

Liverpool Hospital

A Principal Referral peer group A1 facility of
South Western Sydney Local Health District

Operational Plan 2014 – 2018

Leading care, healthier communities



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Foreword

In 2013 Liverpool Hospital celebrated 200 years of continuous service to the community. It is the principal referral hospital in the District for almost all specialities and an important centre of teaching and research.

The Hospital provides a wide range of diagnostic and imaging services, emergency and trauma care, maternity, paediatric, cancer care, mental health, ambulatory care, allied health and medical and surgical services from birth to aged care. It also provides a range of state-wide services in areas such as critical care and trauma, neonatal intensive care and brain injury rehabilitation.

This Operational Plan is based on the District's Corporate Plan 2013 – 2017. It documents the actions that Liverpool Hospital will take over the next five years to ensure that the District fulfils its priorities in line with its vision of *Leading care, Healthier communities* and its Performance Agreement with NSW Ministry of Health. The plan covers eight dimensions:

1. High quality health services – accreditation, safety and quality, targets etc
2. Community partnerships – community participation, capacity building
3. Seamless networks – clinical networks, patient networks, high needs groups
4. Developing our staff – workforce planning, recruitment and retention, performance management
5. Research and Innovation – research, University liaison, clinical trials, best practice models of care
6. Enhancing Assets and Resources – linking service and capital plans, facility capital development
7. Supporting Business – eMR, data and information integration, IT systems
8. Efficiency and Sustainability – financial processes, budget management, risk management

The Plan's structure is similar to the SWSLHD Corporate Plan so that actions can be readily related to the District's Corporate Plan. This Plan will be a public document, available to the population of the District and beyond. It also is a guide for staff so that they know the priorities of the hospital in the different facets of its business. The Plan provides an overview of the Liverpool Hospital community, the profile of the facility in terms of its catchment population, clinical services, patient activity, workforce, achievements, partners, education, teaching and research. The main body of the Plan contains the actions that the hospital will take over the next five years, organised around the eight dimensions defined above.

There has been wide consultation in the development of this Plan: the hospital Executive and a workshop of around 60 staff members, including Stream Directors, nursing representatives, Alllied Health, Corporate Services managers and community representatives contributed to the actions defined here. We would like to take this opportunity to thank them for their time and contribution. This Operational Plan has been endorsed by the Liverpool Hospital Clinical Council.

Robynne Cooke
General Manager

Colin MacArthur
A/Executive Clinical Director
Chair Clinical Council

Executive Summary

The City of Liverpool is located 32 kilometres south-west of the Sydney CBD and is a multicultural local government area (LGA) with residents speaking more than 140 different languages. It is an area where there is fast population growth. Population growth for 2011 to 2021 was 19% which is faster than the Sydney and NSW growth of 6.6% and 5.6% respectively. The local population is projected to grow by 23.9% from 2011 to 2021. In 2011, the population of Liverpool LGA was 188,083 people. It is recognised that the health of the community is influenced by a complex range of factors including age, socio-economic status, social capital, physical environment, behaviours, beliefs, life experiences, country of origin, genetic predisposition and access to health and social care and that population based strategies will be required to create healthy communities and environments.

Liverpool Hospital is a principal referral group A1 hospital with tertiary affiliations to the University of NSW and University of Western Sydney. It provides referral and district acute services to the Liverpool catchment and higher level tertiary care for South Western Sydney residents at mainly role delineation level 6, critical care for rural retrieval catchments and a supra regional catchment in brain injury. The hospital has undergone a major redevelopment and most work was completed in 2012 and further redevelopment is proposed to cater for demand to 2021. An extensive range of clinical services provide care and support to the community and located on the Liverpool Hospital campus is the Ingham Institute for Applied Medical Research and the State Office of Preventative Health. Liverpool Hospital employs a large workforce and in 2013 34% of all SWSLHD staff were employees of Liverpool Hospital.

Liverpool Hospital faces a number of challenges especially related to the expected population growth of both the District and the Liverpool LGA. The population growth projected in the elderly cohort will cause great stress on the hospital system with resultant increases in dementia and other related diseases. The population is also facing a projected high birth rate which will increase demand for hospital services.

The population has other characteristics which will also impact on its use of health services – its low socio-economic status, its culturally and linguistically diverse nature with 49% of families in the District speaking a language other than English at home. The population also has some challenging behaviours and a lower health status than the average for NSW on a number of indicators – higher smoking rates, higher Hepatitis B notifications, lower proportion of women who make their first antenatal visit before 14 weeks gestation. The population also has higher rates of hospitalisations for falls, COPD and diabetes. A high incidence of domestic and family violence occurs within this LGA. This also has an additional impact on services throughout the hospital.

This fast growing population combined with the local health disadvantages faced means more funding is needed for health infrastructure development. Action is also needed to counteract the workforce shortages faced by the hospital.

The priority service directions outlined below in page 22 have been selected in order to meet the challenges of the local area which include:

- projected growth of an ageing population
- high birth rates and projected growth of a young population
- lower health status than the average for NSW

A number of the priority Service development directions for Liverpool Hospital may be dependent on future health infrastructure at the facility as outlined in the SWSLHD Capital and Asset Plan.

The following priorities are as follows:

- Aged care and rehabilitation/Chronic Disease/Complex Care/Internal medicine
- Cancer
- Critical care
- Medical Imaging
- Mental health
- Women's and Children's Health
- Surgical programs

The actions defined here are the priority actions that the hospital will take over the next five years to improve the quality and efficiency of its services. This action plan is structured in a similar way to the District Corporate Plan covering eight different dimensions already defined. Many of the actions in the District Plan are already being undertaken by the hospital and they will continue to be developed and implemented. Some actions are specific to Liverpool Hospital especially those that are needed to progress planning for the new services to cater for the expected population growth.

Introduction

In December 2013, two strategic planning documents to guide the future directions of South Western Sydney Local Health District (SWSLHD) were released. They are:

- The Strategic and Healthcare Services Plan - *Strategic Priorities in Health Care Delivery to 2021* - which provides the healthcare services development plan for the District for the next ten years
- The Corporate Plan 2013 – 2017 - *Directions to Better Health* - which outlines the actions that the District will take over the next five years to respond to community and District-wide needs and concerns and ensure that targets and strategies articulated in the national, NSW and the SWSLHD performance agreement are addressed.

The strategic directions and priority corporate actions are summarised in the *Summary of Strategic Directions*.

Together these Plans form the basis of aligning all SWSLHD services to achieving the Vision of **Leading Care, Healthier Communities**. They also provide a values framework which underpins all that we do. This includes the CORE values of Collaboration, Openness, Respect and Empowerment which are the foundation stones for building trust with our local communities; the mission statement which articulates our purpose, outlining how we will work collaboratively, innovatively and equitably to deliver better healthcare; and the core set of principles for service development (Appendix 1).

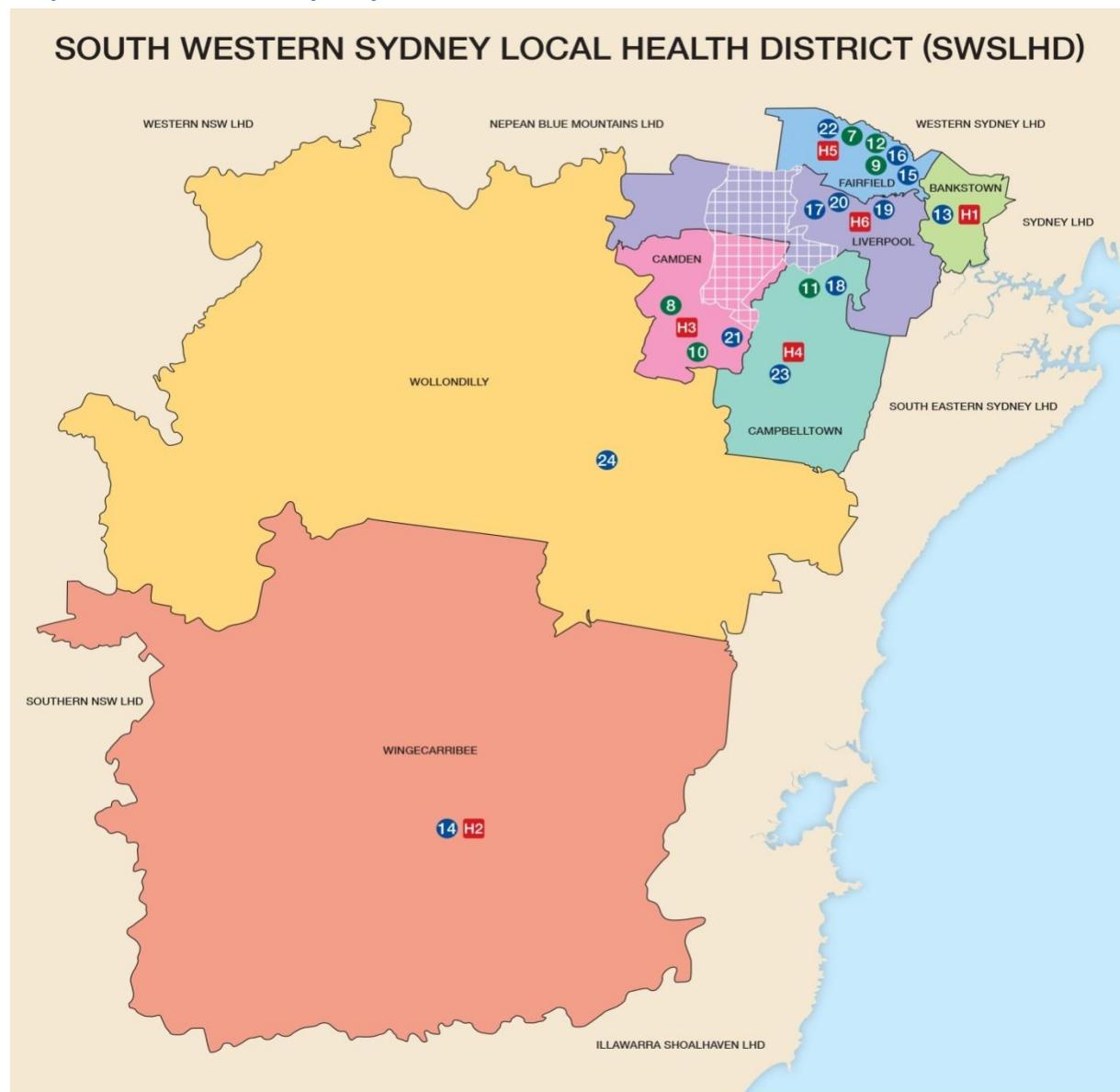
The Liverpool Hospital Corporate Plan 2014 - 2018 provides a framework through which the corporate priorities and actions articulated in the *SWSLHD Corporate Plan* will be addressed.

The Corporate Areas of Action are:

- High quality health services
- Seamless networks
- Research and innovation
- Supporting business
- Community partnerships
- Developing our staff
- Enhancing assets and resources
- Efficiency and sustainability

The Plan outlines the specific strategies that Liverpool Hospital will take over the next five years to realise these organisational goals and contribute to achievement of the SWSLHD Vision.

Map of South Western Sydney Local Health District



- SWSLHD Hospitals**
- H1 Bankstown-Lidcombe Hospital
 - H2 Bowral and District Hospital
 - H3 Camden Hospital
 - H4 Campbelltown Hospital
 - H5 Fairfield Hospital
 - H6 Liverpool Hospital

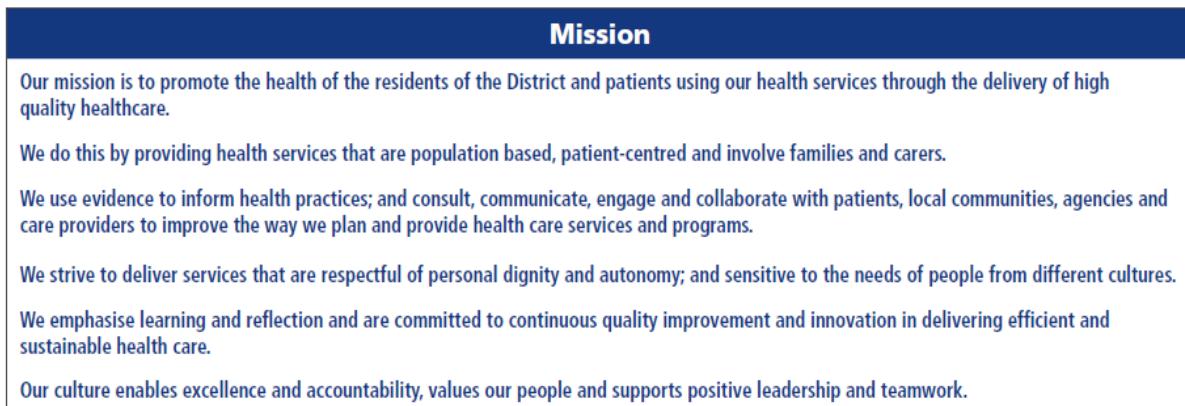
- Affiliated Health Organisations**
- 7 Braeside Hospital
 - 8 Carrington Centennial Care
 - 9 Karitane
 - 10 Karitane @ Camden
 - 11 Scarba - South Western Sydney
 - 12 Service for the Treatment & Rehabilitation of Torture & Trauma Survivors (STARTTS)

- Major Community Health Centres**
- 13 Bankstown
 - 14 Bowral
 - 15 Cabramatta
 - 16 Fairfield
 - 17 Hoxton Park
 - 18 Ingleburn
 - 19 Liverpool
 - 20 Miller
 - 21 Narellan
 - 22 Prairiewood
 - 23 Rosemeadow
 - 24 Tahmoor

LOCAL GOVERNMENT AREAS



Values Framework



Priority Strategic Directions			
Build capacity to effectively service growing demands for health care	Redesign of services bringing them closer to people and communities	Integrated action with the South Western Sydney Medicare Local	Partnering with external providers to deliver public health care
<ul style="list-style-type: none"> » Asset Strategic Plan » Workforce Development Plan » Increase role delineation in some services » New models of care 	<ul style="list-style-type: none"> » Review of community health » IPCCs Oran Park & Leppington » Decant ambulatory hospital services to the community 	<ul style="list-style-type: none"> » Integration Unit » Care pathways » Preventative health » Integrated planning 	<ul style="list-style-type: none"> » Public Private Partnerships » NGO & Affiliated Health Orgs » Pillars inc. NSW Kids and Families » Academia



Appendix 1 outlines the Guiding Principles SWSLHD applies in service delivery.

Community Profile

The City of Liverpool is located 32 kilometres south-west of the Sydney CBD and is a multicultural local government area (LGA) with residents speaking more than 140 different languages (ABS 2011). Liverpool Hospital services the LGA's within the District given its tertiary role.

In 2011, the population of Liverpool LGA was 188,083 people. Liverpool is a young city with a median age in 2011 of 33 years compared to Sydney's median age of 36 years. In Liverpool 38% of the population is less than 25 years of age. It also has an ageing population and the 55+ age group was the fastest growing age group in 2011, increasing by 17% since 2006.

Population growth for 2011 to 2021 was 19% which is faster than the Sydney and NSW growth of 6.6% and 5.6% respectively. The local population is projected to grow by 23.9% from 2011 to 2021.

The South West Growth Centre is a major centre of population growth in NSW and is partly within the Liverpool LGA, with major greenfield developments underway in Austral, Leppington North and Edmondson Park. An additional 48,000 people are expected to move into the area in the next 10 years with a significant increase in the number of young families.

Life expectancy is comparable to NSW. The fertility rate (the average number of babies born to a woman throughout her reproductive life) for Liverpool LGA of approximately 2.07 births is higher than the NSW rate of 1.91.

Some key areas where Liverpool LGA differs from NSW rates (from the 2011 Census) include:

- A higher proportion of residents born overseas (39.8%) compared to NSW (25.7%); and of people speaking a language other than English at home (55.6%) compared to NSW (27.5%)
- Liverpool LGA has a higher proportion of social housing dwellings (9.6%) compared to NSW (4.4%)
- A higher prevalence of diabetes (6.9%) compared to NSW (5.5%)
- A Hepatitis B notification rate which is higher than the NSW rate
- Higher levels of reported high and very high psychological distress (15.4%) compared to NSW (11.1%)
- A significantly higher rate of women smoke during pregnancy than NSW and lower rates for first ant-natal visit before 14 weeks gestation
- A higher unemployment rate (7%) than NSW (5.9%)

Appendices 2 and 3 provide additional demographic and health information about the residents of Liverpool LGA. Refer to the SWSLHD Strategic and Healthcare Services Plan – Strategic Priorities in Health Care Delivery to 2021 for the strategic LHD priorities of the LGA's.

Facility Profile

Liverpool Hospital is a principal referral group A1 hospital with tertiary affiliations to the University of NSW and University of Western Sydney. It is the major health service for South-Western Sydney providing referral and district acute services to the Liverpool catchment and higher level tertiary care for South Western Sydney residents. These services are provided at mainly role delineation level 6, critical care for rural retrieval catchments and a supra regional catchment in brain injury (Appendix 4). State wide services include critical care and trauma, neonatal intensive care and brain injury rehabilitation.

Liverpool Hospital is located approximately 50 minutes drive from the Sydney CBD. It began as a tent hospital for convicts and soldiers over 200 years ago and now provides a health service of international standing, with 23 operating theatres, capacity for 877 beds, diagnostic and imaging services, emergency and trauma care, maternity, paediatric, cancer care, mental health, ambulatory care, allied health and medical and surgical services from birth to aged care.

Liverpool Hospital is located in the suburb of Liverpool, in Liverpool LGA. It is in the State electorate of Liverpool and in the Federal electorate of Hughes.

Liverpool City and South-Western Sydney is home to people from diverse cultures, religious and languages and is situated in one of the fastest-growing regions in Australia. Liverpool Hospital sits within an education and health precinct which includes the Ingham Institute of Applied Medical Research, a Clinical Skills and Simulation Centre, Research Bunker and a number of specialist research centres, the Clinical Schools of the University of NSW and University of Western Sydney, South West Private Hospital and South Western Sydney TAFE.

Liverpool Hospital has recently undergone a major redevelopment which has provided new clinical services and advanced medical infrastructure to help meet the health care needs of the community and the District.

All staff at Liverpool Hospital are committed to patient safety and quality care. We participate in the Australian Council on Healthcare Standards, Evaluation and Quality Improvement Program, incorporating the Australian Commission on Quality and Safety Accreditation Standards and have achieved full accreditation status of the Council.

Catchment Population

Of the 32,652 residents of Liverpool LGA who were admitted to hospital in 2011-12, 65% (21,299) were admitted to Liverpool Hospital; 7% went to Fairfield Hospital; 4% to Campbelltown Hospital; 4% to Bankstown-Lidcombe Hospital; 2% to Braeside Hospital. In terms of hospitals outside the District, the biggest outflow (1346 people or 4% of residents) was to the Children's Hospital at Westmead; 2% of residents went to Concord Hospital and another 2% went to Westmead Hospital.

The distribution pattern described above varies by specialty: 81% of Liverpool residents went to Liverpool Hospital for cardiology and 81% of Liverpool residents went to Liverpool Hospital for interventional cardiology (compared to the average of 65% - see above). All residents requiring transplantation went to hospitals outside the District. Most of the admissions to the Children's Hospital at Westmead were in the following specialties: Gastroenterology, Respiratory Medicine, ENT & Head and Neck, Orthopaedics, Non Sub Specialty Surgery.

The two Service Related Groups (SRGs) that show big outflows (as a percentage of the total patients in that specialty) are Rheumatology – 45% or 94 patients - and ENT& Head and Neck Surgery - 18% or 191 patients. These Liverpool LGA residents were treated in public hospitals outside the District, outside Children's Hospital, outside Concord and Westmead Hospitals.

In terms of patient volume (not the percentage) there were 241 Liverpool residents who were Gastroenterology inpatients that did not go to District public hospitals nor Children's Hospital, Concord or Westmead hospitals. Similarly there were 291 orthopaedics, 284 non sub-specialty medicine and 288

non-sub specialty surgery residents of Liverpool LGA who were admitted to public hospitals outside the District, Children's Hospital, Concord and Westmead hospitals.

Over 47,000 patients (47,146) were admitted to Liverpool Hospital in 2011-2012, with almost half (45%) coming from the Liverpool LGA and 92% coming from the District. Fairfield LGA supplied 25% of Liverpool Hospital's inpatients, followed by Campbelltown (12%), Bankstown (4%), Camden (3%), Wollondilly (2%), Wingecarribee (1%).

The ten largest SRGS were:

- Obstetrics – 5512 patients (12% of total patients)
- Non Subspecialty Surgery – 3837 patients (8% of total patients)
- Orthopaedics – 3728 patients (8% of total patients)
- Cardiology – 3554 patients (7.5% of total patients)
- Respiratory Medicine – 3277 patients (7% of total patients)
- Gastroenterology – 2843 patients (6% of total patients)
- Non Subspeciality Medicine – 2530 patients (5% of total patients)
- Neurology – 1886 patients (4% of total patients)
- Interventional Cardiology – 1775 patients (4% of total patients)
- Gynaecology - 1653 patients (3.5% of total patients)

Despite Orthopaedics, Non Subspecialty Medicine and Non Subspecialty Surgery being large specialties there is still a substantial outflow of Liverpool LGA residents to other public hospitals, as described above.

Clinical Services

- The Hospital provides clinical services in:
- Emergency Medicine - Liverpool Hospital is a major trauma centre
- Cardiology
- Surgical sub-specialties including cardiothoracic, general, ENT, colorectal, neurosurgery, ophthalmology, orthopaedics, plastics, oral and maxillofacial, upper gastrointestinal, vascular, gynaecology, urology, head and neck, hand and paediatrics
- Medical sub-specialties including, endocrinology, gastroenterology, HIV/AIDS, dermatology, immunology, microbiology and infectious diseases, neurology, renal, aged care, pain management, respiratory, clinical genetics and rheumatology
- Cancer therapy including medical and surgical oncology, chemotherapy, haematology and radiation oncology
- Obstetrics, newborn care, neonatology and paediatrics
- Intensive Care Unit/High Dependency Unit (ICU/HDU) and Neonatal Intensive Care (NICU)
- Anaesthetic Services
- Ambulatory Care Unit
- Mental Health
- Drug Health
- Rehabilitation including the Brain Injury Rehabilitation Unit
- Palliative Care
- Imaging – interventional, PET, MRI, CT , nuclear medicine, general radiography, PACS/RIS technology
- South Western Area Pathology Service (SWAPS)

- The Clinical Skills Centre
- After hours GP Services
- Allied Health Services
- Community Health
- Palliative Care
- Trauma

Also located on the Liverpool Hospital campus:

- Ingham Institute for Applied Medical Research, including the Ingham Linear MRI research bunker
- State Office of Preventative Health

Patient Activity

Table 1 shows the key indicators for Liverpool Hospital. On most indicators activity has increased with the exception of total separations which have decreased. However this decline has occurred in the number of day only separations – they have gone down by one third on 2010/11 levels. Overnight separations have increased by 9% and average length of stay has increased marginally from 6.15 days in 2010/11 to 6.28 days in 2012/13.

Table 1 Key indicators for Liverpool Hospital

	2010/11	2011/12	2012/13	% change from 10/11
Births	3141	3139	3208	2%
ED attendances	62216	65839	69779	12%
Average available beds	776	791	817	5%
Separations - total	86929	70847	73626	**-15%
day only	50044	33043	33615	**-33%
overnight	36885	37804	40011	9%
Overnight bed days	226,865	241,475	251,299	11%
Average length of stay (excl day only)	6.15	6.39	6.28	2%
Non admitted patient occasions of service*	607072	699504	722832	19%
Theatre operations - total	13736	14063	14636	7%
elective	7012	7266	7330	5%
emergency	6724	6797	7306	9%

*excludes private referred non inpatients

**This was due to a redistribution of renal dialysis activity that was counted at Liverpool Hospital, but performed at other Local Health District hospitals

In 2012/13 there were 3208 births, up by 2% on 2010/11 levels. ED attendances increased by 12% over the last three years to nearly 70,000 attendances. Despite the increase in overnight separations (9%) and overnight bed days (10%), average available beds only increased by 5% or 41 beds between 2010/11 and 2012/13.

There were nearly 15,000 theatre operations in 2012/13 at Liverpool Hospital and half of those were emergency procedures. Theatre procedures have increased by 7% in the last three years.

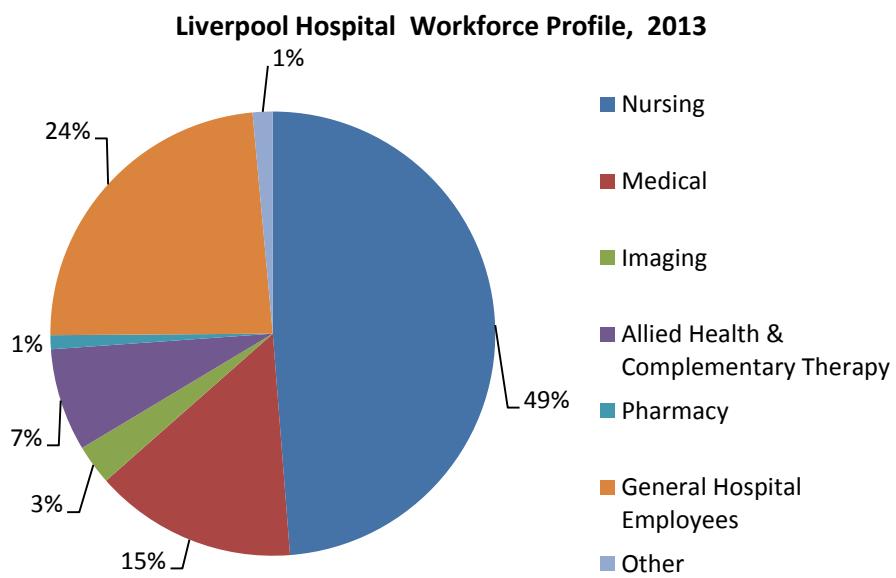
Non admitted patient occasions of service increased by 19% - over 115,000 additional occasions of service in the three year period.

On a typical day at Liverpool Hospital in 2012/13, there were:

- 202 patients discharged from hospital
- 191 people assessed in the emergency department
- 9 babies born
- 40 operations including 20 emergency operations
- 1,980 outpatient, ambulatory and community based services

In 2013, 4,050 people (headcount) or 34% of all SWSLHD staff were employed at Liverpool Hospital. This includes 1,975 nurses, 596 medical staff and a range of other clinical and non-clinical staff. Appendix 8 provides a breakdown of the workforce by employment category.

47% of staff at Liverpool Hospital live within 10 kilometers of the hospital and 25% of staff live within 5 kilometers of the hospital.



Recent Achievements

Liverpool Hospital has been successful in a variety of achievements. Some examples of these are:

- Successfully commissioning a \$390 million redevelopment of Liverpool Hospital to bring capacity to 877 beds, 23 Operating Theatres, 60 Critical Care Beds and a comprehensive ambulatory care centre Development of Ingham Institute for Applied Medical Research was completed in 2012. Throughout the design process, stakeholders which included doctors and nurses as well as community members were consulted with their contributions being a key part of the design. More than 150 members of staff sat on change management groups. These groups were key in the design of different department and wards
- The Liverpool Hospital Emergency Department was awarded the 2012 Australasian Emergency Department of the Year by the College of Emergency Nursing Australia (CENA).

- Liverpool Hospital was awarded the Mayoral Macquarie Award by Mayor Ned Mannoun at the 2013 Australia Day Awards Ceremony in recognition for services to the community over the past 200 years.
- The \$12.8m subacute mental health unit at Liverpool Hospital was officially opened on 30 May 2013 by the NSW Minister for Mental Health, Kevin Humphries. The 20 bed unit will form an integral part of the SWSLHD mental health service and will cater for patients who have previously been treated in an acute ward and are now transferring into a subacute setting as part of their ongoing recovery. The unit will provide support to patients living in the community who require assistance, but do not require the intensive services of an acute unit. The unit features a number of therapeutic patient areas including a gym, quiet rooms and an activity room with arts and crafts.

Partners

The hospital continues to build partnerships across the community, based upon collaboration to achieve care across the whole spectrum of the community. Some examples of these partnerships is with:

- Consumers
- Volunteers
- Ingham Institute Applied Medical Research
- Liverpool City Council
- South Western Sydney Private Hospital
- TAFE
- UNSW and UWS
- Police Local Area Command
- Local Clubs

Education and Teaching

Liverpool Hospital has key educational and research partnerships with the UNSW Australia and the University of Western Sydney. The two universities work closely with the Hospital and account for the majority of clinical placements on the campus; and along with a number of other universities train health professional students across the multidisciplinary spectrum of medicine, nursing and allied health disciplines.

Collaborative medical student program

The two universities continue to work on a combined medical education program on the campus that is unique to medicine programs across the country. This collaboration has been praised by the Australian Medical Council as a model for cooperation on shared campuses for other universities. This collaboration includes ensuring term placements are coordinated between the two universities and teaching activities of each university are open to all students. Student amenity facilities such as lockers, common room and computer laboratory facilities have been resourced by UNSW Australia but are available for all undergraduate students on the campus as part of this collaboration.

Building capacity

Together the two universities have worked closely with Liverpool Hospital to build the capacity to offer clinical placements in south western Sydney. This has included in the development of the physical

teaching infrastructure and in the development of teaching skills through the Clinical Teachers Seminar series, which is available to all staff at the Hospital. The partners will continue to work together to enhance this capacity as the Hospital grows to meet future demand.

Clinical skills and simulation

The Hospital is host to, and is a key partner in, the Ingham Institute Skills and Simulation Centre. The Centre is managed by UNSW Australia on behalf of a partnership between the LHD, UNSW and UWS. This Centre is a state-of-the-art education facility supporting both low and medium fidelity skills education and higher fidelity immersive training facilities. The Centre facilitates training at a range of levels from undergraduate to prevocational and vocational training for students and staff of the Hospital and LHD. The Centre has also allowed the Hospital to look for opportunities to develop our own training capacity in areas such as Advanced Life Support that have previously been provided to the Hospital by external agencies.

Increasing student satisfaction

A key to engagement of health professional students and staff in future employment at Liverpool Hospital is in the level of satisfaction with the training they receive at the Hospital. The partners on the campus continue to work together to increase the level of satisfaction in programs provided in the south west as facilities develop to match those adjacent to the major universities. At both the undergraduate and postgraduate level, recent results suggest that Liverpool is seen as an employer of choice in the long term on the basis of the quality of training programs and recently enhanced facilities.

Multidisciplinary learning

A key focus of training at Liverpool is a multidisciplinary approach. Clinical practice occurs in a team environment and UNSW Australia has recently commenced work to foster multidisciplinary learning amongst undergraduate students undertaking clinical placements on the campus. This work is mirrored in much of the training activity in the Clinical Skills and Simulation Centre which focuses on teamwork in a simulated environment.

Increased access to education

The development of a south western Sydney videoconference network by UNSW Australia has significantly opened the opportunities for students and staff of Liverpool Hospital to collaborate in training held off-site and to share local training with other facilities. This network has also incorporated key clinical areas such as the Simulation Centre, theatres, echo labs and cardiac catheter labs to enable teaching to occur from venues that are usually capacity constrained. In addition to being a valuable resource for undergraduate students and opening access to campus teaching on both the UNSW and UWS campuses, the network is available for use by Hospital staff and is actively used by a number of groups in increasing opportunities for education including Cancer Services and Allied Health.

Research

Ingham Institute for Applied Medical Research

The Ingham Institute for Applied Medical Research is a new, purpose built research facility built on the site of Liverpool Hospital. It acts as a focus for both new research, and for research currently being conducted at Hospitals in SWSLHD. The Ingham Institute represents a unique collaboration between health services of South West Sydney, the University of New South Wales and the University of Western Sydney, and the growing and diverse community of South West Sydney. Research at the Ingham Institute falls under seven core research streams including Cancer Research, Cardiovascular Disease, Community & Population Health, Early Years/Childhood Diseases, Infectious & Inflammatory Diseases, Injury and Mental Health.

Clinical Skills & Simulation Centre

The opening of the Clinical Skills & Simulation Centre on Tuesday in June 2013 at Liverpool Hospital in partnership with the Ingham Institute for Applied Medical Research provides some of the most advanced training facilities in Australia for researchers, students and clinicians to help them build careers in medicine and medical research. The Centre offers a world class simulated learning environment and comprises of some of the most high-level simulation equipment including a high-fidelity robotic patient mannequin SimMan 3G and two fully simulated operating theatres to enable ‘mock’ operations.

Research Committee

The Liverpool Research Committee is the peak governance research committee for the hospital. It was formed in 2013 in response to the new EQuIP National Standards and the Research Strategy for the SWS District, both of which require the hospital executive to be cognisant of the research needs of the hospital and the District, and the research activities undertaken that align with these needs. The hospital executive identified the absence of a mechanism by which the research activities of the hospital could be efficiently ascertained, both in terms of the activities undertaken and their relevance to local service delivery.

The Committee comprises diverse representation from various clinical disciplines and from areas which support research activities. These include the Nursing, Allied Health and Medicine disciplines, as well as representation from the Executive, Quality and Accreditation unit, UNSW, the IIMR, the library, finance, Pharmacy, and Multicultural Services.

The main objectives of the Committee include the following:

- monitoring research activities undertaken at Liverpool Hospital, with a focus on the relevance of such research to the hospital as well as the departments involved,
- promoting and facilitating research relevant to the population served by the hospital.

As of February 2014, research areas highlighted by the Committee were engagement of the CALD communities in clinical trials and other research designs, and capitalisation of the CNC role to enhance research at the coal-face.

Ethics Committee

The HREC (Health Research and Ethics Committee) functions on behalf of the Public Health Organisation are to:

- Provide independent oversight of human research projects;

- Provide competent, timely review and monitoring of human research projects in respect of their ethical and scientific acceptability for as long as projects are active;
- Determine the compliance of a human research project with the National Statement and grant, withhold or withdraw ethical approval; and
- Provide advice on strategies to promote awareness of the ethical conduct of human research.

The responsibilities of the HREC are to:

Review human research applications where the research takes place at:

- Any institution/s governed by South Western Sydney Local Health District for single-centre studies and/or
- External institutions/organisations and investigators as approved by the Chief Executive.
- The HREC is directly accountable to the Chief Executive of the Public Health Organisation under which it is constituted.

Clinical Trials Phase 1

The commencement of the Phase 1 Centre for clinical trials will take advantage of the huge demand for clinical trials patients from pharmaceutical companies and the scarcity of Phase 1 trial facilities available in NSW at this time. The centre will initially focus on oncology trials, but would have the capacity to expand to incorporate trials from other disciplines in the future and Phase II trials where appropriate.

Future Demands

Appendix 9 shows the inpatient activity projections by SRG for acute and sub & non acute SRGs for 2016/17. Excluding emergency department spaces, chemotherapy chairs, renal dialysis, bassinets, delivery suite and mental health beds there were 614 average available beds in 2011/12 at Liverpool Hospital – 31 day only beds and 583 inpatient beds. (The average available beds differs from the bed numbers identified in Table 1 because of the exclusions defined above.)

Based on NSW Health projection methodology (Source: NSW population projection version 1.2009, Department of Planning & Statewide Services Development Branch, NSW Health 2009), it is expected that there will be an increase in demand at Liverpool Hospital. This will result in the need for an estimated additional 8 day only beds and 59 overnight beds by 2016/17 (if the hospital is to operate at benchmark occupancy levels). In 2011/12, there were an additional 56 overnight beds included in the bed base which is working towards Liverpool Hospital's goal of 115 additional overnight beds by 2016/17. This will bring the total acute and sub/non acute bed numbers to 737 beds – 39 day only and 698 overnight beds.

The number of additional Acute beds needed varies by specialty. Those specialties requiring the most additional beds are:

- Respiratory Medicine – 10 overnight beds
- Neurosurgery – 8 overnight beds
- Orthopaedics – 1 day only bed, 8 overnight beds
- Cardiology – 4 overnight beds
- Interventional cardiology – 3 overnight beds
- Non subspecialty surgery – 3 overnight beds
- Non subspecialty medicine – 2 overnight beds

A significant proportion of additional beds needed will be sub acute and non acute beds. Of the total 698 overnight beds, 80 should be Sub and Non Acute beds.

Non inpatient attendances (excluding Mental Health) are projected to rise to 893,443 or 15.5% by 2017 from an estimated 696,739 in 2011/12. This growth is expected in all clinical services but especially in Aged Care & Rehabilitation (28%), Allied Health (28%) and Cancer (20%). See Appendix 10.

In addition to acute, sub and non acute beds in hospital, there is demand for ED spaces, renal dialysis and chemotherapy. The following are the projected requirements for Liverpool Hospital to 2016:

- Emergency Department – development of the Emergency Department to include flexible models of care.
- Renal Dialysis – home training – 7; in centre - 23 and satellite 18
- Chemotherapy chairs – 40 chairs (based on cancer incidence models)

Data Analysis

A comment should be made on the methodology used for these projections. NSW Ministry of Health provides tools for this purpose:

- aim2010 is used to forecast acute care bed numbers based on the historical trends of hospitalisation by clinical specialty (SRG), projected population growth and age-sex structure. The

model takes account of changes that have occurred in length of stay and assumes the latest pattern of patient flows. In other words, the flow of patients to hospitals for treatment that exists in the base year is assumed in the projections. If a new service comes into existence since that base year that has changed the pattern of patient flow, it will not be reflected in the projections.

- SiAM2010 is used to project sub acute and non acute care beds. It uses a projection methodology similar to aIM2010, based on five age groups. Like aIM2010 the base case supply projections assume that the current pattern of service delivery will remain broadly similar into the future.
- NSW Health does not provide a software tool for projecting future outpatient clinic or community health activity. Rather NSW Health requires detailed analysis of population growth and site specific assessment of the adequacy of current supply and review of current and proposed models of care, by care type and profession. The SWSLHD Planning Unit has undertaken an assessment for each SWSLHD facility using the geographic area that best represents the facility catchment and broad service categories – Medical, Surgery, Aged Care & Rehab etc . (see Appendix 10 for list of categories).
- Projections for acute, sub and non acute beds and non inpatient attendances are primarily driven by population growth which is the main reason why there will be a need for such a significant increase in acute and sub/non acute bed numbers at Liverpool Hospital over the next four to five years and why non inpatient occasions of service are projected to rise so substantially. Changes in the model of care will also have an impact, presumably on outpatient, ambulatory and community services. However this has not been factored into the non inpatient projections, nor has unmet need, as measured by waiting lists or waiting time.

Challenges in Meeting Demands – Current and Future

Liverpool Hospital has some major challenges to meet current and projected levels of demand. These can be summarised as:

- Population growth including ageing of population and high birth rate
- Characteristics of population that affect access to services
 - Low socio-economic status
 - Aboriginal population
 - Culturally and linguistically diverse population
- Health behaviour and health status of Liverpool population
- Funding for infrastructure development
- Workforce recruitment and retention

Population growth

Most significant among these challenges is the expected **sustained population growth**. Because Liverpool Hospital is the local hospital for the residents of Liverpool LGA and also the tertiary hospital for the District, consideration needs to be given to the expected growth in the local Liverpool LGA population as well as the expected growth in the District population. The SWSLHD Strategic and Healthcare Services Plan indicates that the District population is expected to grow by 78,723 people between 2011 and 2016 or 9% and the Liverpool LGA is expected to grow by 16,328 people or 9%. By 2021 the population of the District is expected to be 20% greater than the 2011 population and in Liverpool LGA it is expected to be 25% greater than the 2011 population.

The population of SWSLHD is not only growing, it is also **ageing**. The population 70 and over of the District is expected to increase by nearly 50% between 2011 and 2021. The population aged 70 years and over of the Liverpool LGA is expected to increase by over 56%. SWSLHD also has a **high birth rate** with all LGAs, except Fairfield, in the District having a higher fertility rate than the NSW average (1.91). Liverpool LGA's fertility rate is 2.07. Both of these demographic changes—ageing of population and high birth rate—have implications for the demand on hospital services and they have been factored into the projections.

Characteristics of population that affect access to services

The population of the District in general and Liverpool LGA in particular has characteristics that impact access to health services including:

- Lower socio-economic status
- High Aboriginal population
- High culturally and linguistically diverse communities

Socio-economic disadvantage

There are significant pockets of disadvantage in the District and the evidence suggests that people from poorer socio-economic backgrounds tend to have worse health outcomes and lower use of preventative health services.

The Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA) (2011) indicate that South Western Sydney has some of the poorest communities in the State. The Index of Relative Socio-economic Disadvantage (IRSD) uses indicators of disadvantage such as income, unemployment and low levels of education. Fairfield, Bankstown, Campbelltown and Liverpool are in the ten most disadvantaged LGAs in metropolitan Sydney, well below the Australian average score of 1,000. There are twenty nine suburbs in

South Western Sydney which are in NSW's ten percent most disadvantaged suburbs (i.e. with an ISRD score of 900 or below) and 10 of these suburbs – Miller, Cartwright, Ashcroft, Sadleir, Warwick Farm, Heckenberg, Busby, Lurnea, Liverpool, Mount Pritchard – are in the Liverpool LGA.

Aboriginal population

In 2011, 13,070 people in SWSLHD identified as having an Aboriginal or Torres Strait Islander background, an increase of 2,867 from 2006. The highest numbers of Aboriginal people within the District reside in Campbelltown (4,729), followed by Liverpool (2,676) and Bankstown (1,388). Only Campbelltown (of all LGAs in the District) has a higher proportion of Aboriginal people when compared with NSW (3.2% and 2.5% respectively).

The Aboriginal population is more likely to die young (under 25 years), die from diabetes and injury and poisoning, have a higher infant mortality rate, higher reported smoking rates, higher lung cancer rates, higher cervical cancer rates than the non Aboriginal population. The Aboriginal population is more likely to be admitted to hospital, and are less likely to receive antenatal care than the non Aboriginal population.

Culturally and linguistically diverse population

South Western Sydney is known for its cultural diversity. In 2011:

- 36% of people living in the District were born overseas (compared with 26% for NSW).
- 51% of families speak English only at home (compared with 73% for NSW).
- Overwhelmingly Arabic is the most commonly spoken language other than English (over 74,000 people), followed by Vietnamese (over 61,000 people) and Cantonese (over 19,000 people). In Liverpool LGA the first most common language other than English spoken at home is Arabic followed by Hindi and Vietnamese. 40% of the Arabic speaking people in NSW reside in South Western Sydney.
- Almost 8,000 people who were humanitarian arrivals settled in the District over the 5 year period 2008 to 2012 (37% of all NSW humanitarian arrivals, up from 34% in 2004-2009). Of these, the majority settled in Fairfield (4,249) and Liverpool (2,834).
- Humanitarian arrivals represented numerous countries of origin, reflecting conflict patterns around the world. The number of people coming from Iraq was overwhelmingly the highest (5,888 people or almost three quarters of humanitarian entrants). Other countries of origin in order of number of settlers are Iran, Egypt, China, Burma, Syria, Afghanistan, Kuwait, Sierra Leone and Pakistan.

Health behaviour and health status of Liverpool population

The residents of Liverpool LGA engage in a number of lifestyle behaviours and/or have a health status that may lead to premature death and/or increased hospitalisations:

- They have a higher rate of smoking than the population for NSW as a whole including women who smoke during pregnancy
- They have a lower proportion of women who make their first antenatal visit before 14 weeks gestation than NSW as a whole
- The cervical screening rate for women aged 20-69 years is lower than the NSW average
- Liverpool residents have higher rates of hospitalisations than the NSW average (100) that are:
 - from falls related injury (116.9)
 - high body mass index attributable (101)
 - COPD related (112.9)
 - diabetes related (132.1)
 - smoking attributable (100.5)

- The prevalence of diabetes is 6.9% compared to the NSW average of 5.5%
- Hepatitis B notifications are 50.7 per 100,000 people compared to the average for NSW of 37.6 per 100,000 people reflecting the large culturally and linguistically diverse population who often received non sterile health procedures, especially immunisation, in their country of birth or the virus was transmitted from mother to child in the overseas country of birth

Funding needed for infrastructure development

Even though the first stages of the Liverpool Hospital redevelopment have been funded, further capital development is required to meet the projected demand. It is imperative that the hospital continues working with the District on planning of Stage 2 – Phases 2&3 of Liverpool Hospital during the period of this Corporate Plan. This infrastructure development – Stage 2 – phases 2&3 – is the second priority of the District in the SWSLHD Asset Strategic Plan.

As indicated in the section on ‘Future Demands’ there needs to be additional beds to meet the expected population growth. In 2011/12 the average available beds were 31 day only beds and 583 overnight beds. However based on benchmark occupancy rates of NSW Health, there should have been 34 day only beds and 620 overnight beds to accommodate the current demand. The estimated additional beds needed by 2016/17 are 8 day only beds and 59 overnight beds. Liverpool Hospital has been working towards the goal of increasing to 115 overnight beds. In 2011/12, there was an additional bed enhancement of 56 beds.

Workforce recruitment and retention:

Workforce recruitment and retention is a continuing issue for Liverpool Hospital. In the SWSLHD *Strategic and Healthcare Services Plan*, the Clinical Directors identified current workforce shortages and the ability to recruit and retain suitably qualified staff as well as a lack of clinical academics to drive research, as two of the key issues and concerns. The SWSLHD Workforce Plan also identifies some risks that are faced by the workforce in South West Sydney and proposes some risk mitigation actions. Liverpool Hospital employs 35% of all SWSLHD staff and it needs to be aware of these risks, particularly those risks that have been classified as high including the:

- Large female workforce combined with inflexible working conditions
- Poor workplace culture due to heightened workloads, pressure, demands of workplace; resulting in staff burnout, increased sick leave, errors, etc.
- Specific health issues associated with increased levels of younger/older population which can create a greater demand on workforce
- High percentage of staff nearing traditional retirement age, which could cause a significant future deficit in skills, knowledge and service provision
- Heightened and increasing socio-economically disadvantaged population combined with overall poorer health status which can over-burden the SWSLHD’s service provision

Some of the actions proposed include:

- Implement flexible working conditions
- Develop localised workplace planning frameworks
- Implement staff wellbeing program
- Implement rewards/recognition program: appreciation and safety initiatives
- Develop innovative health-team models
- Expand the volunteer program
- Invest in Community Health initiatives, eg ‘Hospitals in the Home’

- Implement specific ‘taskforce’ committees for each community
- Expand numbers of Nurse Practitioners, within identified need areas
- Investigate job redesign
- Implement Staged Exit Program
- Develop ‘Retirement Intentions’ survey

Priority Service Development Directions

The service development directions outlined in the *SWSLHD Strategic & Healthcare Services Plan* were reviewed by the Hospital Executive and a workshop of around 60 staff, including Stream Directors, nursing representatives, Alllied Health, Corporate Services managers and community representatives contributed to the actions defined here at Liverpool Hospital.

The priority service directions outlined below have been selected in order to meet the challenges of the following:

- projected growth of an ageing population
- high birth rates and projected growth of a young population
- lower health status than the average for NSW

A number of the priority Service development directions for Liverpool Hospital may be dependent on future health infrastructure at the facility as outlined in the SWSLHD Asset Plan

The following priorities are as follows:

Aged care and rehabilitation/Chronic Disease/Complex Care/Internal medicine

- Increase acute and sub acute geriatric and psychogeriatric beds
- Improve acute and sub acute inpatient rehabilitation model of care and linkages to appropriate community services and other subacute facilities
- Review management of metabolic disease including multidisciplinary obesity service and diabetes with an initial focus on gestational diabetes management
- Expansion of ambulatory care / hospital in the home (HITH)
- Expansion of capacity for high level viral hepatitis and therapy services

Cancer

- Expansion of Cancer services including models of care to support growth in cancer services and meet the needs of chemotherapy
- Ongoing development of the Liverpool Cancer Wellness Centre

Critical Care

- Reconfiguration of Emergency Department (ED) with imaging service availability; expanded trauma capacity
- Increase ICU capacity to meet ED and Surgical demands
- Relocation of Medical Assessment Unit adjacent to ED to improve efficiency and model of care

Medical Imaging

- Establishing a GMP compliant cyclotron and radiopharmaceutical production facility for molecular imaging and delivery of a translational research approach
- Improve access and timeliness to diagnostic imaging specifically abdominal ultrasound for acute admissions in ED and the vascular diagnostic service afterhours and on weekends

- Expansion of interventional radiology so available on 24/7 basis

Mental Health

- Reconfiguration of inpatient beds and review of 24 hour receiving capacity

Women's and Children's Health

- Redevelopment of the NICU to ensure improved model of care and compliance with national standards
- Review of childrens services in infants, children and adolescents
- Explore options of paediatric medicine and surgery including requirements of adequate resources such as staffing, expertise, beds and other for consideration of paediatric surgery
- Consider provision of a tertiary and high risk maternity service

Surgical programs

- Liverpool Hospital to continue the development as a tertiary (and where applicable a quaternary) referral centre for complex acute and chronic surgical illnesses.
- Continue as a tertiary referral centre for the multidisciplinary and surgical management of cancer patients. This will include: complex neurosurgical, thoracic, hepatobiliary, upper GI, colorectal, urological, breast, endocrine, and head and neck cancers. This will include developing a Pelvic Oncological Unit.
- Review model of care for Ophthalmology Services
- Implement a High quality digital / hybrid (eventually robotic provided there is evidence base for this technology) infrastructure support to further develop minimally invasive surgery for Upper GI, Colorectal, Urology, Cardiac and Thoracic, Vascular, Endocrine, Head and Neck surgery, Gynaecology and Gynaecological Oncology and spinal surgery. This advanced technology would also be applicable to Trauma patients.

Research:

- Support involvement of staff in research by grants and backfill positions.

Teaching:

- Continue to develop the Clinical Skills and Simulation Centre with an emphasis on multidisciplinary teaching and learning

Support services

- IT developments (data collection,eMR, QA, archiving of imaging)
- Consider the enhancement of Ron Dunbier House accommodation for patients and relatives/carers to improve access
- Develop relevant corporate services to support the implementation of priority service directions outlined above

Corporate Actions

The Liverpool Hospital action plan outlines the key actions that this facility will be taking over the next five years:

- the plan is structured using the eight areas of corporate action i.e. High quality health services; Seamless networks; Research and innovation; Supporting business; Community partnerships; Developing our staff; Enhancing assets and resources; Efficiency and sustainability;
- under each area of action, specific objectives and the associated risks of failure to make progress have been clearly identified.
- under each objective specific strategies have been identified, together with timeframes and responsible staff.

The introductory paragraphs under each corporate action have been modified to ensure relevance at the Liverpool Hospital facility level.

Corporate Action 1: Providing High Quality Health Services

The community expects and has a right to receive high quality health care. At an individual level, quality is measured by a range of factors including excellent patient outcomes, ease of access to health care, timeliness of services, good communication, strong teamwork, a seamless service and respectful treatment. At a system level it is formally measured by achievement of standards and targets and informally through media reports.

Liverpool Hospital will develop and deliver quality services. Through clinical governance and corporate structures and systems, quality will be monitored and measured. Liverpool Hospital will ensure that the strategies implemented enable quality health care to be fostered and strengthened.

Quality health care not only relates to the health care of people who are sick but also preventing health problems from occurring. There is considerable evidence that intervention in the early years protects children against poor longer term outcomes and that health promotion strategies will prevent premature death, reduce ill health and prevent further disability.

SWSLHD Objectives

- 1.1 Develop staff communication skills in working with patients, family and service providers
- 1.2 Ensure patients, carers, visitors, community and service providers are treated with dignity, respect and in an ethical manner
- 1.3 Improve the quality and safety of health services
- 1.4 Improve the patient experience
- 1.5 Implement early intervention and health promotion and illness prevention strategies

Note: The column labelled *Links to CPS* indicates which strategy of the SWSLHD Corporate Plan the Actions relate to

	Actions	Responsible Manager	Completed by	Links to CPS
1.1	Develop staff communication skills in working with patients, family and service providers			
1.1.1	Implement the <i>Communication with Purpose Program</i> to improve the way in which staff and patients communicate with each other. <ul style="list-style-type: none"> Revise and redevelop the implementation plan for Communication with Purpose Program 	General Manager	2015 & ongoing	1.1.1
1.1.2	Implement the Patient Based Care Challenge	Quality & Accreditation Manager	2016	1.1.2
The risk of not achieving this objective is: The decreased patient/family engagement will result in poorer care outcomes				
1.2	Ensure patients, carers, visitors, community and service providers are treated with dignity, respect and in an ethical manner			
1.2.1	Continue implementing the <i>Respecting the Difference: Aboriginal Cultural Training Framework</i> to provide staff with the knowledge and skills to deliver respectful, responsive and culturally sensitive services to Aboriginal people families and communities.	General Manager	2017	1.2.1
1.2.2	Develop a local strategy for implementing the NSW Advance Planning for Quality Care at End of Life Strategic and Implementation Framework. Local strategies will include: <ul style="list-style-type: none"> Identification of key stakeholders and support networks Staff training and education Quality audits of performance Evaluation 	General Manager	2016	1.2.2
1.2.3	Continue cultural training to staff so that they are respectful, responsive and culturally sensitive to people from a culturally and linguistically diverse group (CALD)	General Manager	2017	1.2
1.2.4	Consider establishing a Clinical Ethics panel at Liverpool Hospital.	General Manager	2017	1.2
1.2.5	Build an understanding of the role of carers; enhance skills of carers to cope and navigate system	General Manager	2016	1.2
The risk of not achieving this objective is: Workplace culture and attitudes may not support optimal centred patient care; there may be complaints/dissatisfaction with the service				
1.3	Improve the quality and safety of health services			
1.3.1	Maintain accreditation through the participation in external accreditation schemes and quality processes	Liverpool Executive	2016	1.3.1
1.3.2	Continue to Implement infection control strategies relating to <ul style="list-style-type: none"> Hand Hygiene (HH) Hospital associated bloodstream infections (HAI) Antimicrobial stewardship (AMS) 	General Manager	HH – ongoing HAI - ongoing AMS - 2015	1.3.3

		Actions	Responsible Manager	Completed by	Links to CPS
1.3.3		<p>Continue to Implement Clinical Excellence Commission (CEC) initiatives including:</p> <ul style="list-style-type: none"> • “Between the Flags Program” to improve the way staff recognise and respond to patients whose clinical condition starts to deteriorate • “Sepsis Pathway” to improve recognition and management of severe infection and sepsis • Chest Pain Pathway to improve management of patients presenting with Chest Pain or other symptoms of myocardial ischaemia • “In Safe Hands” to build and sustain highly functioning healthcare unit teams 	Liverpool Executive	BTF: 2014 & ongoing Sepsis pathway: 2014. CPP:ongoing. In Safe Hands:2014 & ongoing	1.3.4
1.3.4		<p>Meet and maintain targets for: -</p> <ul style="list-style-type: none"> • Whole of Hospital (incl NEAT) • NEST • Unplanned readmissions • Unplanned representations • Incident monitoring 	General Manager	Ongoing	1.3.7

The risk of not achieving this objective is: losing the community's confidence regarding the quality of their local health service

1.4	Improve the patient experience				
1.4.1	Implement a model of care for coordination within inpatient units to support multidisciplinary care and transfer to the community by:	<ul style="list-style-type: none"> • Review and improve the current models of care in aged care, cardiothoracic and renal • Review the patient journey • Establish guidelines in relation to the implementation of improved model of care • Ongoing evaluation of the new model of care 	General Manager Together with Director of Nursing and Midwifery Services	2017	1.4.1
1.4.2	Continue to implement the Essentials of Care Program:	<ul style="list-style-type: none"> • Develop and evaluate aspects of nursing and midwifery practice at ward service level • Improve patient care experiences at a ward and unit level • Facilitate ward education and development 	Director of Nursing & Midwifery	2017	1.4.2
1.4.3	Implement the Clinical Excellence Commission "Patient based Care Challenge" to assist in refocusing the organisation on the patient by:	<ul style="list-style-type: none"> • Increased focus of patient stories at committee meetings • Training of staff members in how to engage patients • The involvement of consumer representation and patients at committee meetings • Increased collection of patient feedback • Implementation of conducting handover at bedside 	Senior Managers & Quality & Accreditation Manager	2016	1.4.4
1.4.4	Develop a business case to consider the following: Review of the current Aged Care Services	<ul style="list-style-type: none"> • Expansion of acute and sub-acute geriatric beds and psychogeriatrics • Specialised capacity to manage dementia / delirium, delivered in Aged Care precinct 	General Manager & HOD Aged Care	2016	1.4

	Actions	Responsible Manager	Completed by	Links to CPS
1.4.5	Strengthen staff preparedness to respond to major incidents, disasters and health emergencies	Disaster Coordinator & Emergency Management Coordinator	ongoing	1.5.13
1.4.6	Continue to review the models of care throughout the Facility to facilitate patient flow: <ul style="list-style-type: none"> • Ophthalmology services • Cardiothoracic • Hospital in the Home (HITH) • Aged Care and rehabilitation 	General Manager	ongoing	1.4

The risk of not achieving this objective is: May impact on the patient experience negatively

1.5	Implement early intervention and health promotion and illness prevention strategies				
1.5.1	Review the current maternity services and consider expansion for : <ul style="list-style-type: none"> • A tertiary and high risk maternity service through the enhancement of Neo Natal Intensive Care Unit and Special Care Nursery • Expanded antenatal care • Establish contemporary midwifery models of care 	General Manager & Womens and Childrens' Nurse Manager	2017		1.5

The risk of not achieving this objective is: Poorer health outcomes for individuals and increased demand on hospital services

Corporate Action 2: Community Partnerships

Communities have a significant role to play in the operation of health services - in service planning, in service provision through volunteering, in health research through participation in clinical trials and other forms of research, in working as businesses or local agencies with health services to meet patient needs or to provide support services, and in building physical capacity through donations and philanthropy. Different approaches will need to be developed at Liverpool Hospital to ensure that all members and sections of the community, including private business, can contribute.

Integral to service development and delivery will be partnerships with patients, clients, carers and the community. Services will need to draw on the expertise, experience and diversity of community members and communities to ensure that health responses are appropriate to local needs. In particular greater effort will need to be given to ensuring that communities who experience greatest disadvantage are consulted and involved in planning and development of services and programs that are tailored to meet their needs.

Health literacy plays a key role in building effective partnerships with the community. Liverpool Hospital will need to ensure that the opportunities created through new social and information media are adapted so that the community and patients receive information in a way that is easily understood and enables them to make informed choices. Services will also need to consider and accept formal feedback from patients, services and the community when evaluating the effectiveness of services and programs.

SWLHD Objectives

- 2.1 Engage and involve stakeholders in planning, service development and delivery
- 2.2 Raise the profile of the hospital locally through timely and accurate information
- 2.3 Empower individuals and local communities to make informed health choices

	Actions	Responsible Manager	Completed by	Links To CPS
2.1 Engage and involve stakeholders in planning, service development and delivery				
2.1.1	Ensure community participation in service planning by: <ul style="list-style-type: none"> • Enhanced engagement with the Liverpool Clinical Council • Inviting community participants to appropriate forums and ensuring plans and developments are communicated to the public. • Review and strengthen existing community linkages • Improved partnerships with Liverpool City Council and key stakeholders 	General Manager & Community Participation Coordinator	2014 & ongoing	2.1.3
2.1.2	Increase the number of volunteers contributing to and supporting Liverpool Hospital by: <ul style="list-style-type: none"> • Encouraging people from culturally and linguistically diverse communities to be volunteers • Providing volunteer group sessions and support • Hosting annual events and publicly demonstrating the hospital's appreciation of the volunteers work 	Director of Human Resources	2015	2.1.6
2.1.3	Develop a strategy to improve the fund-raising capacity of Liverpool Hospital <ul style="list-style-type: none"> • Building and maintaining existing relationships with community members, previous financial supporters and key stakeholders • Increasing fund raising activities 	General Manager	2017	2.1
The risk of not achieving this objective is: There is a risk of not identifying the community needs				
2.2 Raise the profile of the Liverpool Hospital locally through timely and accurate information				
2.2.1	Support a framework to build community interest and knowledge about healthy lifestyles, local health services and programs <ul style="list-style-type: none"> • Foster education for the community in relation to health promotion • Develop collaborative approach with Liverpool City Council 	General Manager	2014 & ongoing	2.2.1
The risk of not achieving this objective is: Risk of reduced community support for Liverpool Hospital				
2.3 Empower individuals and local communities to make informed health choices				
2.3.1	Align with SWSLHD in the use of traditional and emerging technologies to promote SWSLHD programs and initiatives to improve access to and use of health services and programs and support healthier lifestyle choices.	General Manager	2014 & ongoing	2.3.1
2.3.2	Support and promote the development of strategies to improve health literacy <ul style="list-style-type: none"> • Increased promotion of health awareness weeks throughout Liverpool Hospital • Increase uptake of rehabilitation programs • Promotion of self-management • Continue Chronic support links 	General Manager & Community Participation Coordinator	2014 & ongoing	2.3.2
The risk of not achieving this objective is: There is a potential for poor community health outcomes				

Corporate Action 3: Seamless Networks

The health of individuals and communities is not only dependent on quality of health care and how and where health services and programs are delivered but also on individual factors including the social and environmental determinants of health such as education, employment and income and food security. Improving health care can at times be extremely difficult, requiring excellent communication, coordination and collaboration within and across health facilities and services, with other health providers such as general practitioners, with community services and across levels of government.

Health improvement will require input from medical, nursing, allied health, prevention and other health practitioners across hospitals, community health centres and primary health care settings. It will also require close collaboration and coordination with other government agencies and community based services which provide ongoing support to individuals, families and communities to support the patient journey.

Liverpool Hospital with their staff will work at local and regional levels to plan for future needs, develop services and programs, improve access and build knowledge about factors which contribute to health and wellbeing which will influence the work of other agencies.

There will also be a focus on building an integrated health care system for local residents and other people using and working with health services. This will mean that irrespective of where help is sought, the right service can be accessed. Networks will be developed within clinical and service streams to build skills and expertise. Where required, centres of excellence will be developed to ensure that health care is provided at the most appropriately equipped facility.

SWLHD Objectives

- 3.1 Actively participate in regional and local forums to build capacity to respond to emerging needs
- 3.2 Foster coordinated planning and service delivery in health care
- 3.3 Improve transfer of care and patient access to services
- 3.4 Strengthen access and support for high needs groups

	Actions	Responsible Manager	Completed by	Links To CPS
3.1	Actively participate in regional and local forums to build capacity to respond to emerging needs			
3.1.1	Participate in and contribute to Liverpool City Council and interagency planning, coordination and implementation forums addressing human services, multicultural communities and Aboriginal people. (Primary Health Network)	Executive Committee	2017	3.1.4
3.1.2	Align with the LHD to establish a formal partnership with the South Western Sydney Medicare Local (SWSML) which includes: targeted integration strategies; collaborative planning and community consultation approaches; responses to local health needs; common KPIs; shared representation on appropriate corporate governance entities; and efficient coordination and communication. A high priority integration strategy will be the collaborative development of care pathways which include integrated action with NGOs and the health and non-health community sector.	General Manager	2017	3.1.5
The risk of not achieving this objective is: Poor communication with other providers and with the community resulting in weak partnerships				
3.2	Foster coordinated planning and service delivery in health care			
3.2.1	Engage with Community Health to further develop links specifically: <ul style="list-style-type: none"> • Referral processes between the hospital and community • Improve access to health services through coordinated care • Ongoing review of patient flow straetgies 	General Manager	ongoing	3.2.5
The risk of not achieving this objective is: Avoidable hospital admissions, delayed discharges and increased length-of-stays				
3.3	Improve transfer of care and patient access to services			
3.3.1	Continue to implement strategies to support patient handover: <ul style="list-style-type: none"> • Reviewing the transfer of care across clinical areas • Local community facilities and services within the Liverpool LGA • Supporting patient and carer involvement 	General Manager	2017	3.3.1
3.3.2	Develop web-based information about available services, entry criteria and referral processes <ul style="list-style-type: none"> • Continue to improve the Liverpool Hospital website 	Director Corporate Services	2017	3.3.2
3.3.3	Continue to use the National Emergency Admission Targets (NEAT) as a driver for innovation and efficiency in managing Emergency Department presentations and admissions.	General Manager	2017	3.3.1
The risk of not achieving this objective is: Lack of continuity of patient care resulting in potential duplication and higher costs				
3.4	Strengthen access and support for high needs groups			
3.4.1	Work with the SWSLHD in implementing aspects of the previous administration's <i>Aboriginal Health Plan 2010-2014</i> of continuing relevance that are consistent with national policy commitments and targets <i>and</i> emerging directions of the 10 year <i>NSW Aboriginal Health Plan 2013-2023</i> ; including framework and corporate initiatives and initiatives in priority health areas of early years, children and young people; chronic diseases and ageing; drug health; mental health; infectious diseases and sexual health; and oral health. Guided by the 10 year NSW Aboriginal Health Plan, work with the SWSLHD in initiating in 2013 -14 a process to develop a SWSLHD Aboriginal Health Plan to apply from 2015 onwards.	General Manager	2015 & ongoing	3.4.1

	Actions	Responsible Manager	Completed by	Links To CPS
3.4.2	Identify best practice framework for meeting the diverse needs of local multicultural communities across all aspects of healthcare provision at Liverpool Hospital	General Manager	2017	3.4.4
3.4.3	Implement the SWSLHD Disability and Carers Action Plan	General Manager	2015 and ongoing	3.4.6

The risk of not achieving this objective is: A widening gap between advantaged and disadvantaged and poorer health of populations who are more disadvantaged.

Corporate Action 4: Developing Our Staff

Over the next ten years, there will be further development of health services in South West Sydney. Quality health services and care relies on having sufficient staff with the necessary knowledge and skills to provide effective care and to provide it in the right location.

Liverpool Hospital will need to attract and retain skilled staff across all health professions and support services. It will also need to ensure that the skills and knowledge of existing staff are developed and that staff has the capacity and adaptability to adopt new practice, and skills needed to support innovation and change. Liverpool Hospital will value its workforce and ensure that staff are encouraged, rewarded and treated fairly and with respect.

Building on the work of the Centre for Education and Workforce Development (CEWD) and both existing and developing relationships with local universities, the UNSW Skills Centre and NSW Technical and Further Education, the hospital will develop the skills and qualifications of its workforce. These relationships will also be important in developing relationships with potential employees.

SWLHD Objectives

- 4.1 Develop a sustainable workforce that reflects and has the skills required to address community needs
- 4.2 Create an organisation that people want to work in
- 4.3 Develop relationships with future employees

	Actions	Responsible Manager	Completed by	Links To CPS
4.1 Develop a sustainable workforce that reflects and has the skills required to address community needs				
4.1.1	Implement the SWSLHD Workforce Plan which considers the <i>NSW Health Professional Workforce Plan</i> and includes regular horizon scanning of future workforce needs.	Director HR	Inline with the SWSLHD Workforce Plan	4.1.1
4.1.2	In conjunction with the CEWD, review , expand and improve access to the range of clinical and non-clinical workforce development programs.	General Manager & Director HR	2016	4.1.2
4.1.3	Implement strategies from the Aboriginal Employment Implementation Plan (AEIP) to build the Liverpool Aboriginal workforce and includes initiatives to: <ul style="list-style-type: none"> • Increase representation of Aboriginal people across clinical and non-clinical settings and levels • Increase Aboriginal traineeships • Develop career pathways and skills including support and mentoring programs 	General Manager & Director HR	2015	4.1.3
4.1.4	Implement new SWSLHD processes to identify skill mix requirements for new and emerging models of care and successfully manage job redesign.	General Manager & Executive Committee	2015 & ongoing	4.1.6
4.1.5	Continue to strengthen succession planning by linking performance management processes to post graduate management, management trainee and mentoring programs for clinical and non-clinical staff.	General Manager & Director HR	2016	4.1.8
4.1.6	Implement the SWSLHD performance development system that is effective, sustainable and clearly links individual performance to service goals and priorities.	Director HR	2016	4.1.11
4.1.11	Work collaboratively with the Ministry of Health and the four Pillars (HETI, CEC, ACI and BHI) to Influence and drive changes in state-wide awards and human resource management	General Manager & Director HR	2018 & ongoing	4.1.12
4.1.12	In partnership with CEWD, Implement leadership training and continued leadership development	Director HR	2016	4.1
The risk of not achieving this objective is: A possibility of reduction of quality care and staff engagement				
4.2 Create an organisation that people want to work in				
4.2.1	Contribute to the CEWD review of orientation programs for staff and volunteers including delivery of mandatory training.	Director HR	2014	4.2.1
4.2.2	Create a respectful, effective and innovative Work Health Safety environment through embedding the <i>NSW Public Sector Workplace Health and Safety and Injury Management Strategy 2010-12</i> and includes: <ul style="list-style-type: none"> • Proactive workplace safety solutions • Programs which foster respect and prevent and address bullying 	Director HR & Director Corporate Services	2016	4.2.2

	Actions	Responsible Manager	Completed by	Links To CPS
	<ul style="list-style-type: none"> • Robust incident reporting and management systems and • Early return to work for injured staff programs 			
4.2.3	Implement programs which improve the health and wellbeing of staff. This includes healthy worker initiatives which focus on issues such as vaccination, healthier eating, active transport, smoke free workplaces and staff amenities.	Director HR	2017	4.2.3
4.2.4	Develop strategies to increase work place flexibility and address workload management	Director HR	2017	4.2.5
4.2.5	Develop and implement strategies informed by the <i>NSW Health Your Say</i> , NSW Public Sector Workplace surveys	General Manager & Director HR	2017	4.2.6
4.2.6	Explore opportunities for apprenticeships or traineeships for non-clinical staff	Director HR	2015	4.2
4.2.7	Develop and implement programs to support the accessibility to employment for people with disabilities	Director HR	2014	4.2
The risk of not achieving this objective is: Staff dissatisfaction and a potential inability to retain staff				
4.3	Develop relationships with future staff			
4.3.1	Continue to work collaboratively with universities and other educational agencies to grow clinical placement capacity, ensure clinical training meets future hospital service requirements and ensure quality clinical education placements (including education of staff providing clinical supervision).	Executive Committee	2016	4.3.1
The risk of not achieving this objective is: Prospective inability to engage and employ a skilled workforce				

Corporate Action 5: Research and Innovation

Health services and practices are constantly evolving and changing with new evidence about better methods to respond to emerging needs and improve health care. There are also changes led by national and state governments that require flexibility and new ways of working including new partnerships.

Liverpool Hospital has considerable clinical and research expertise and experience that can be leveraged to support the development of the District's healthcare services. Clinicians and health services will be encouraged and supported to assume leadership roles and identify where they can contribute to health improvement. In collaboration with Ministry of Health agencies and other agencies, local services will use new health practice and contribute to new evidence through innovation and research which leads to better health outcomes for local communities.

SWLHD Objectives

- 5.1 Foster an innovative culture and research capability
- 5.2 Support innovation and best practice in prevention and clinical settings

	Actions	Responsible Manager	Completed by	Links To CPS
5.1	Foster an innovative culture and research capability			Chief Executive
5.1.1	Increase clinical trial activity in areas relevant to community needs.	General Manager	ongoing	5.1.4
5.1.2	Expand translational research and strengthen the application of evidence in new models of service delivery.	General Manager	ongoing	5.1.5
5.1.3	Promote the use of journal clubs, grand rounds and facility based education sessions to foster a culture of continual learning amongst all staff.	Director Medical Services, Director Nursing and Midwifery Services	ongoing	5.1.8
5.1.4	Build research interest and skills of nursing, allied health, community health professionals and managers by: <ul style="list-style-type: none"> • Development of a nursing and midwifery research culture and supported by dedicated nursing and midwifery academic staff 	Director of Nursing and Midwifery Services & Director Allied Health	2017	5.1.8
5.1.10	Enhance research through a multidisciplinary research facility at Liverpool Hospital and assess feasibility of developing professorial positions in Nursing and Allied Health	General Manager, Director Nursing and Midwifery Services & Director Allied Health	2015	5.1
The risk of not achieving this objective is: Potential inability to remain a world-renowned health facility that attracts the highest quality staff				
5.2	Support innovation and best practice in prevention and clinical settings			
5.2.1	Develop a program to acknowledge, showcase and celebrate the work of individual staff and teams.	Executive Committee	2015	5.2.1
5.2.2	Develop local approaches through harnessing staff talent and sharing innovation and excellence.	General Manager	2017	5.2.2
5.2.3	Increase participation in quality and innovation award programs.	Executive Committee	2015	5.2.3
5.2.4	Develop and implement clinical redesign programs in priority areas.	General Manager & Executive Committee	2016	5.2.4
5.2.5	In collaboration with universities, promote an exchange of ideas through opportunities for overseas travel to learn about and contribute to international discussions and hosting the visits of international experts.	General Manager	ongoing	5.2.6
The risk of not achieving this objective is: Liverpool Hospital is unable to maintain its place as a centre in innovation and excellence in health care delivery				

Corporate Action 6: Enhancing Assets and Resources

Liverpool Hospital will need to ensure that health service infrastructure has capacity to meet the growing and complex healthcare needs arising from demographic change. Additional investment will be required in public and private health services to meet this demand.

The hospital with support from the SWSLHD will continue to identify and invest in capital infrastructure programs and new technology. Information technology will also require further development to ensure that communication supports clinical services, health service structures and needs. Improving utilisation and management of existing resources will also ensure that new and existing resources are efficiently used.

Liverpool Hospital will assist the District when investigating new opportunities to develop health services for local communities.

SWSLHD Objectives

- 6.1 Provide physical capacity to address emerging health needs and population increases
- 6.2. Respond to changes in the operating environment
- 6.3 Ensure good stewardship of existing resources

	Actions	Responsible Manager	Completed by	Links To CPS
6.1	Provide physical capacity to address emerging health needs and population increases			
6.1.1	Implement and regularly update the SWSLHD Asset Strategic Plan to ensure that facility development reflects need and progress projects including: <ul style="list-style-type: none"> • Liverpool Hospital Redevelopment Stages 2.2 and 2.3. • Expansion of interventional imaging, acute primary angioplasty and non-invasive cardiology ensuring interventional radiology is available 24/7. • Growth of General Medicine as a major specialty with pivotal role in acute assessment. • Reconfigure the Emergency Department to accommodate increased services and a new Model of Care with physical capacity for imaging services within the ED, increased ESSU and PECC services and the integration of acute medicine within the ED, reconfigure to include establishing MAU/AAU, including clinics, adjacent to ED. • Extend imaging support via ultrasound. • Enhancement of accommodation for patients undergoing continuing care not requiring inpatient supervision 	Liverpool Executives	ongoing	6.1.2
6.1.2	Contribute to and participate in clinical service planning and minor and major capital planning activities which focus on Liverpool Hospital	General Manager	ongoing	6.1.2
6.1.3	Participate in the information system hardware expansion and upgrade for eMR, and core network and communication systems including telehealth.	General Manager	Ongoing	6.1.7
6.1.4	Consult with clinicians, to identify technology requirements and innovative funding opportunities and mechanisms.	General Manager	Ongoing	6.1.8
6.1.5	Improve employee facilities at Liverpool Hospital such as: <ul style="list-style-type: none"> • Development of a retail precinct 	General Manager	2016	6.1
The risk of not achieving this objective is: Limited up to date technology, may lead to patients requiring longer stays in hospital. Liverpool Hospital will not be able to attract or retain staff if facilities are inadequate. The Hospital will not meet national standards				
6.2	Respond to changes in the operating environment			
6.2.1	Continue to utilise the Liverpool Hospital Clinical Council to review models of care by contemporary clinical practice and best practice identified by NSW Ministry Pillars	Clinical Council	ongoing	6.2.2
The risk of not achieving this objective is: Unaware of new developments, community need and best practice				
6.3	Ensure good stewardship of existing resources			
6.3.1	Implement the Asset Maintenance, Replacement and Disposal Program that is developed by the LHD.	Director Corporate	2015	6.3.1

		Actions	Responsible Manager	Completed by	Links To CPS
			Services		
6.3.2		Review utilisation of : <ul style="list-style-type: none"> • Plant and equipment and maximize performance and asset life • Clinical and non-clinical space to optimise use of existing facilities 	Director Corporate Services	2015	6.3.2
6.3.4		<ul style="list-style-type: none"> • Review accommodation options for rural/remote patients and families/carers by: • Considering options for room allocations in Ron Dunbier House 	General Manager and Director Corporate Services	2016	6.3

The risk of not achieving this objective is: Waste and deterioration of infrastructure

Corporate Action 7: Supporting Business

In an environment of rapid change, clinicians and managers require access to appropriate and up-to-date information and data to support informed decision making, monitor progress and develop new ways of care. Information management and technology (IM& IT) provides potential for developing efficiencies, promoting innovation and improving patient care.

A patient-centred Electronic Medical Record (eMR) informed by privacy considerations will provide a comprehensive view of each patient. All team members will share access to the EMR, strengthening decision making and improving communication.

Liverpool Hospital will work in conjunction with the District in the development of bedside technology and use of applications to promote work practice innovation. Business planning capabilities will be developed to ensure that existing and new services are viable from a service and financial perspective

SWLHD Objectives

- 7.1 Develop integrated and appropriate technology to meet the needs of clinicians, managers and patients
- 7.2 Develop business intelligence and decision support capability

	Actions	Responsible Manager	Completed by	Links To CPS
7.1	Develop integrated and appropriate technology to meet the needs of clinicians, managers and patients			
7.1.1	Participate in and implement national and state-wide technology driven projects including: <ul style="list-style-type: none">• Medication Management (including Pharmacy Systems)• Oracle Release 12• V Money• Rostering Systems• Patient Revenue Systems• Organisational Risk Management• Medical Imaging Information System• National personally controlled Electronic Health Record	Executives	ongoing	7.1.8
7.1.2	Develop a business case on the the installation of Wi-fi access to clinicians and patients; off site access for clinicians	General Manager	2016	7.1
The risk of not achieving this objective is: Prescription/medication errors; adverse events; inefficient use of resources; potential impact on business management systems				
7.2	Develop business intelligence and decision support capability			
7.2.1	Implement the Performance Framework processes into planning and operational activity.	General Manager	2015	7.2.3
7.2.2	Develop business planning capacity and undertake comprehensive planning to identify: <ul style="list-style-type: none">• Benefits and risks of new proposals• The financial cost of service development directions.• Ongoing monitoring of key sustainability strategies as developed by Liverpool Hospital Sustainability Committee	Director of Finance	ongoing	7.2.4
The risk of not achieving this objective is: Inefficient use of resources and missed opportunities in fundraising opportunities				

Corporate Action 8: Efficiency and Sustainability

Recent changes to funding models created by the National Health and Hospitals Reform Agreement will drive considerable change in how services are funded, provided, organised and measured. There will be a growing emphasis on monitoring performance and identifying opportunities to improve efficiency and effectiveness in care and service delivery. All services will need to ensure that the necessary processes and systems are used to drive improvement.

With a complex health environment, responding to new challenges will also create new risks. Systems will need to be developed to ensure that the risks are clearly identified and strategies are in place to ensure that these risks are managed. These systems will need to be supported by effective governance.

The threats posed by climate change on the environment and on individuals and communities are increasingly recognised. Liverpool Hospital will reduce and manage use of resources so that the impact on the environment is minimised.

SWLHD Objectives

- 8.1 Strengthen the financial sustainability of the District
- 8.2 Minimise risk
- 8.3 Contribute to environmental sustainability
- 8.4 Ensure efficiency of services
- 8.5 Strengthen governance

Liverpool Hospital Operational Plan 2014 - 2018

	Actions	Responsible Manager	Completed by	Links To CPS
8.1 Strengthen the financial sustainability of the District				
8.1.1	Implement the SWSLHD financial framework and processes including: <ul style="list-style-type: none">• Financial reporting mechanisms• Financial accountability/delegations	General Manager & Director of Finance	ongoing	8.1.1
8.1.2	Develop capability, understanding and responsiveness to Activity Based Funding.	Director of Finance	ongoing	8.1.2
8.1.3	Maximise funding through Activity Based Funding including achievement of clinical coding targets and contribution to State-wide costing.	Director of Finance	ongoing	8.1.3
8.1.4	Develop financial capability in managers and staff to ensure effective financial management	Director of Finance	ongoing	8.1.6
8.1.5	Meet identified annual targets for services including: <ul style="list-style-type: none">• Expenditure, revenue and payment of creditors• Activity from purchased volume in cost weighted separations, acute inpatient services, cost weighted• Emergency attendances and emergency services	Director of Finance & Service Managers	ongoing	8.1.9
The risk of not achieving this objective is: Sub optimal funding for Liverpool Hospital				
8.2 Minimise risk				
8.2.1	Manage risks across Liverpool Hospital which includes strategies to: <ul style="list-style-type: none">• Embed governance structures and arrangements into day to day operation• Develop and maintain risk registers• Establish formal processes for identifying and analysing risks• Develop risk management plans• Ensure disaster recovery and continuity	General Manager & Director Corporate Services	ongoing	8.2.1
8.2.2	Implement a comprehensive rolling program of audit and implement the recommendations.	General Manager	ongoing	8.2.2
8.2.3	Implement the SWSLHD developed reporting framework to assess success in implementing Strategic and Operational Plan initiatives and their effectiveness in achieving desired outcomes.	General Manager	2018	8.2.3
The risk of not achieving this objective is: Risks will not be managed appropriately				
8.3 Contribute to environmental sustainability				
8.3.1	Implement the District Sustainability Plan	General Manager	2018	8.3.1
8.3.2	Incorporate sustainability in asset maintenance, replacement and capital developments	Director of Corporate Services	2014 & ongoing	8.3.2

Liverpool Hospital Operational Plan 2014 - 2018

	Actions	Responsible Manager	Completed by	Links To CPS
8.3.3	Participate in NSW Government sustainability initiatives and implement strategies to reduce energy consumption at Liverpool Hospital	Director of Corporate Services	2014 & ongoing	8.3.3
The risk of not achieving this objective is: Wasted expenditure				
8.4 Ensure efficiency of services				
8.4.1	Review the efficiency and effectiveness of services and models of care and identify strategies for reengineering and disinvestment.	General Manager	ongoing	8.4.1
8.4.2	Identify, plan and implement increased use of subacute beds to assist in efficiency of acute bed utilisation	General Managers & Clinical Director Aged Care & Rehabilitation	2016	8.4.2
The risk of not achieving this objective is: Inefficiency of Liverpool Hospitals services				
8.5 Strengthen Governance				
8.5.1	Embed actions from the annual performance agreement, SWSLHD Strategic Priorities in Health Care Delivery to 2021 Healthcare Services Strategic Plan and <i>Directions to Better Health for South Western Sydney – Corporate Plan 2012 – 2017</i> into operational plans	General Manager	2017	8.5.3
8.5.2	Implement strategies to increase staff awareness of statutory and related reporting requirements.	General Manager & Director of Nursing and Midwifery Services	ongoing	8.5.4
8.5.3	Review internal structures and processes to ensure that the Liverpool Hospital complies with corporate governance requirements as outlined in the <i>Corporate Governance Compendium</i> and reporting requirements.	General Manager	ongoing	8.5.5
The risk of not achieving this objective is: Poor and lacking processes may highlight the hospital to be non compliant with governance				
8.6 Ensure work health safety				
8.6.1	Align with the LHD strategic framework to implement the NSW Ministry of Health Policy Directive 2013_005 Work Health and Safety: Better Practice Procedures	General Manager	2016	8.6.1
8.6.2	Implement the work health safety management system that aligns with the NSW Work Health and Safety Act 2011	General Manager	2018	8.6.2
The risk of not achieving this objective is Staff may be at risk of work injuries				

Implementation

This Plan identifies the key strategies that will be implemented over the next five years. Against each key strategy the person(s) responsible for ensuring that the operational aspects of the strategy are progressed and the completion status have been identified.

The Liverpool Hospital Executive Team will monitor, via a developed monitoring tool, on a monthly basis, progress against this Plan at the Liverpool Executive meeting. It is expected that all services will contribute to achieving the objectives of the plan and will report progress to the SWSLHD Executive. The review process will include consideration of:

- The performance reports prepared for the *South Western Sydney Local Health District* Annual Strategic Priorities and Performance Agreement with the NSW Ministry.
- Local priorities from this Plan for inclusion in the Annual SWSLHD Strategic Priorities and Performance Agreement for the subsequent financial year
- New and emerging NSW Government priorities and whether they are adequately reflected within this Plan.
- Reports on progress against strategies which may not be in the annual performance agreement. This may include strategies which have a longer timeframe or have been prioritised to respond to the operating environment.

Progress on strategies within this Plan will be used to inform the South Western Sydney Local Health District Annual Report and reporting to the NSW Ministry of Health

This Liverpool Hospital Operational Plan will be formally reviewed annually.

Appendices

Appendix 1: SWSLHD Guiding Principles

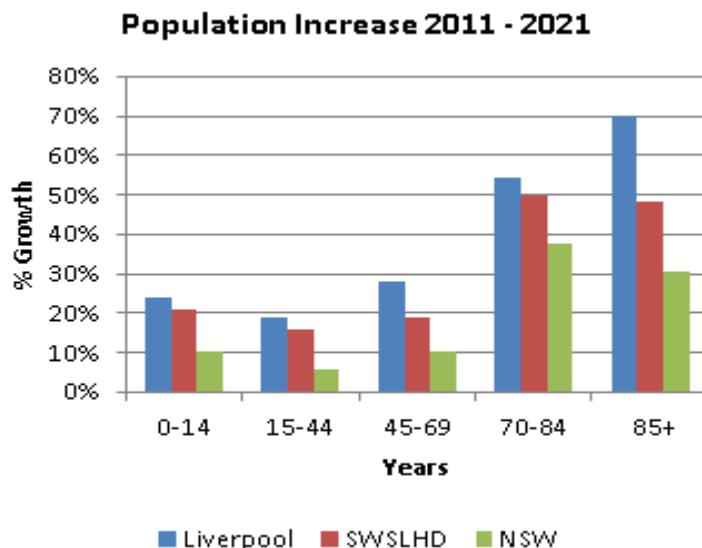
The **Principles** which guide how services are managed and developed into the future are:

1. All residents have equity in access to health care services. People who are disadvantaged will be provided with assistance to access services where necessary.
2. Health services across the District will be of high quality.
3. Patients, communities, staff and service providers will be treated with courtesy, dignity and respect.
4. Health care will be patient and family centred and responsive to the needs of individuals, families and communities.
5. Individuals and communities will be actively engaged in health care and programs. They will be provided with information and supported to make informed choices about their health. Autonomy in decision making will be respected.
6. Population health programs and strategies will be developed with communities and other agencies to improve the health of local communities. Strategies will be multifaceted to increase effectiveness and sustainability.
7. Services will be provided as close to home as possible and integrated across hospitals, community and primary health settings. Networks to centres of excellence and tertiary services will increase access to expertise when required and support timely care.
8. Teamwork will occur within all health services, and involves patients, community members and service partners. New partnerships and opportunities to improve health and health care will be explored and developed.
9. The workforce is valued and will be consulted and included in the development and implementation of initiatives. Personal and professional development opportunities will be provided to enable staff to meet ongoing changes in the health system.
10. Services will be provided in a safe and healthy environment.
11. New models of care, health care practices and technology based on evidence will be used to ensure that patients and communities receive the best and most appropriate service available. Innovation and research will be encouraged to ensure safe and appropriate interventions.
12. Services will be provided in an efficient and cost effective manner and will be evaluated and remodelled as required.
13. Environmental sustainability will be fundamental to the design and delivery of clinical and non-clinical services and infrastructure.

Appendix 2: Health Snapshot Liverpool LGA

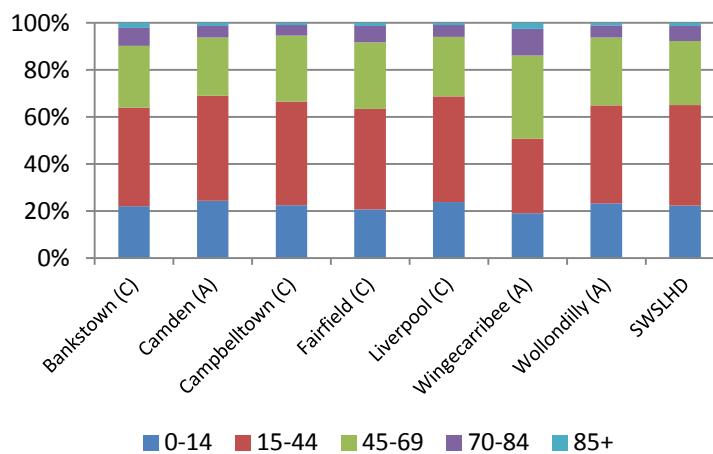
Liverpool is one of seven local government areas (LGA) covered by the South Western Sydney Local Health District (SWSLHD). It is a fringe, very large LGA under the Australian Classification of Local Governments covering an area of 305 square Kilometres with a population density of 626 persons per square kilometre.

Population Demographics



- In 2011 there were 188,083 residents, projected to rise to 236,009 by 2021 i.e. 19.2% growth

Age Structure of LGA Populations 2011



- 22.7% are ≤14 years and 6% ≥ 70 years of age. By 2021, the proportion of children and older people will be 23.6% and 7.5% respectively. The fertility rate is 2.07(NSW 1.91)
- 55.6% of residents speak a language other than English at home NSW (27.5%), the most common being Arabic (9.5%), Indo-Aryan (6.5%) and Vietnamese (4.4%)
- 2,834 refugees (humanitarian stream) settled here 2008-2012, 13.3% of NSW refugees
- 2,676 residents (1.5%) identify as Aboriginal people or Torres Strait Islanders (NSW 2.5%)
- It is the 88th most disadvantaged of 152 LGAs in NSW (SEIFA 2011). The most disadvantaged suburbs are Cartwright and Miller
- There are 5,669 (9.6%) social housing dwellings (NSW 5.0%). 512 people are homeless and 507 people live in crowded dwellings

- 36.8% have only completed their education to year 10 or below NSW (37.1%)
- The unemployment rate is 7% (NSW 5.9%)
- 8.9% use only public transport (NSW 11.7%)
- 19.2% of private dwellings have no internet connection (NSW 20.1%)
- 62.5% (NSW 72.4%) of residents feel safe walking down their street after dark
- 68.8% (NSW 73.4%) of residents would feel sad to leave their neighbourhood

Health Behaviours of Adults

- 21.8% of adults consume 2+ standard alcoholic drinks a day (NSW 30.4%)
- 56.0% consume the recommended daily amounts of fruit (NSW 56.6%) and 4.1% consume the recommended daily amounts of vegetables (NSW 10%)
- 48.1% engage in adequate physical activity (NSW 55.2%)
- 34.8% are overweight (NSW 33.4%) and 21.8% are obese (NSW 19.6%)
- 22.3 % currently smoke (NSW 17%). The Prevalence Ratio for women who smoke during pregnancy is 124 (NSW 100)
- 76.0% of women had their first antenatal visit before 14 weeks gestation (NSW 79.3%)
- The cervical screening rate for women aged 20-69 years is 51.1% (NSW 57.2%). The rate of breast screening is 80.8% (NSW 76.3%)

Health Status

- 79.8% of adults rated their health as being excellent, very good or good NSW (80.2%). 15.4% reported high or very high levels of psychological distress compared to NSW (11.1%)
- Compared to NSW (100), Liverpool has a higher rate of death that is from all causes (107.3)
- Compared to NSW (100), Liverpool has lower rate of deaths that are
 - from preventable causes (96.6)
 - potentially avoidable (99.5)
 - amenable to health care (97.8)
 - smoking attributable (99.2)
 - alcohol attributable (94.6)
 - high body mass index attributable (91.1)
- Compared to NSW (100) Liverpool has lower rate of hospitalisations that are
 - from all causes (99.9)
 - potentially preventable (95.4)
 - alcohol attributable (81.8)
 - coronary heart disease related (91.2)
- Compared to NSW (100), Liverpool has higher rates of hospitalisations that are
 - from falls-related injury (116.9)
 - high body mass index attributable (101)
 - COPD related (112.9)
 - diabetes related (132.1)
 - smoking attributable (100.5)
- The prevalence of Diabetes is 6.9 % (NSW 5.5%)
- Hepatitis B notifications are 50.7/ 100,000 people (NSW 37.6/ 100,000). Hepatitis C notifications are 54.8/ 100,000 people (NSW 57.2 / 100,000)

Appendix 3: Morbidity and Mortality Data for Liverpool LGA

Indicator	Liverpool	SWSLHD
Deaths from all causes 2005-2007, Standardised Mortality Ratio (SMR)	107.3	100.8
Life expectancy at birth and by gender 2002-2006	Males: 79.5 Females: 83.4	Males: 78.7 Females: 83.5
Hospitalisations 2009-10 to 2010-11, smoothed number of separations per year (smoothed estimate of Standardised Separation Ratio - seSSR)	58,010 (99.9)	284,213
Potentially preventable hospitalisations 2009-10 2010-11 smoothed number of hospitalisations per year (seSSR)	3,686 (91.3)	20,431 (n.a.)
Alcohol attributable hospitalisations, 2009-10 to 2010-11, smoothed number of hospitalisations per year, (seSSR)	916 (82.3)	4,792 (n.a.)
Smoking attributable hospitalisations, 2009-10 to 2010-11, smoothed number of hospitalisations per year (seSSR)	865 (99.1)	4,692 (n.a)
High body mass index attributable hospitalisations, smoothed number of separations per year 2009-10 to 2010-11 (seSSR)	775 (101.7)	4,218 (n.a)
Coronary heart disease hospitalisations 2009-10 to 2010-11 smoothed number of hospitalisations per year (seSSR)	821 (91.2)	4,806 (n.a)
COPD Hospitalisations, persons aged over 65, 2008-09 to 2009-10, smoothed number of separations per year (seSSR)	287 (128.9)	1,533 (n.a.)
Diabetes hospitalisations, 2009-10 to 2010-11, smoothed number of separations per year (seSSR)	515 (132.1)	2,293 (n.a.)
Fall-related injury overnight hospitalisations, persons aged 65 years and over, 2008-2009 to 2009-2010 combined, smoothed number of hospitalisations per year (seSSR)	437 (105.5)	2,659 (n.a.)
Potentially avoidable deaths, persons aged under 75 years, 2006 to 2007 combined, smoothed number of deaths per year, smoothed Standardised Mortality Ratio (sSMR)	208 (98.5)	1,115 (n.a)
Deaths from preventable causes, persons aged under 75 years, 2006 to 2007 combined (sSMR)	123 (98.1)	668 (n.a.)
Potentially avoidable deaths from causes amenable to health care, persons aged under 75 years, 2006 to 2007 combined, smoothed number of deaths per year (sSMR)	85 (99.1)	449 (n.a.)
High body mass index attributable deaths by LGA 2006 2007, (sSMR)	46 (91.1)	261 (n.a)
Alcohol attributable deaths, smoothed estimate of standardised mortality ratios per year, 2006 - 2007 (sSMR)	23 (94.6)	123 (n.a.)
Smoking attributable deaths, smoothed estimate of standardised mortality ratios per year, 2006 - 2007 (sSMR)	79 (99.2)	504 (n.a.)
Number of people with diabetes - NDSS Registrations (% of 2011 population)	11,626 (6.5%)	53,438 (6.1%)
All cancers, count and age standardised incidence rates per 100,000 2004 - 2008	2,811 (413.7)	16,609 (450.1)
All cancers, count and age standardised mortality rates per 100,000 2004 - 2008	1,019 (172.9)	6,347 (178.7)

Source: Data derived from Centre for Epidemiology and Evidence. Health Statistics New South Wales. Sydney: NSW Ministry of Health. Available at: www.healthstats.nsw.gov.au. Accessed (10/10/2013).

Appendix 4: Role Delineation Levels for Liverpool Hospital

Service	Delineation Level	Service	Delineation Level
Pathology	6	Orthopaedics	6
Pharmacy	6	Plastic Surgery	6
Diagnostic Imaging	6	Urology	6
Nuclear Medicine	6	Vascular Surgery	6
Anaesthetics	6	Maternity	6
Intensive Care	6	Neonatology	5
Operating Suite	6	Paediatric Medicine	4
Coronary Care	6	Paediatric Surgery	4
Emergency	6	Family & Child Health	4
General Medicine	6	Adolescents	3
Cardiology	6	Adult Mental health (Inpatient)	5
Dermatology	6	Adult Mental Health (Community)	4
Endocrinology	6	Child Adolescent Mental Health (Inpatient)	3
Gastroenterology	6	Child Adolescent Mental Health (Community)	4
Haematology	6	Older Adult Mental Health (Inpatients)	NPS
HIV/AIDS	6	Older Adult Mental Health (Community)	2
Immunology	6	Child Protection Services	4
Infectious Diseases	6	Drug & Alcohol Services	6
Oncology - Medical	6	Geriatrics	6
Neurology	6	Health Promotion	6
Oncology - Radiation	6	Palliative Care	6
Renal Medicine	6	Rehabilitation	6
Respiratory	6	Sexual Assault Services	4
Rheumatology	6	Aboriginal Health	5
General Surgery	6	Community Health - General	5
Burns	3	Community Nursing	5
Cardiothoracic Surgery	6	Genetics	5
Day Surgery	4	Multicultural Health	4
Ear, Nose & Throat	6	Oral Health	5
Gynaecology	5	Sexual Health Services	4
Neurosurgery	6	Women's Health	4
Ophthalmology	6		

Note "NPS" refers to where there is no planned service or a limited service. In addition, some services listed above are provided by other facilities including SWSLHD Community Health Services, Drug Health Services and Mental Health Services

Appendix 5: Flow of Local Catchment Population to Hospitals for Inpatient Care – Liverpool LGA residents 2011-12

Service Related Group	Liverpool	% of Total	Fairfield	% of Total	Childrens Westmead	% of Total	Campbell town	% of Total	Bankstown Lidcombe	% of Total	Braeside	% of Total	Concord	% of Total	Westmead	% of Total	Other Hospital	% of Total	Total Pub Hosp
Cardiology	1,826	81%	160	7%	12	1%	32	1%	37	2%	0%	0%	6	0%	26	1%	179	8%	2,252
Interventional Cardiology	445	81%	11	2%	5	1%	8	1%	0%	0%	0%	0%	4	1%	21	4%	79	14%	552
Dermatology	78	53%	7	5%	19	13%	8	5%	8	5%	0%	0%	15	10%	1	1%	13	9%	148
Endocrinology	171	64%	11	4%	38	14%	21	8%	7	3%	0%	0%	2	1%	1	0%	19	7%	269
Gastroenterology	1,412	62%	226	10%	181	8%	68	3%	113	5%	0%	0%	22	1%	39	2%	241	11%	2,263
Diagnostic GI Endoscopy	234	35%	156	24%	20	3%	100	15%	73	11%	0%	0%	9	1%	11	2%	69	10%	661
Haematology	138	59%	3	1%	52	22%	1	0%	4	2%	0%	0%	1	0%	5	2%	33	14%	232
Immunology & Infections	211	65%	16	5%	62	19%	8	2%	3	1%	0%	0%	0%	0%	1	0%	23	7%	323
Oncology	188	69%	4	1%	26	10%	9	3%	13	5%	0%	0%	1	0%	6	2%	30	11%	271
Neurology	854	66%	60	5%	71	5%	14	1%	26	2%	0%	0%	145	11%	28	2%	122	9%	1,292
Renal Medicine	160	63%	7	3%	5	2%	11	4%	24	9%	0%	0%	10	4%	5	2%	37	15%	254
Respiratory Medicine	1,765	77%	126	6%	137	6%	39	2%	39	2%	0%	0%	7	0%	14	1%	169	7%	2,282
Rheumatology	84	41%	4	2%	11	5%	1	0%	12	6%	0%	0%	1	0%	52	25%	94	45%	207
Pain Management	151	77%	6	3%	3	2%	5	3%	5	3%	0%	0%	1	1%	2	1%	24	12%	195
Non Subspecialty Med	1,248	67%	97	5%	98	5%	57	3%	81	4%	0%	0%	11	1%	17	1%	284	15%	1,876
Breast Surgery	100	58%	14	8%	0%	0%	9	5%	11	6%	0%	0%	4	2%	6	4%	33	19%	171
Cardiothoracic Surg	123	80%	0%	0%	7	5%	1	1%	0%	0%	0%	0%	0%	0%	2	1%	22	14%	153
Colorectal Surgery	211	40%	96	18%	7	1%	55	10%	103	19%	0%	0%	10	2%	3	1%	47	9%	529
Upper GIT Surgery	431	62%	55	8%	17	2%	50	7%	62	9%	0%	0%	19	3%	3	0%	62	9%	696
Neurosurgery	444	75%	10	2%	34	6%	9	2%	10	2%	0%	0%	7	1%	21	4%	80	13%	594
Dentistry	39	24%	0%	0%	10	6%	16	10%	0%	0%	0%	0%	5	3%	34	21%	90	56%	160
ENT & Head and Neck	619	58%	21	2%	117	11%	75	7%	37	3%	0%	0%	15	1%	11	1%	191	18%	1,075
Orthopaedics	1,234	58%	311	15%	103	5%	77	4%	81	4%	0%	0%	27	1%	32	2%	291	14%	2,124
Ophthalmology	245	44%	0%	0%	27	5%	33	6%	16	3%	0%	0%	65	12%	4	1%	173	31%	559
Plastic and Recon Surg	250	50%	17	3%	36	7%	48	10%	29	6%	0%	0%	31	6%	16	3%	85	17%	496
Urology	629	53%	20	2%	40	3%	135	11%	141	12%	0%	0%	44	4%	10	1%	176	15%	1,185
Vascular Surgery	247	65%	25	7%	14	4%	2	1%	33	9%	0%	0%	3	1%	10	3%	57	15%	381
Non Subspecialty Surg	1,572	66%	168	7%	136	6%	103	4%	97	4%	0%	0%	23	1%	60	3%	288	12%	2,387
Transplantation	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2	20%	10	98%	10
Extensive Burns	2	33%	0%	0%	1	17%	0%	0%	0%	0%	0%	0%	1	17%	0%	0%	2	33%	6
Tracheostomy	48	67%	0%	0%	4	6%	0%	0%	7	10%	0%	0%	0%	0%	2	3%	13	18%	72
Gynaecology	805	66%	140	12%	5	0%	53	4%	28	2%	0%	0%	5	0%	32	3%	178	15%	1,214
Obstetrics	3,708	88%	170	4%	0%	0%	77	2%	40	1%	0%	0%	0%	0%	51	1%	232	5%	4,227
Qualified Neonate	382	80%	24	5%	8	2%	18	4%	2	0%	0%	0%	0%	0%	15	3%	43	9%	477
Perinatology	140	79%	0%	0%	23	13%	0%	0%	0%	0%	0%	0%	0%	0%	7	4%	15	8%	178
Drug and Alcohol	171	45%	133	35%	1	0%	7	2%	12	3%	0%	0%	7	2%	8	2%	46	12%	377
Psychiatry - Acute	581	57%	3	0%	8	1%	79	8%	24	2%	0%	0%	197	19%	13	1%	135	13%	1,027
Psychiatry - Non Acute	0%	0%	0%	0%	0%	0%	1	2%	0%	1	2%	0%	0%	0%	0%	44	96%	46	
Rehabilitation	222	27%	143	17%	0%	0%	1	0%	10	1%	404	49%	6	1%	3	0%	35	4%	821
Psychogeriatric Care	10	20%	0%	0%	0%	0%	0%	0%	1	2%	37	74%	1	2%	0%	0%	1	2%	50
Palliative Care	59	14%	0%	0%	0%	0%	1	0%	1	0%	362	83%	0%	0%	2	0%	14	3%	437
Maintenance	38	57%	0%	0%	0%	0%	0%	0%	4	6%	0%	0%	1	1%	0%	0%	24	36%	67
Unallocated	24	43%	0%	0%	8	14%	4	7%	2	4%	0%	0%	4	7%	0%	0%	14	25%	56
Total	21,299	65%	2,244	7%	1,346	4%	1,236	4%	1,196	4%	804	2%	710	2%	576	2%	3,816	12%	32,652

Appendix 6: LGA of Residence of Inpatients of Liverpool Hospital 2011-12

Service Related Group	Liverpool	% of Total	Fairfield	% of Total	Campbell town	% of Total	Bankstown	% of Total	Camden	% of Total	Wollondilly	% of Total	Winge carribee	% of Total	Other LGAs	% of Total	Total Hospital
Cardiology	1,826	51%	913	26%	361	10%	108	3%	75	2%	33	1%	22	1%	216	6%	3,554
Interventional Cardiology	445	25%	442	25%	400	23%	58	3%	126	7%	63	4%	99	6%	142	8%	1,775
Dermatology	78	47%	39	23%	28	17%	8	5%	3	2%	1	1%	0	0%	9	5%	166
Endocrinology	171	47%	78	21%	47	13%	28	8%	9	2%	4	1%	4	1%	25	7%	366
Gastroenterology	1,412	50%	771	27%	268	9%	83	3%	88	3%	31	1%	29	1%	161	6%	2,843
Diagnostic GI Endoscopy	234	42%	165	30%	72	13%	20	4%	21	4%	5	1%	3	1%	39	7%	559
Haematology	138	33%	104	25%	78	19%	25	6%	25	6%	9	2%	11	3%	30	7%	420
Immunology & Infections	211	56%	93	25%	39	10%	8	2%	4	1%	2	1%	2	1%	16	4%	375
Oncology	188	38%	187	37%	52	10%	26	5%	10	2%	6	1%	4	1%	27	5%	500
Neurology	854	45%	529	28%	191	10%	93	5%	50	3%	23	1%	18	1%	128	7%	1,886
Renal Medicine	160	34%	153	32%	72	15%	30	6%	13	3%	10	2%	8	2%	31	6%	477
Respiratory Medicine	1,765	54%	860	26%	308	9%	117	4%	54	2%	22	1%	12	0%	139	4%	3,277
Rheumatology	84	45%	65	35%	19	10%	5	3%	4	2%	1	1%	1	1%	6	3%	185
Pain Management	151	47%	76	24%	33	10%	15	5%	12	4%	4	1%	0	0%	27	8%	318
Non Subspecialty Med	1,248	49%	692	27%	262	10%	110	4%	48	2%	21	1%	9	0%	140	6%	2,530
Breast Surgery	100	36%	74	27%	57	21%	7	3%	10	4%	4	1%	3	1%	19	7%	274
Cardiothoracic Surg	123	21%	143	25%	130	23%	21	4%	41	7%	26	5%	19	3%	72	13%	575
Colorectal Surgery	211	46%	108	24%	52	11%	17	4%	11	2%	5	1%	2	0%	48	11%	454
Upper GIT Surgery	431	46%	262	28%	102	11%	32	3%	18	2%	4	0%	7	1%	74	8%	930
Neurosurgery	444	30%	320	22%	229	16%	144	10%	75	5%	53	4%	43	3%	165	11%	1,473
Dentistry	39	27%	28	20%	31	22%	11	8%	8	6%	3	2%	2	1%	20	14%	142
ENT & Head and Neck	619	40%	351	23%	224	15%	79	5%	52	3%	47	3%	19	1%	146	9%	1,537
Orthopaedics	1,234	33%	1,033	28%	569	15%	157	4%	179	5%	122	3%	49	1%	385	10%	3,728
Ophthalmology	245	35%	249	36%	89	13%	36	5%	13	2%	15	2%	3	0%	45	6%	695
Plastic and Recon Surg	250	33%	147	19%	160	21%	53	7%	35	5%	16	2%	16	2%	79	10%	756
Urology	629	43%	403	28%	188	13%	53	4%	41	3%	17	1%	28	2%	90	6%	1,449
Vascular Surgery	247	24%	229	22%	188	18%	104	10%	57	6%	39	4%	33	3%	133	13%	1,030
Non Subspecialty Surg	1,572	41%	902	24%	495	13%	223	6%	151	4%	104	3%	39	1%	351	9%	3,837
Extensive Burns	2	29%	1	14%	1	14%	1	14%	0	0%	1	14%	0	0%	1	14%	7
Tracheostomy	48	28%	44	25%	27	16%	12	7%	7	4%	1	1%	8	5%	26	15%	173
Gynaecology	805	49%	375	23%	168	10%	70	4%	33	2%	22	1%	9	1%	171	10%	1,653
Obstetrics	3,708	67%	795	14%	471	9%	154	3%	85	2%	28	1%	10	0%	261	5%	5,512
Qualified Neonate	382	67%	91	16%	40	7%	20	4%	11	2%	4	1%	2	0%	21	4%	571
Perinatology	140	32%	83	19%	60	14%	44	10%	13	3%	3	1%	9	2%	86	20%	438
Drug and Alcohol	171	48%	95	26%	32	9%	16	4%	3	1%	4	1%	2	1%	36	10%	359
Psychiatry - Acute	581	45%	501	39%	56	4%	35	3%	12	1%	2	0%	1	0%	109	8%	1,297
Rehabilitation	222	32%	159	23%	77	11%	59	9%	23	3%	23	3%	28	4%	102	15%	693
Psychogeriatric Care	10	56%	6	33%	1	6%	0	0%	0	0%	0	0%	0	0%	1	6%	18
Palliative Care	59	43%	49	36%	9	7%	7	5%	2	1%	4	3%	1	1%	6	4%	137
Maintenance	38	32%	40	33%	17	14%	9	8%	7	6%	2	2%	2	2%	5	4%	120
Unallocated	24	42%	17	30%	7	12%	5	9%	0	0%	0	0%	0	0%	4	7%	57
Total	21,299	45%	11,672	25%	5,710	12%	2103	4%	1,429	3%	784	2%	557	1%	3,592	8%	47,146

Appendix 7: Core Activity Indicators from the Performance Management Framework

Indicators	2010/11	2011/12	2012/13
Emergency Department			
ED Admissions	24,621	26,849	30,326
ED Admissions to Ward	23,124	25,101	27,981
ED Attendance Triage 1 - Immediately life threatening	493	609	542
ED Attendance Triage 2 - Imminently life-threatening	6,562	8,269	8,783
ED Attendance Triage 3 - Potentially life-threatening	14,852	14,978	17,231
ED Attendance Triage 4 - Potentially serious	2,292	2,493	3,212
ED Attendance Triage 5 - Less urgent	422	500	558
ED Attendances	62,216	65,839	69,779
ED Available Beds	52	52	53
ED Emergency Access performance (EAP)	51.6%	51.7%	59.2%
ED National Emergency Access Target (NEAT)	37.3%	36.1%	45.5%
ED Transfer of Care (ToC)		59.1%	76.7%
ED Triage 1 (% seen ≤ 2 mins, immediately life threatening)	100.0%	100.0%	100.0%
ED Triage 2 (% seen ≤ 10 mins, imminently life-threatening)	85.7%	79.7%	79.4%
ED Triage 3 (% seen ≤30 mins, potentially life-threatening)	78.1%	68.5%	71.6%
ED Triage 4 (% seen ≤60 mins, potentially serious)	74.9%	77.1%	77.7%
ED Triage 5 (% seen ≤120 mins, less urgent)	89.3%	91.5%	92.7%
Separations			
Separations Total	86,929	70,847	73,626
Separations Planned	44,270	29,094	28,422
Separations Unplanned	42,659	41,753	45,204
Separations Overnight	36,885	37,804	40,011
Separations Same Day	50,044	33,043	33,615
Acute Inpatient Activity			
Acute Separations Total	85,732	69,886	72,419
Acute Overnight BedDays	211,245	225,241	233,114
Acute Separations Overnight	35,754	36,872	38,836
Acute Separations Same Day	49,978	33,014	33,583
ALOS Overnight			
Average Length of Stay Overnight	6.15	6.39	6.28
Average Available Beds			
Average Available Beds	776.0	791.4	817.1
Overnight Bed Days			
Overnight Bed Days	226,865	241,475	251,299
Non-acute Inpatient Activity			
Non Acute Separations Total		962	1,203
Non Acute Separations Overnight		933	1,172
Non Acute Separations Same Day		29	31
Births			
Births	3,141	3,139	3,208
Surgery			
Theatre Cases - Elective	7,012	7,266	7,330
Theatre Cases - Emergency	6,724	6,797	7,306
Theatre Cases - Total	13,736	14,063	14,636
National Elective Surgery Targets (NEST)			
NEST 1 (% within 30 days)	92.2%	91.4%	95.9%
NEST 2 (% within 90 days)	89.7%	87.9%	96.5%
NEST 3 (% within 365 days)	94.9%	91.7%	93.9%
National Weighted Activity Units (NWAU)¹			
Acute			71,874
ED			9,103
Mental Health			5,359
Non Admitted			21,642
Sub Acute			3,345
Non-admitted Patient Occasions of Service			
NAPOOS ²	607,072	699,504	722,832

1. An NWAU is a measure of activity expressed as a common unit, against which the National Efficiency Price (NEP) is paid. It is a point of relativity for pricing of hospital services, which are weighted for clinical complexity. The 'average' hospital service is worth one NWAU. More intensive and expensive activities are worth multiple NWAUs, and simpler and less expensive activities are worth fractions of an NWAU.NWAU not available for 2010/11 and 2011/12

'2. NAPOOS exclude Private Referred Non Inpatient (PRENIP)

'3. Data sourced December 2013

Appendix 8: Liverpool Hospital Workforce Profile 2013

Employment Category	Liverpool Hospital	
	Headcount (Number) of Employees	% of Employees
Nursing	1,975	49%
Medical	596	15%
Imaging	118	3%
Allied Health & Complementary Therapy	303	7%
Pharmacy	41	1%
General Hospital Employees	958	24%
Other	59	1%
Total	4,050	100%

Source: SWSLHD Workforce Profile, April 2013

N.B. Excludes South South West Pathology Service

Appendix 9: Inpatient Activity Projections by SRG for 2016/2017 (Source: NSW population projection version 1.2009, Department of Planning & Statewide Services Development Branch, NSW Health 2009)

Service Related Group ¹	2010-11						2016-17						% Δ in NWAUs	
	Day Only		Overnight			Total NWAUs V13	Day Only		Overnight			NWAUs V13		
	Seps	I/P Beds @ B'mark ²	Seps	B'days	I/P Beds @ 85% B'mark ³		Seps	Beds @ B'mark	Seps	B'days	B'mark			
11 Cardiology	675	2.25	2,458	8,880	28.6	2,142	759	2.5	2,792	10,301	33.2	2,488	16%	
12 Interventional Cardiology	547	1.8	1,221	5,306	17.1	3,435	658	2.2	1,520	6,333	20.4	4,241	23%	
13 Dermatology	39	0.1	124	625	2.0	146	43	0.1	131	618	2.0	142	-3%	
14 Endocrinology	19	0.1	316	1,963	6.3	446	23	0.1	348	1,955	6.3	515	15%	
15 Gastroenterology	613	2.0	2,107	10,757	34.7	2,623	791	2.6	2,314	11,557	37.3	2,898	10%	
16 Diagnostic GI Endoscopy	385	1.3	253	1,156	3.7	385	520	1.7	303	1,426	4.6	507	32%	
17 Haematology	7	0.0	486	5,830	18.8	1,646	23	0.1	518	5,472	17.6	1,696	3%	
18 Immunology and Infections	34	0.1	312	1,049	3.4	256	46	0.2	274	1,051	3.4	277	8%	
19 Oncology	22	0.1	414	3,579	11.5	758	77	0.3	488	4,084	13.2	939	24%	
21 Neurology	238	0.8	1,432	9,343	30.1	2,036	284	0.9	1,621	9,480	30.6	2,290	12%	
22 Renal Medicine	41	0.1	352	2,659	8.6	719	82	0.3	468	3,210	10.3	991	38%	
24 Respiratory Medicine	214	0.7	2,526	13,701	44.2	3,456	242	0.8	2,932	16,764	54.0	4,202	22%	
25 Rheumatology	13	0.0	150	1,128	3.6	233	15	0.1	171	1,139	3.7	252	8%	
26 Pain Management	167	0.6	96	382	1.2	102	212	0.7	93	374	1.2	120	18%	
27 Non Subspecialty Medicine	208	0.7	2,044	13,838	44.6	3,179	291	1.0	2,269	14,484	46.7	3,512	10%	
41 Breast Surgery	145	0.5	95	388	1.3	292	155	0.5	110	279	0.9	317	9%	
42 Cardiothoracic Surgery	1	0.0	518	6,455	20.8	3,522		0.0	519	6,017	19.4	3,469	-2%	
43 Colorectal Surgery	54	0.2	326	2,983	9.6	1,132	77	0.3	343	3,250	10.5	1,294	14%	
44 Upper GIT Surgery	30	0.1	879	5,823	18.8	2,061	33	0.1	832	5,171	16.7	2,152	4%	
46 Neurosurgery	43	0.1	1,285	8,737	28.2	3,780	48	0.2	1,490	11,034	35.6	4,636	23%	
47 Dentistry	101	0.3	16	44	0.1	51	100	0.3	17	56	0.2	60	19%	
48 ENT & Head and Neck	275	0.9	1,088	2,490	8.0	1,055	345	1.1	1,099	2,390	7.7	1,116	6%	
49 Orthopaedics	1,489	5.0	2,069	12,769	41.2	5,328	1,651	5.5	2,290	15,071	48.6	6,434	21%	
50 Ophthalmology	339	1.1	156	535	1.7	360	559	1.9	174	629	2.0	509	41%	
51 Plastic and Reconstructive Surgery	270	0.9	479	2,426	7.8	1,002	276	0.9	491	2,564	8.3	1,102	10%	
52 Urology	608	2.0	736	3,094	10.0	1,281	639	2.1	778	3,064	9.9	1,477	15%	
53 Vascular Surgery	70	0.2	837	8,643	27.9	2,991	79	0.3	934	8,953	28.9	3,341	12%	
54 Non Subspecialty Surgery	740	2.5	2,487	10,517	33.9	3,458	802	2.7	2,642	11,433	36.9	4,142	20%	
62 Extensive Burns	1	0.0	7	14	0.0	8	1	0.0	7	102	0.3	11	41%	
63 Tracheostomy		0.0	167	5,301	17.1	3,803		0.0	212	7,216	23.3	5,234	38%	
71 Gynaecology	961	3.2	719	1,923	6.2	1,435	1,003	3.3	735	2,069	6.7	1,555	8%	
72 Obstetrics	1,594	5.3	3,867	13,528	43.6	4,654	1,729	5.8	4,217	13,132	42.3	5,404	16%	
73 Qualified Neonate	9	0.0	618	3,102	10.0	693	16	0.1	430	2,432	7.8	484	-30%	
75 Perinatology	6	0.0	396	6,907	22.3	2,679	6	0.0	325	6,430	20.7	2,402	-10%	
81 Drug and Alcohol	39	0.1	238	731	2.4	187	68	0.2	234	843	2.7	204	9%	
82 Psychiatry - Acute	15	0.1	105	506	1.6	136	15	0.1	105	506	1.6	136	0%	
99 Unallocated	4	0.0	48	866	2.8	217	4	0.0	48	866	2.8	217	0%	
Total Acute SRGs	10,016	33	31,427	177,978	574	61,682	11,671	39	34,276	191,758	618	70,764	15%	
84 Rehabilitation	59	0.2	938	12,690	38.6	N/A	128	0.4	941	18,387	56.0	N/A		
85 Psychogeriatric Care		0.0	14	221	0.7	N/A		0.0	17	439	1.3	N/A		
86 Palliative Care	2	0.0	86	986	3.0	N/A		0.0	126	1,423	4.3	N/A		
87 Maintenance	4	0.0	123	1,308	4.0	N/A		0.0	298	6,064	18.5	N/A		
Total Sub and Non Acute SRGs	65	0	1,161	15,205	46		128	0	1,382	26,312	80			
Total All SRGs	10,081	34	32,588	193,183	620	61,682	11,799	39	35,657	218,070	698	70,764	0	
2011-12 average available beds⁴		31		583				8			115			
Estimated additional beds in 2017 above 2012 level at benchmark occupancy levels														

1 excludes chemotherapy, renal dialysis, unqualified neonates

2 benchmarked at 120% occupancy for 250 days p.a.

3 benchmarked at 85% occupancy for 365 days p.a. for acute care and 90% occupancy for 365 days p.a. for sub and non acute care

4 excludes emergency department, renal dialysis, bassinets, delivery suite, designated mental health beds

Appendix 10: Outpatient Activity (NAPOOS) Projections for 2016/2017

Clinical Services	2011/12 Equiv Non Admitted Patients Occasions of Service	2017 projections	2011/12 Privately Referred Non- Inpatients	2017 projections	2017 projections (NAPOOS & PRNIP)	% Growth
Aged Care & Rehab	83,784	107,453	0	0	107,453	28.3%
Allied Health	48,225	61,849	0	0	61,849	28.3%
Cancer Services	22,484	26,868	56,862	67,950	94,818	19.5%
Cardiovascular	38,038	42,678	14	16	42,694	12.2%
Complex Care	66,205	73,587	6,668	7,411	80,998	11.2%
Critical Care	46,689	52,385	5	6	52,391	12.2%
Gastro and Liver	12,748	14,303	2,379	2,669	16,972	12.2%
Medical Imaging	18,625	20,897	5,935	6,659	27,556	12.2%
Pathology	174,649	196,218	419	471	196,689	12.4%
Paediatric	965	1,080	0	0	1,080	11.9%
Surgical Spec	29,845	33,486	0	0	33,486	12.2%
Women's Health	55,599	62,799	3,153	3,561	66,360	13.0%
Facility Services	98,884	111,096	0	0	111,096	12.4%
Liverpool Total	696,739	804,700	75,435	88,743	893,443	15.5%

Data Sourced Dec 2012, excludes Mental Health and is consistent with that in the *SWSLHD Strategic & Healthcare Services Plan*. Variance between data in this table and the SWSLHD Performance Management Framework (data sourced Dec 2013) is due to exclusion of PRNIP data, ongoing auditing and service realignment.

* **Paediatric Services:** This date only includes the Rainbow Clinic and Paediatric Clinic. The data excludes services that have subsequently transferred across.

Appendix 11: Service Development Directions for Liverpool Hospital

Extract from SWSLHD Strategic & Healthcare Services Plan

Aged care and Rehabilitation - expand acute and sub-acute geriatric beds and psychogeriatrics, with specialised capacity to manage dementia/delirium, delivered in an Aged Care precinct with associated Day Hospital; develop acute and sub-acute inpatient rehabilitation; and expand the brain injury service

Allied Health - provide extended hour social work and physiotherapy services for emergency and specific inpatient caseloads 7 days per week; and enhance paediatric allied health workforce and physical capabilities

Cancer - Expand Cancer Therapy Centre with additional inpatient beds and services in haematology, medical oncology, a melanoma clinic, a Wellness Centre to enhance cancer survivorship and expanded chemotherapy and radiation oncology; develop a Centre of Excellence in Hepatology and Hepatocellular cancer; develop a complex pelvic malignancy surgical unit (gynae-oncology, urological cancer and colorectal cancer) with associated services; explore development of a Breast Cancer Assessment Unit (including imaging, assessment and support for breast surgery undertaken at local hospitals, and specialist nursing support); develop a prostate brachytherapy service, and an Allogeneic Bone Marrow Transplant service (as per the NSW Blood and Marrow Transplantation Plan); and expand inpatient palliative care and education in palliative care

Cardiovascular - develop a Centre of Excellence for Cardiology and Renal Services, including a Cardiology Academic Chair; expand provision of cardiothoracic surgery and increase the cardiology bed base; maintain the tertiary referral centre role for diabetes and endocrinology; expand in-centre renal dialysis and enhance the interventional component of the renal service; expand interventional imaging, acute primary angioplasty and non-invasive cardiology, ensuring interventional radiology is available 24/7; and provide out of hours rehabilitation programs (for people with cardiac, pulmonary and metabolic conditions)

Complex Care and Internal Medicine – grow General Medicine as a major specialty with a pivotal role in acute assessment; enhance respiratory services including Lung Function Laboratory capabilities, capacity to manage COPD and tuberculosis and deliver non-invasive respiratory ventilation; enhance sleep disorder services (with expanded sleep study capacity and additional testing for daytime sleep latency and maintenance of wakefulness and associated clinics); enhance interventional pulmonology services (with support for lung cancer services for staging and diagnosis with EBUS (endobronchial ultrasound), rigid bronchoscopy service and pleural procedures with bedside ultrasound); establish a District Infection Prevention Operational unit, expand the infectious disease hub to strengthen prevention initiatives and maintain links with the microbiology laboratory with inpatient, acute and chronic clinics and specialised services to other streams supported by research; investigate establishment of clinical genetics laboratory for common molecular testing and research with clinics for common disorders as new methods and technology emerge; expand rheumatology and immunology inpatient and clinic services to support greater patient complexity (including accessing to support and emergency services for allergen testing, ED bypass urgent care clinics and rapid access to intravenous infusions; develop an osteoporosis case finding, investigation and management service (as per the ACI fracture prevention model of care), with outreach capabilities; develop a comprehensive, multidisciplinary care for people with obesity (including management for arthritis, diabetes and other complications); enhance dermatology services; expand the neurology inpatient , outpatient, neuroaudiology and neurophysiology services and provide additional therapies for stroke including intravenous thrombolysis and neurointerventional radiology 24/7(State planning)

Critical Care - expand trauma capacity to meet local needs and potentially wider catchments; expand ED services and physical capacity with imaging service availability in ED; provide additional ESSU and PECC services; establish a Medical Assessment Unit/ Acute Assessment Unit (MAU/ AAU) including clinics, adjacent to ED; and expand ICU and HDU (supported by cardiac step-down beds and respiratory high acuity beds)

Drug Health - Continue provision of enhanced consultation and liaison services with extended hours, tobacco cessation; ambulatory detoxification supported by GP shared care; co-locate the Drug Health Service including the OTP clinic, counselling and court diversion programs within the hospital and align with other services; establish an integrated toxicology service and expand secondary NSP.

Gastroenterology and Liver - Fully commission the Stage 2 Phase 1 Special Endoscopy Unit (SEU) as a stand-alone unit utilising specialised equipment e.g. EUS, EBUS, improving timeliness, efficiency and cost of care; establish home wards with a high acuity pod for HDU step down patients; expand capacity for high level viral hepatitis therapy services; develop a centre of excellence in liver cancer; and develop a Centre of Excellence in Upper GIT sub-specialties of hepatic surgery, gastric surgery and complex biliary surgery

Laboratory Services - expand physical capacity and invest in new technology to meet increasing demand

Medical Imaging - extend imaging support via MRI (including planning MRI scanner), CT, PET, ultrasound, nuclear medicine; and investigate establishing a GMP compliant cyclotron and radiopharmaceutical production facility for molecular imaging and delivery of a translational research approach, particularly in oncology, cardiac disease, neurosciences and Alzheimer's disease

Mental Health - deliver additional mental health inpatient, ambulatory care and 24-hour receiving capacity, with inpatient services for older people, adolescents and people who are behaviourally intoxicated

Oral Health - Create a Hub of Excellence, focusing on Oral Surgery and Oral Medicine

Paediatrics and Neonatology - Develop paediatric assessment units and expand ambulatory and outpatient care in liaison with the Sydney Children's Hospital Network; and maintain an emergency paediatric surgery role

Surgical Specialties - enhance peri-operative medicine for people with multiple medical comorbidities admitted under surgical teams; expand operating theatre availability to support additional major and complex surgery workloads including emergency and urgent general surgery, jaw and facial trauma surgery, emergency and trauma orthopaedic surgery, caesarean section surgery, complex hand trauma, vascular surgery, cardiothoracic surgery, cancer resection, neurosurgery, head and neck surgery including endocrine, upper GIT surgery including hepatic, breast microvascular reconstruction surgery, urology particularly complex malignancies; establish a Surgical Ambulatory Care Unit (SACU) to initially provide under local anaesthetic some theatre surgeries e.g. estimated that 20% of head and neck surgery could be provided in SACU, noting provision of services requiring regional block anaesthesia within SACU is under clinical review and that some pain, dermatology, plastic surgery and ophthalmology services could also be provided in SACU; and provide greater access to digital and robotic surgery and emerging evidence-based technology

Women's Health - provide a tertiary maternity service and develop a birth centre, with expanded antenatal care; enhance NICU and SCN capacity; develop a District-wide infertility service; explore options for some gynaecology procedures to occur in outpatients rather than in operating theatres i.e. large loop excision of the transformation zone (LLETZ)



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