Council of Australian Governments Subacute Programs

National Partnership Agreement
Program Overview

2009/10 – 2011/12

NSW GOVERNMENT Health
South Eastern Sydney Local Health District

SESLHD COAG Subacute Programs Report: National Partnership Agreement Overview 2009/10-2011/12

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1. Summary

South Eastern Sydney Local Health District (SESLHD) has had subacute programs growth funded under two (2) National Partnership Agreements (NPA) as part of the National Health Reform. The NPAs are,

1. The **National Partnership Agreement - Improving Public Hospital Services** (NPA-IPHS). This NPA provided recurrent funding (annualised into the district budget) for opening new beds commencing in the 2010/11FY. SESLHD opened 47 new beds, including 8 beds in subacute services.

2. The **National Partnership Agreement - Hospital & Health Workplace Reform** (NPA-HHWR). Schedule C of this NPA provided non-recurrent commonwealth funding for enhanced subacute care services. This funding, totalling $18.25M for SESLHD, commenced in the 2009/10FY and concludes in the 2012/13FY.

This paper primarily discusses and makes recommendations in relation to rehabilitation services following a comprehensive review of these programs. Initial findings in other subacute areas are also discussed in this report, however, further evaluation is required.

2. The context

By 2022, subacute care is projected to account for 13% of all inpatient episodes of care and 23% of all bed days in SESLHD. SESLHD recognised the need to implement programs that improved the efficiency and capacity of subacute services in order to address identified current and future demands for these services.

Capacity and efficiencies generated by enhanced subacute rehabilitation services is crucial to assist in achieving National Emergency Access Targets (NEAT) and National Elective Surgery Targets (NEST). Patient access to subacute services has improved due to increasing the capacity of the subacute bed base through funding under the National Partnership Agreement on ***Improving Public Hospital Services (NPA-IPHS)***. Improvements in patient access and functional outcomes in the subacute setting have resulted from increasing the health workforce through funding under Schedule C of the National Partnership Agreement on ***Hospital and Health Workforce Reform (NPA-HHWR***). This funding has enabled the development of new and innovative models of care as well as strengthening existing models of care, to generate increased efficiency and capacity. Continuation of COAG funding is paramount to maintain and improve the efficiency and capacity afforded to the health care system by these programs.

3. National Partnership Agreement – Funded Programs

3.1 NPA-IPHS: funding of additional beds

NPA-IPHS funding was provided by the Commonwealth to improve the efficiency and capacity of public hospitals to increase patient access to elective surgery, emergency departments and subacute services.

NSW was allocated $1,065.8m between the 2009/10 and 2016/17 FYs. SESLHD was allocated ~$57.7m between the 2010/11 and 2013/14 FYs to open 47 additional beds across emergency, acute and subacute settings. SESLHD allocated approximately $8.5m of this funding to open eight (8) additional subacute rehabilitation beds in the 2010/11FY as indicated in Table 1. **This funding is recurrent,** annualised into the district budget.

Table 1: NPA-IPHS – Commonwealth Funding (2010/11), State funding (2011/12 onwards)

Site	NPA -BEDS	2010/11	2011/12	2012/13	2013/14 and thereafter
Prince of Wales Hospital					
Acute	3	$900,000	$936,000	$960,000	$984,000
Surgical	7	$2,100,000	$2,184,000	$2,240,000	$2,296,000
Subacute	2	$260,000	$624,000	$640,000	$656,000
St George Hospital					
Acute	5	$1,500,000	$1,560,000	$1,600,000	$1,640,000
Surgical	14	$4,200,000	$4,368,000	$4,480,000	$4,592,000
The Sutherland Hospital					
ED	5	$1,500,000	$1,560,000	$1,600,000	$1,640,000
Acute	1	$300,000	$312,000	$320,000	$328,000
Surgical	4	$1,200,000	$1,248,000	$1,280,000	$1,312,000
Subacute	6	$600,000	$1,872,000	$1,919,000	$1,967,000
Yearly Total	47	**$12,560,000**	**$14,664,000**	**$15,039,000**	**$15,415,000**
Total Funding					**$57,678,000**

3.2 NPA-HHWR: funding of enhanced subacute rehabilitation models of care

NPA-HHWR funding was provided by the Commonwealth to improve the efficiency and capacity of public hospitals. Schedule C of this agreement refers to the enhancement of subacute services, which aimed to increase the volume and quality of subacute services to improve patient health outcomes and quality of life. **NPA-HHWR funding is confirmed until 30 June 2013 only.**

NSW was allocated $165.65M to enhance subacute services under the NPA-HHWR between the 2009/10 and 2012/13 FYs. SESLHD was allocated approximately $18.25M, which was utilised across the four subacute care types of: Rehabilitation (approximately 60% of funding); Geriatric Evaluation and Management (approximately 18%); Palliative Care (approximately 18%); and Psychogeriatrics (approximately 4%). The SESLHD allocation is outlined in Table 2.

Table 2: NPA- HHWR – Commonwealth funding

Site/subacute area	2009/10	2010/11	2011/12	2012/13
War Memorial Hospital				
Rehabilitation	$-	$121,898	$127,987	$131,187
GEM	$197,999	$349,589	$371,600	$385,110
Prince of Wales Hospital				
Rehabilitation	$310,128	$804,177	$1,125,425	$1,325,339
Palliative Care	$-	$44,514	$355,744	$366,656
GEM	$-	$163,655	$174,397	$181,198
Psychogeriatrics	$17,930	$60,009	$62,299	$64,677
St George Hospital				
Rehabilitation	$110,994	$667,233	$703,347	$1,077,646
Palliative Care	$149,700	$272,237	$287,292	$346,997
GEM	$-	$-	$180,773	$187,824
Psychogeriatrics	$44,672	$119,719	$124,298	$129,053
The Sutherland Hospital				
Rehabilitation	$232,772	$324,732	$905,630	$1,361,085
GEM	$-	$-	$180,773	$187,824
Calvary Healthcare Sydney				
Rehabilitation	$188,247	$276,606	$290,869	$298,129
Palliative Care	$26,700	$197,691	$493,399	$508,197
GEM	$-	$241,594	$257,453	$267,493
District Overheads				
Across All	$80,700	$296,000	$150,000	$105,000
A&PHC				$238,903
Yearly Total All Programs	**$1,359,842**	**$3,939,654**	**$5,791,286**	**$7,162,318**
Grand Total				**$18,253,100**

4. NPA-HHWR rehabilitation programs in SESLHD

SESLHD has utilised NPA-HHWR Schedule C funding to implement twenty-three initiatives across five SESLHD facilities between the 2009/10FY and 2011/12 FYs. Subacute programs are intrinsically linked through the patient journey from the acute admission to the subacute stay and continuing on in outpatient post-discharge care. All NPA-HHWR programs were supported through access to project management and subacute data capture resources.

This paper primarily discusses the NPA-HHWR enhanced inpatient rehabilitation programs. It briefly outlines models of care, outcomes and estimated fiscal efficiency and activity benefits that these rehabilitation programs have achieved. Models of care and initiatives in other subacute care types, GEM; Palliative Care; and Psychogeriatrics, will be described and evaluated in future reports.

Rehabilitation programs (n=10) were implemented across inpatient and ambulatory care settings. Rehabilitation models of care were implemented in line with funding growth in a three stage rollout to facilitate development of the models:

- Stage 1: 2009/10 onwards:
  - Intensity of Therapy (ITP) programs in the subacute inpatient setting across 5 units
  - Outpatients (OP) programs in the ambulatory care setting across 2 sites
- Stage 2: 2010/11 onwards:
  - Acute Rehabilitation Therapy (ART) programs in the acute settings across 2 sites
- Stage 3: 2011/12 onwards:
  - Rehabilitation in the Home (RITH) program in the domiciliary setting at one site (NB: this program is conducted under a Service Level Agreement with St Vincent's Hospital, Darlinghurst)

5. Alignment to NPA-HHWR Schedule C objectives

Program-specific performance measures were developed for inpatient rehabilitation programs to align with the NPA-HHWR Schedule C Performance and Benchmark indicators, as described in the Table 3 below.

Table 3: SESLHD inpatient rehabilitation program alignment with NPA-HHWR Schedule C indicators

Schedule C Performance Indicator	Program	Performance Measure
C16 – Access to subacute care services	ITP	Strengthening of existing model of care Increased number of rehabilitation episodes in subacute units
	ART	Development of new rehabilitation model of care Increased number of patients receiving rehabilitation programs in the acute setting Increased number of avoided admissions
C17 - Increased workforce capacity in subacute care	ITP / ART	27.30FTE employed across SESLHD Allied Health and Medical disciplines
C18 – Patient outcomes	ITP	Improvement in Functional Independence Measure (FIM) outcomes – admission and discharge FIM, and discharge destination
	ART	Avoided admissions
C20 – Timeliness of care	ART	Increased number of patients receiving rehabilitation programs in the acute setting
C21 - Efficiency	ITP	Performance of the service against casemix adjusted relative means Improvement in Functional Independence Measure (FIM) outcomes –FIM improvement rates
	ART	Avoided admissions

6. Outcomes – making a difference

SESLHD rehabilitation programs have generated efficiencies that have ongoing annual benefits. COAG funding enhancements have been critical in improving the efficiency and capacity of rehabilitation services in SESLHD given the demand for rehabilitation services across the state continues to grow. Funding has facilitated enhanced coordination of a patient's rehabilitation journey across several care settings, and as such, has enabled patients to be provided the most appropriate care in the most appropriate setting in a timely manner to optimise patient outcomes.

6.1 Performance against NPA-HHWR subacute bed activity KPI

SESLHD has achieved cumulative activity increases of more than 30% above the NPA-HHWR subacute bed activity target across all subacute care types. Rehabilitation (inpatient portion) has demonstrated a cumulative increase of more than 40% above the activity target for this reporting period.

6.2 SESLHD subacute inpatient rehabilitation program achievements

Inpatient rehabilitation programs were primarily enhanced through two models of care funded under the NPA-HHWR. These were the Intensity of Therapy (ITP) in the subacute inpatient setting and Acute Rehabilitation Therapy (ART) in the acute setting.

Enhancements to rehabilitation services received under NPA-IPHS and NPA-HHWR have been associated with the following improvements in inpatient settings across SESLHD:

- Increased efficiency of subacute services, including improved patient functional outcomes:
    - 13% reduction in the average length of stay of rehabilitation episodes in 2011/12FY compared to 2007/08FY, approximately equating to an additional 29.3 beds (at 90% occupancy)
    - up to 75% improvement in Functional Independence Measure (FIM) gains per week in comparison to the baseline year
    - over 130 avoided admissions to rehabilitation subacute units annually due to early rehabilitation intervention in the acute setting, equating to an approximate 12.9 rehabilitation beds (at 90% occupancy)
- Improved patient access to subacute services:
    - 33% increase in the number of rehabilitation episodes in 2011/12FY compared to 2007/08FY, supported by the opening of 8 additional subacute rehabilitation beds under NPA-IPHS funding
    - 457 patients provided with new early rehabilitation services in the acute setting annually
- Increased Allied Health and Medical workforce capacity across rehabilitation settings by 30.49FTE, of which, 27.30FTE were in inpatient settings.

6.3 Efficiency cost benefit analysis of rehabilitation programs

Rehabilitation enhancements have produced an annual efficiency of $11,398,274 for an investment of $5,649,258[1]. In addition to the opening of 8 rehabilitation beds, enhancements have generated an annual efficiency benefit equivalent to 42.2 additional rehabilitation beds (at 90% occupancy).

This has been achieved by strengthening existing models of care, developing new models of care, and the opening of additional rehabilitation beds. Efficiency savings generated by decreasing subacute inpatient average length of stay has been estimated at approximately $7.9M, equivalent to approximately 29.3 additional beds (at 90% occupancy). Efficiency generated by avoided admissions has been estimated at approximately $3.5M, equivalent to an additional 12.9 beds (at 90% occupancy).

[1] The annual investment in rehabilitation programs is determined as the combined investment of the rehabilitation portion of NPA-HHWR and NPA-IPHS based on 2011/12FY, which is calculated as approximately $3,153,258 and $2,496,000 respectively.

7. Future directions and recommendations

COAG funding has provided SESLHD with the opportunity and impetus to evaluate the models of subacute care currently employed across the District. More importantly, funding has enabled the creation of innovative enhanced care strategies resulting in improved patient centred activity outcomes delivered in efficient and cost-effective ways.

Several recommendations are offered regarding the continuation of subacute care services in SESLHD.

7.1 Retention of successful rehabilitation programs

Numerous improvements in subacute care have been realised in SESLHD and COAG subacute enhancements have been a key component in achieving these results. The following programs have demonstrated robust clinical outcomes as well as fiscal efficiency. It is recommended that these programs be retained in their entirety:

a) Acute Rehabilitation Therapy (ART) at Prince of Wales Hospital and St George Hospital:

The ART model of care enhances the treatment of patients in the acute setting by providing simultaneous rehabilitation services, driven by enhanced collaboration between acute medical/surgical and rehabilitation multidisciplinary teams. ART services have led improved patient outcomes with the earlier onset of therapy services. It has also led to a reduction in:

- overall average length of stay across the acute and rehabilitation settings
- the number of patients requiring a subacute inpatient stay
- discharge delays due to early assessment and discharge planning

b) Intensive Therapy Programs (ITP) at War Memorial Hospital, Prince of Wales Hospital – Aged Care Rehabilitation Team, Calvary Health care Sydney and Sutherland Hospital:

The ITP model of care enhances therapy services within the subacute inpatient rehabilitation setting to accelerate patient functional recovery. Successful ITP services decrease rehabilitation length of stay by achieving rehabilitation goals earlier through:

- improved access to multidisciplinary rehabilitation services
- increased throughput in the subacute inpatient rehabilitation setting through decreasing patient length of stay
- improved patient Functional Independence Measure (FIM) outcomes. Note - FIM is one of the current measures of relative complexity for subacute rehabilitation services.

7.2 Discontinuation of some SESLHD COAG funded rehabilitation programs

Some COAG funded rehabilitation programs have not demonstrated significant efficiency or capacity gains. These programs will continue to be evaluated over the coming months to

ascertain if adjustments to their current model of care result in improved outcomes. These programs include the outpatient programs and ITP programs at SGH and POW. It is recommended that these programs are discontinued in their current configuration.

7.3 Continuation of Geriatric Flying Squads Programs

Analysis of the Geriatric Flying Squad program's initial data indicates potential for strong efficiency gains. It is therefore recommended that the GFS programs **at The Sutherland Hospital, St George Hospital and War Memorial Hospital be retained.**

The GFS models of care aim to enhance timely expert interventions to older clients. There are two primary types of GFS in SESLHD:

a) ***Sutherland and St George Hospitals GFS to Residential Aged Care facilities (RACF)*** provide early medical and nursing intervention in RACF for patients flagged as potentially requiring transfer to the Emergency Department (ED). These services also provide training and education to RACF staff on improving management of acutely unwell patients and will provide phone consultations to optimise patient care. The intervention of the GFS means people who would have been transferred to ED and admitted to hospital avoid hospital and are more comfortably treated within their facility.

b) ***The War Memorial Hospital GFS Domically Response team*** provides specialised holistic and comprehensive rehabilitation services to community dwelling and low-level RACF patients 'at-risk' of not coping living in the community. These services have facilitated an improved quality of life for many people through improved functional ability, increased confidence and safety to remain living independently in their homes, avoiding hospitalisation (thereby reducing client stress and anxiety) and avoiding premature aged care placement

7.4 Evaluation of other COAG Subacute funded programs

The remaining COAG funded subacute programs are currently being evaluated to determine efficiencies and performance. Recommendations regarding these models of care will be presented in future reports.

7.5 Investigation of enhancement and modification to existing programs

Further work is planned to investigate gains that may still be achieved through the enhancement and/or modification of existing programs. Additionally, models of care continue to be refined through regular reporting and monitoring processes.

7.6 Integration of care models throughout the patient journey

SESLHD has adopted an integrated model of care in deploying COAG funding. Programs extend from the acute setting, through subacute and into ambulatory care settings to prevent unnecessary admissions and improve patient outcomes. Integrated and holistic models of care that 'close the loop' in the patient journey drive efficiency and reduce the overall burden on the health system and must be considered in any service expansion.

7.7 Program support and evaluation

Regular review of models of care and investigation of efficiency gains requires investment in project and data management. Subacute services in SESLHD have been well supported in terms of access to data analysis and feedback mechanisms. Therefore retention of these resources are recommended.

7.8 Management of risks

Determining future funding arrangements is imperative for SESLHD. In particular, there is an identified risk in relation to the large temporary, predominantly allied health, workforce employed within these programs. If programs are to continue then providing ongoing permanent positions will be a high priority for retaining staff.

The COAG subacute programs have afforded significant efficiencies which have greatly increased the capacity of subacute services to treat more people for the same outcome. Cessation of these programs thus poses a significant risk to the effective functioning of SESLHD.

8. Conclusion

SESLHD has demonstrated significant efficiency gains through the judicious use of growth funds in subacute care. The district has implemented innovative models of care and employed rigorous methodology to ascertain the effectiveness of these models. Programs that have demonstrated improvements in capacity, enhanced patient care and efficiency gains should continue to be supported with ongoing funding.

The district faces significant risks in the potential closure of these programs. If these efficiency gains cannot be maintained there will be effects throughout acute, subacute and ambulatory care settings. Additionally, retention of workforce poses a similar risk as temporary staff may begin seeking employment elsewhere in 2013, effectively reducing these subacute programs capacity.