	6	NPS	NPS	NPS
	Sexual Assault Services	1	NPS	NPS	NPS	NPS	4	1	NPS	NPS
	Sexual Health and HIV Medicine	5	1	5	NPS	NPS	4	1	NPS	NPS
	Drug and Alcohol Services	5	5	6	NPS	NPS	6	5	NPS	NPS

SERVICE TYPE	SPECIALTY	POWH	RHW	SSEH	WMH	GW	SGH	TSH	CHCK	GC
C. Surgery	Burns	4	NPS	NPS	NPS	NPS	4	NPS	NPS	NPS
	Cardiothoracic Surgery	6	NPS	NPS	NPS	NPS	6	NPS	NPS	NPS
	Ear, Nose and Throat Surgery	6	NPS	4	NPS	NPS	6	4	NPS	NPS
	General Surgery	6	6	NPS	NPS	1	6	5	NPS	NPS
	Gynaecology	NPS	6	NPS	NPS	NPS	6	4	NPS	NPS
	Neurosurgery	6	NPS	NPS	NPS	NPS	6	NPS	NPS	NPS
	Ophthalmology	6	NPS	6	NPS	NPS	1	3	NPS	NPS
	Oral Health	6	NPS	NPS	NPS	2	3	4	NPS	NPS
	Orthopaedic Surgery	6	NPS	6	NPS	NPS	6	5	NPS	NPS
	Plastic Surgery	6	4	NPS	NPS	NPS	6	NPS	NPS	NPS
	Urology	6	NPS	NPS	NPS	NPS	6	5	NPS	NPS
	Vascular Surgery	6	NPS	NPS	NPS	NPS	6	4	NPS	NPS
D. Child and Family Health Services	Child and Family Health	NPS	NPS	NPS	NPS	NPS	4	5	NPS	NPS
	Child Protection Services	NPS	NPS	NPS	NPS	NPS	4	3	NPS	NPS
	Maternity	NPS	6	NPS	NPS	NPS	5	4	NPS	NPS
	Neonatal	NPS	6	NPS	NPS	NPS	4	3	NPS	NPS
	Paediatric Medicine	NPS	6	NPS	NPS	NPS	5	4	NPS	NPS
	Surgery for Children	NPS	6	NPS	NPS	NPS	4	3	NPS	NPS
	Youth Health	NPS	NPS	NPS	NPS	NPS	3	3	NPS	NPS
E. Mental Health Services	Adult Mental Health	6	NPS	NPS	NPS	NPS	5	5	NPS	NPS
	Child and Youth Mental Health	4	NPS	NPS	NPS	NPS	4	4	NPS	NPS
	Older Persons Mental Health	6	NPS	NPS	NPS	NPS	6	4	NPS	NPS
F. Aboriginal Health	Aboriginal Health	6	6	4	2	NPS	4	4	2	2
G. Community Health	Community Health	4	3	4	3	1	4	4	3	NPS

Appendix 7
Aboriginal Health Impact Statement



Aboriginal Health Impact Statement
The Royal Hospital for Women Integrated Health Services Plan

Title of the initiative:	The Royal Hospital for Women Integrated Health Services Plan
Organisation/Department/ Centre:	The Royal Hospital for Women
Contact name and title:	Ms Vanessa Madunic, General Manager, Royal Hospital for Women
Date completed:	Completed by Alison Sneddon, Manager Strategy and Planning Unit SESLHD 4th December 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

The SESLHD *Journey to Excellence Strategy 2018-2021* outlines the District's ambitions to empower communities to optimise their health and wellbeing along the life course and provide safe, person centred and integrated care. 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 people.

The *Royal Hospital for Women Integrated Health Services Plan* ('The Plan') further articulates these strategies, with a key focus on:
a. Delivering on The Royal's role as the statewide leader in developing, supporting and embedding a gender sensitive approach in the development of research, education, training and clinical care in women's and newborn health care;
b. Continuing to develop partnerships, our people, infrastructure, systems and processes that will enable The Royal to meet the health needs of the women of NSW
c. Recognising The Royal as a key partner on the Randwick Health and Education Precinct and an integral component of the Precinct's unique strengths in research, education and the delivery of care

The Plan encompasses the life stages from young women through the childbearing years to mid- life and older women, with particular emphasis on maternal, gynaecological and newborn care and achieving equitable care across women's life stages.

For Aboriginal people, the Royal Hospital for Women Integrated Health Services Plan builds upon the work initiated in the RHW Strategic Plan 2014-2020, which recognised the need to continue to enhance services to women of an Aboriginal background and cater for the needs of Aboriginal families with newborn care. This Plan seeks to maintain the well-developed links between the Aboriginal Health Unit and the Royal Hospital for Women's services to continue to address key issues affecting the health and wellbeing of Aboriginal women and families in our community and the wider Aboriginal community we serve.

1. The health context for Aboriginal people

In 2016, the ABS recorded over 8,200 people (4,140 female) identifying as Aboriginal and/or Torres Strait Islander in the area covered by SESLHD. Although there is an identified community of Aboriginal women living in La Perouse it is important not to ignore the significant numbers of Aboriginal women living in other areas in the SESLHD, especially Sutherland, and Sydney City LGAs.

While Aboriginal people are reaching older ages, and this is reflected in an increased number of older Aboriginal people accessing SESLHD health services, the obvious gap in life expectancy between Aboriginal and Non Aboriginal people is still observed. The Aboriginal population has a higher mortality rate and a lower life expectancy than other Australians - in SESLHD in 2016, just 5.2% of the Aboriginal population were aged 65 and over compared with 14.7% of the non-Indigenous population. Conversely, the percentage of children and younger people is greater in the Aboriginal population, with women aged 19 years and younger representing 38.7% of the female Aboriginal population, as opposed to 20.5% of the non-Aboriginal population. This will have ramifications for the future planning of Aboriginal services at the Royal, particularly for the child bearing years.

As noted in The Plan, Aboriginal women also experience higher levels of domestic and family violence than non-Aboriginal women. They participate less in cancer screening programs and generally experience poorer access to health care services, are diagnosed at a later stage and experience poorer outcomes for a range of conditions, for example diabetes, ischaemic heart disease, other cardiovascular conditions, and breast, cervical and ovarian cancers.

Trans-generational trauma impacts on individual Aboriginal women and their communities. For Aboriginal women intergenerational trauma can lead to severe mental health effects, including anxiety and depression and post-traumatic stress. A trauma-based approach to care is especially important in Aboriginal Health Care. Consideration of perinatal mental health is thus also an important consideration for Aboriginal women in SESLHD.

Aboriginal women, including older Aboriginal women, may take a carer role with grandchildren, children, partners or extended family. Aboriginal people living with disability and their carers face additional challenges related to socioeconomic disadvantage, and cultural perceptions of disability that may limit carers asking for and/or receiving adequate support.

The *National Women's Health Strategy 2020-2030* acknowledges that the life course for Aboriginal and Torres Strait Islander women and girls is different from non-Indigenous women and girls. Cultural determinants of health are important for Aboriginal women and girls, as a 'strong connection to culture is strongly correlated with good health, through strengthened identity, resilience and wellbeing'.

At the Royal in 2016/17 there were 279 admissions requiring 729 bed days for Aboriginal women (aged 15 years+), with 180 (64.5%) of these admissions for Obstetrics and 78 (28%) for Gynaecology. More than 56% of these admissions were for SESLHD residents, with 72% of these residents of the local LGAs of Randwick and Botany Bay.

More than 43% of the Aboriginal women admitted to the Royal were from other metro and rural LHDs, most notably Illawarra Shoalhaven, Sydney and Western NSW LHDs. These women generally had a longer average length of stay and higher average PEM (Public Equivalent Model) than Aboriginal residents from SESLHD, reflecting more costly and/or complex care and the specialised services available at The Royal. This was similar for Aboriginal neonates requiring specialised care, with 47% from LHDs other than SESLHD.

Aboriginal women accounted for only 1.1% of all occasions of service in a non-admitted setting at The Royal.

2. The potential impact of the policy, program or strategy on Aboriginal people including approaches to mitigate any potential undesired effects

The evidence of a significant inequity in health access and outcomes between Aboriginal and non-Aboriginal Australians indicates that is imperative to ensure that the services provided by The Royal meet the unique health and wellbeing needs of Aboriginal women, their babies and families.

This Plan supports the continuation of a range of existing Aboriginal Health services and programs serving the SESLHD community that provide integrated care for Aboriginal people.

The Plan recognizes and proposed to continue the valuable work undertaken by The Royal, for example:

- Malabar Community Midwifery Link Services, caring for Aboriginal and Torres Strait Islander families and health promotion within the community
- Program designed to increase the number of Indigenous midwives in the health system, which enabled two local Aboriginal women to study and train as midwives.

For Aboriginal women, their babies and families, The Plan further proposes:

- Introduction of a full-time Aboriginal Health Liaison Officer position to cover The Royal
- Providing an Aboriginal specific room for families
- Providing further outreach and capacity building for staff for Aboriginal health across NSW, building on the Moree experience, e.g. training gynaecology nurse specialists in colposcopy, contraception (including IUD fittings), menopause symptoms and treatments; and telehealth
- Continued advocacy to “close the gap” and improve equity in health access and outcomes for older Aboriginal women and families in our community.

3. Engagement with Aboriginal people

The Royal has a long-standing relationship with the local community through the Malabar Community Midwifery Link Services and programs held at La Perouse. The acting NUM of The Royal’s Aboriginal Maternal and Infant Health Program provided information during the development of The Plan.

If any funding for capital redevelopment is provided for The Royal, it is intended ongoing advice will be sought from the Aboriginal Health Unit and with representatives of the local Aboriginal community to ensure a welcoming environment that is suitable for Aboriginal women, their babies and families. This includes Aboriginal friendly zones within the hospital and consideration of location of Aboriginal specific services within the building.

Approved by:

Margaret Broadbent

Date:

11/12/2019

Title/position:

Deputy Manager

Organisation/Department/Centre:

Aboriginal Health Unit
South Eastern Sydney Local Health District

Contact phone number:

9540 8254

Signature:

MBroadbent

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

Appendix 8
Abbreviations

ABBREVIATION	FULL NAME
ABA	Australian Breastfeeding Association
ACAT	Aged Care Assessment
AHMAC	Australian Health Ministers Advisory Council
ANRQ	Antenatal Risk Questionnaire
APS	Acute Pain Service
BFHI	Breastfeeding Friendly Health initiative
BHI	Bureau of health Information
BSU	Breastfeeding Support Unit
CALD	Culturally and Linguistically Diverse
C & F	Child and Family
CESPHN	Central and Eastern Sydney Primary Health Network
CHSP	Commonwealth Home Support Program
CICU	Children's Intensive Care Unit
ComPacks	Community Packages
COU	Close Observation Unit
COWS	Computers on Wheels
CMC	Clinical Midwifery Consultant
CMV	Cytomegalovirus
CNC	Clinical Nurse Consultant
CPRS	Complex Regional Pain Syndrome
D & C	Dilatation and Curettage
DPPHE	Directorate of Planning, Population Health and Equity
DRG	Diagnosis Related Group
DV	Domestic Violence
ED	Emergency Department
EMR	Electronic Medical Record
EPAS	Early Pregnancy Assessment Service
ESMHS	Eastern Suburbs Mental Health Service
ESRG	Enhanced Service Related Group
FiCare	Family Integrated Care
FTE	Full Time Equivalent
FRC	Fertility and Research Centre
GDM	Gestational Diabetes Mellitus
GP	General Practitioner

ABBREVIATION	FULL NAME
GRISP	Greater Randwick Integrated Health Services Plan
HCC	Hereditary Cancer Clinic
HDU	High Dependency Unit
HETI	Health Education and Training Institute
IBCLC	International Board Certified Lactation Consultant
ICU	Intensive care Unit
IVF	In Vitro Fertilisation
KPI	Key Performance Indicator
LGA	Local Government Area
LHD	Local Health District
MAIF	Marketing in Australia of Infant Formula
MDM	Multi-Disciplinary Team Meeting
MDT	Multi-Disciplinary Team
MFM	Maternal-Fetal Medicine
MGP	Midwifery Group Practice
MHS	Mental Health Service
MOU	Memorandum of Understanding
MSP	Midwifery support service
NBAC	Next birth after caesarean
NCC	Newborn Care Centre
NDIS	National Disability Insurance Scheme
NEC	Necrotizing Enterocolitis
NICU	Neonatal intensive Care Unit
NPESU	National Perinatal Epidemiology and Statistics Unit (UNSW)
NSAMS	A National Strategic Approach to Maternity Services
NSLHD	Northern Sydney Local Health District
NUM	Nursing Unit Manager
NWAU	National Weighted Activity Unit
OPD	Outpatient Department
OrBiT	Organisation reporting and business intelligence for transformation
PCC	Pregnancy centred care
PEM	Public Equivalent Model
PLaN	Pregnancy Planning, Lifestyle and Nutrition
PICH	Directorate of Primary, Integrated and Community Health
PICU	Paediatric Intensive Care Unit
PIMHS	Perinatal & Infant Mental Health Service
PIPA	Perinatal Integrated Psychosocial Assessment
POW	Prince of Wales
POWH	Prince of Wales Hospital

ABBREVIATION	FULL NAME
PTS	Post-traumatic stress
PTSD	Post-traumatic stress disorder
RHW	Royal Hospital for Women
RN	Registered Nurse
RNSH	Royal North Shore Hospital
SCH	Sydney Children's Hospital
SCHN	Sydney Children's Hospital Network
SCN	Special Care Nursery
SEALS	South Eastern Area Laboratory Services
SESLHD	South Eastern Sydney Local Health District
SGH	St George Hospital
SLHD	Sydney Local Health District
SRG	Service Related Group
SVHN	St Vincent's Hospital Network
TACS	Transitional Aged Care
TGD	Transgender and Gender Diverse
UNICEF	United Nations International Children's Emergency Fund
UNSW	University of New South Wales
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
VPN remote	IT application software allowing remote access to SESLHD intranet and records
VMO	Visiting Medical Officer
WAS	Women's Assessment Service
WHO	World Health Organisation

Appendix 9
References

1. SESLHD Journey to Excellence Strategy 2018-2021. Available at: https://www.seslhd.health.nsw.gov.au/about-us/health-plan
2. NSW Health Bureau for Information's Healthcare Observer patient surveys. Available at: http://www.bhi.nsw.gov.au/nsw_patient_survey_program
3. NSW Health. The First 2000 Days Framework. Available at https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2019_008.pdf
4. Australian Government Department of Health. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
5. ibid
6. Australian Government Department of Health. National Action Plan for Endometriosis. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/endometriosis
7. Australian Government Department of Health. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
8. ibid
9. ibid
10. Tracy, S.K., Hartz, D., Hall, B. et al. A randomised controlled trial of caseload midwifery care: M@NGO (Midwives @ New Group practice Options). BMC Pregnancy Childbirth 11, 82 (2011) doi:10.1186/1471-2393-11-82
11. Centre for Epidemiology and Evidence. New South Wales Mothers and Babies 2018. Sydney: NSW Ministry of Health, 2019
12. Milson, I., et al., Epidemiology of urinary incontinence (UI) and other lower urinary tract symptoms (LUTS), pelvic organ prolapse (POP) and anal incontinence (AI), in Incontinence 6th edition, A. Abrams, et al., Editors. 2017, ICUD ICS: Tokyo.
13. Salvatore, S., et al., Pathophysiology of urinary incontinence, faecal incontinence and pelvic organ prolapse, in Incontinence 6th edition P. Abrams, et al., Editors. 2017, ICUD ICS: Tokyo.
14. Dumoulin, C., et al., Adult conservative management, in Incontinence 6th edition P. Abrams, et al., Editors. 2017, ICUD ICS: Tokyo.
15. Personal communication with Professor Marie Paule-Austin
16. Milson, I., et al., Epidemiology of urinary incontinence (UI) and other lower urinary tract symptoms (LUTS), pelvic organ prolapse (POP) and anal incontinence (AI), in Incontinence 6th edition, A. Abrams, et al., Editors. 2017, ICUD ICS: Tokyo.
17. Dalal, P.K. and M. Agarwal, Postmenopausal syndrome. Indian journal of psychiatry, 2015. 57(Sup pl 2): p. S222-S232
18. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
19. Australian Government, 2018. Breast cancer statistics - Cancer Australia 2017 https://canceraustralia.gov.au/ko/printpdf/affected-cancer/cancer-types/breast-cancer/breast-cancer-statistics
20. Cancer Institute of NSW: 2018. Reporting for Better Cancer Outcomes. Published November 2018
21. SESLHD Women's Health Strategy 2018: Reproduced with permission.
22. AIHW. Estimating the prevalence of osteoporosis in Australia, 2014. Available at: https://www.aihw.gov.au/getmedia/9125fd35-5bd5-4b4f-a0a6-99ae64ae246f/17656.pdf.aspx?inline=true
23. AIHW Osteoporosis Snapshot. 2018. Available at: https://www.aihw.gov.au/reports/chronic-musculoskeletal-conditions/osteoporosis/contents/what-is-osteoporosis

24. AIHW The health of Australia's females, 2017 Available at: https://www.aihw.gov.au/reports/men-women/female-health/contents/who-are
25. AIHW Estimating the prevalence of osteoporosis in Australia, 2014. Available at: https://www.aihw.gov.au/getmedia/9125fd35-5bd5-4b4f-a0a6-99ae64ae246f/17656.pdf.aspx?inline=true
26. AIHW Older Australia at a glance, 2018. Available at: https://www.aihw.gov.au/reports/older-people/older-australia-at-a-glance/contents/summary
27. Kupelian V, Fitzgerald MP, Kaplan SA, Norgaard JP, Chiu GR, Rosen RC. Association of nocturia and mortality: results from the Third National Health and Nutrition Examination Survey. J Urol 2011;185:571–7
28. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
29. SESLHD Equity Strategy. Available at: https://www.seslhd.health.nsw.gov.au/about-us/health-plans
30. Department of Health 2018. National Women's Health Strategy 2020-2030, p.14. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
31. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
32. Australian Bureau of Statistics 2016 census data
33. New South Wales, Department of Health. Aboriginal Family Health Strategy 2011-2016: Responding to family violence in Aboriginal communities. North Sydney, N.S.W.: NSW Dept. of Health; 2011.
34. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
35. Burrow S, Ride K. Review of diabetes among Aboriginal and Torres Strait Islander people. 2016. Available at: https://healthinfonet.ecu.edu.au/healthinfonet/getContent.php?linkid=590810&title=Review+of+diabetes+among+Aboriginal+and+Torres+Strait+Islander+people
36. Foundation TH. Cardiovascular risk profile of Aboriginal and Torres Strait Islander peoples [Internet]. The Heart Foundation. [Cited 2018 Feb 5]. Available from: https://www.heartfoundation.org.au/about-us/what-we-do/heart-disease-in-australia/cardiovascular-risk-profile-of-aboriginal-and-torres-strait-islander-peoples
37. Tapia KA, Garvey G, Entee MM, Rickard M, Brennan P. Breast Cancer in Australian Indigenous Women: Incidence, Mortality, and Risk Factors. Asian Pac J Cancer Prev APJCP. 2017; 18(4):873–84.
38. NSW Health Tobacco Strategy Work Plan 2019-2021. Available at: https://www.health.nsw.gov.au/tobacco/Publications/tobacco-work-plan.pdf
39. AIHW. Trends in Indigenous Mortality and Life Expectancy, 2001 - 2015: evidence from the Enhanced Mortality Database. Canberra; 2017.
40. Mah B, Weatherall L, Burrows J, Blackwell CC, Gwynn J, Wadhwa P, et al. Post-traumatic stress disorder symptoms in pregnant Australian Indigenous women residing in rural and remote New South Wales: A cross-sectional descriptive study. Aust N Z J Obstet Gynaecol. 57(5):520–5.
41. Kickett-Tucker C, Bessarab D, Coffin J, Wright M. Mia Aboriginal Community Development. Cambridge University Press; 2016. 257 p.
42. Ibid
43. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030
44. Wohler Y, Dantas JA. Barriers Accessing Mental Health Services Among Culturally and Linguistically Diverse (CALD) Immigrant Women in Australia: Policy Implications. J Immigr Minor Health. 2017 Jun 1; 19(3):697–701.
45. Addressing cancer stigma within Macedonian and Serbian communities in the Illawarra [Internet]. Cancer Institute NSW. [Cited 2018 Feb 4]. Available from: https://www.cancerinstitute.org.au/about-us/events/innovations-in-cancer-treatment-and-care/Innovations-in-Cancer-Treatment-and-Care-NSW-Confe/Abstracts/addressing-cancer-stigma-within-macedonian-and-ser
46. Alzubaidi H, Mc Namara K, Browning C, Marriott J. Barriers and enablers to healthcare access and use among Arabic-speaking and Caucasian English-speaking patients with type 2 diabetes mellitus: a qualitative comparative study. BMJ Open [Internet]. 2015 Nov 1; 5(11). Available from:http://bmjopen.bmj.com/content/5/11/e008687.abstract

47. cancer_cald_communities_report2010.pdf [Internet]. [Cited 2018 Feb 4]. Available from: http://www.fecca.org.au/images/stories/pdfs/cancer_cald_communities_report2010.pdf

48. Mengesha ZB, Dune T, Perz J. Culturally and linguistically diverse women's views and experiences of accessing sexual and reproductive health care in Australia: a systematic review. Sex Health. 2016 May 23; 13(4):299–310.

49. Hadgkiss EJ, Renzaho AMN. The physical health status, service utilisation and barriers to accessing care for asylum seekers residing in the community: a systematic review of the literature. Aust Health Rev. 2014 May 20; 38 (2):142–59.

50. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

51. McNair R, Szalacha LA, Hughes TL. Health Status, Health Service Use, and Satisfaction According to Sexual Identity of Young Australian Women. Womens Health Issues. 2011 Jan 1; 21(1):40–7.

52. Australian Bureau of Statistics, 2071.0 - Census of Population and Housing: Reflecting Australia - Stories from the Census, 2016. Latest Issue Released at 11:30 AM (CANBERRA TIME) 18/01/2018. Available at: https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2071.0~2016~Main%20Features~Same-Sex%20Couples~85

53. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

54. Australian Bureau of Statistics, 2015 National Health Survey 2014-2015. Available at: https://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/CDA852A349B4CEE6CA257F150009FC53/$File/national%20health%20survey%20first%20results,%202014-15.pdf

55. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

56. BeyondBlue. Available at: https://www.beyondblue.org.au/

57. Department of Health 2018. National Women's Health Strategy 2020-2030. P. 37. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

58. National Institute on Drug Abuse (USA). Available at: https://www.drugabuse.gov/publications/drugfacts/substance-use-in-women

59. Australian Institute of Health and Welfare 2017. National Drug Strategy Household Survey 2016: detailed findings. Drug Statistics series no. 31.

60. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

61. ANROWS - Australia's National Research Organisation for Women's Safety. 2016 [cited 2018 Jul 28]. A preventable burden: Measuring and addressing the prevalence and health impacts of intimate partner violence in Australian women: Key findings and future directions [Internet]. Available from: https://www.anrows.org.au/publications/compass-0/preventable-burden-measuring-and-addressing-the-prevalence-and-health-impacts

62. Cadilhac DA, Sheppard L, Cumming TB, Thayabaranathan T, Pearce DC, Carter R, et al. The health and economic benefits of reducing intimate partner violence: an Australian example. BMC Public Health. 2015 Jul 9; 15:625.

63. Department of Health 2018. National Women's Health Strategy 2020-2030. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

64. Source: Australian Bureau of Statistics, Survey of Disability and Carers (SDAC) 2015, tables estimated to SESLHD level.

65. Hussain R, Wark S, Dillon G, Ryan P. Self-reported physical and mental health of Australian carers: a cross-sectional study. BMJ Open. 2016 Sep 1; 6(9):e011417.

66. Australia H. Study reveals first year of parenthood struggles [Internet]. 2018 [cited 2018 Jul 28]. Available at: http://www.pregnancybirthbaby.org.au/news/study-reveals-first-year-of-parenthood-struggles

67. Cooklin AR, Dinh H, Strazdins L, Westrupp E, Leach LS, Nicholson JM. Change and stability in work–family conflict and mothers' and fathers' mental health: Longitudinal evidence from an Australian cohort. Soc Sci Med. 2016 Apr 1; 155:24–34.

68. 68. Robinson LD, Magee C, Caputi P. Burnout and the work-family interface: A two-wave study of sole and partnered working mothers. Career Dev Int. 2016 Jan 12; 21(1):31–44.

69. Giallo R, Cooklin A, Nicholson JM. Risk factors associated with trajectories of mothers' depressive symptoms across the early parenting period: an Australian population-based longitudinal study. Arch Womens Ment Health. 2014 Apr 1; 17(2):115–25.

70. Dillon-Wallace JA, McDonagh SH, Fordham LA. How Stable is the Well-Being of Australian Mothers Who Care for Young Children with Special Health Care Needs? J Child Fam Stud. 2014 Oct 1; 23(7):1215–26.

71. Zaidman-Zait A, Mirenda P, Duku E, Vaillancourt T, Smith IM, Szatmari P, et al. Impact of personal and social resources on parenting stress in mothers of children with autism spectrum disorder. Autism. 2017 Feb 1; 21(2):155–66.

72. SESLHD Community Partnerships Strategy 2015 Available at: https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/Community_Partnership/docs/2015/SESLHDComPartStrategyFINAL.pdf

73. NSW Health. Genomics Strategy June 2017. Available at: https://www.health.nsw.gov.au/services/Publications/nsw-health-genomics-strategy.pdf

74. Essentials of Genetic and Genomic Nursing 2nd edition

75. Meskó B. The Guide to the Future of Medicine. Available at: https://medicalfuturist.com/wp-content/media/2013/10/the-guide-to-the-future-of-medicine-white-paper.pdf

76. Gretton C, Honeyman M. The Kings Fund 2016 The digital revolution: eight technologies that will change health and care. Available at: http://www.kingsfund.org.uk/publications/articles/eight-technologies-will-change-health-and-care

77. SESLHD ICT Strategy. Available at: http://www.seslhd.health.nsw.gov.au/HealthPlans/documents/2017/ICTStategy.pdf

78. NSW Health Data Analytics Framework, 2016. p.1. Available at: http://www.ehealth.nsw.gov.au/__data/assets/pdf_file/0020/303752/NSW_Health_Analytics_Framework.pdf

79. ibid

80. SESLHD Environmental Sustainability Plan 2019-2021. Available at: https://www.seslhd.health.nsw.gov.au/about-us/health-plans

81. Guo Y, Li S, Liu DL, et al. Projecting future temperature-related mortality in three largest Australiancities. Environ Pollut 2016; 208: 66-73

82. McMichael A, Woodfuff R, Whetton P et al (2002). Human health and climate change in Oceania: a risk assessment. Canberra: Australian Government Department of Health and Ageing

83. McMichael C, Barnett J, McMichael AJ. An ill wind? Climate change, migration, and health. EnviroHealth Perspect 2012; 120: 646-654.

84. IPCC, 2018: Summary for Policymakers, p15

85. SESLHD Research Strategy 2017-2021. AVAILABLE AT: https://www.seslhd.health.nsw.gov.au/sites/default/files/migration/HealthPlans/documents/ResearchStrategy_Final.pdf

86. Department of Health 2018. National Women's Health Strategy 2020-2030, p.34. Available at: https://www1.health.gov.au/internet/main/publishing.nsf/Content/national-womens-health-strategy-2020-2030

87. ibid

88. CESPHN's Strategic Plan 2019- 2021 Available at:http://www.cesphn.org.au/images/Central_and_Eastern_Sydney_PHN_Strategic_Plan.pdf

89. UNSW 2025 Strategy Available at: https://www.2025.unsw.edu.au/

90. UNSW Medicine Strategy Available at: https://med.unsw.edu.au/sites/default/files/_local_upload/others/Faculty_Strategic_Intent.pdf

91. WHO, UNICEF Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services: the revised Baby-friendly Hospital Initiative 2018 AVAILABLE AT: http://www.who.int/nutrition/publications/infantfeeding/bfhi-implementation/en/

92. NSW State Health Plan – towards 2021. Available at: http://www.health.nsw.gov.au/statehealthplan/Publications/NSW-state-health-plan-towards-2021.pdf

93. NSW Kids and Families. Healthy, Safe and Well: A Strategic Health Plan for Children, Young People and Families 2014–24 Available at: https://www.health.nsw.gov.au/kidsfamilies/Pages/healthy-safe-well-2014-24.aspx

94. NSW Health PD2010_045 Maternity – Towards Normal Birth in NSW. Available at: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2010_045.pdf

95. NSW Health. The First 2000 Days Framework. Available at: https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2019_008.pdf

96. Greater Sydney Commission – Towards our Greater Sydney 2056. Available at https://gsc-public-1.s3.amazonaws.com/s3fs-public/towards_our_greater_sydney_2056.pdf?x6WAV8GT8h51mtA5dWliCB6SlCvJuyhw

97. SESLHD Journey to Excellence Strategy 2018-2021. Available at: https://www.seslhd.health.nsw.gov.au/sites/default/files/groups/Planning_Population_and_Equity/Health_Plans/JourneytoExcellenceStrategySUMMARY.pdf

98. Institute for Healthcare Improvement: The Triple Aim for Populations. Available at: http://www.ihi.org/Topics/TripleAim/Pages/Overview.aspx

99. SESLHD Plans are available at https://www.seslhd.health.nsw.gov.au/about-us/health-plans

100. Greater Randwick Integrated Health Services Plan Available at: https://www.seslhd.health.nsw.gov.au/sites/default/files/groups/Planning_Population_and_Equity/Health_Plans/GreaterRandwickIHSP_10Nov.pdf

The Royal
HOSPITAL
FOR WOMEN