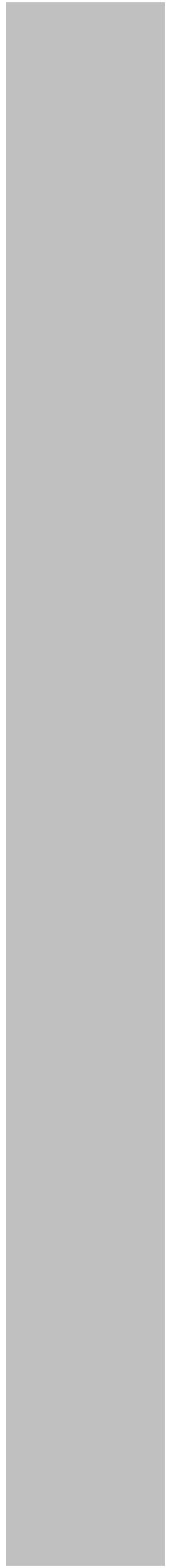


**CAMPBELLTOWN
HOSPITAL STAGE 2
REDEVELOPMENT
FUNCTIONAL DESIGN
BRIEF**

MARCH 2018



Document History

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PROJECT OUTLINE

1. PROJECT OUTLINE

In 2031, Campbelltown Hospital will be a tertiary referral hospital providing a broad range of medical, surgical, women's and children's subspecialties and mental health services, covering the Local Governments Areas (LGAs) with the Macarthur region (Campbelltown, Camden, and Wollondilly Shire) and beyond, including the Wingecarribee LGA. The hospital will be the acute hub for patients with complex care needs and major health problems in the Macarthur region, while providing high level support services to Bowral Hospital in Wingecarribee. Most services will be operating at role delineation level 6, with district-level services provided to its local catchment population.

The existing Campbelltown facilities are at capacity with significant increases in service demand projected by 2026/27 and beyond. The Stage 1 Redevelopment completed in 2016 included enhancements to the Emergency Department, maternity and paediatric services, increase in acute inpatient bed capacity, and two cardiac catheterisation laboratories. It collocated ambulatory, antenatal and allied health consulting rooms and treatment spaces and provided expanded pathology, clinical information spaces, loading dock and parking.

Campbelltown Hospital Stage 2 Redevelopment will enhance clinical services on the hospital campus, providing a range of expanded services to meet the needs of the growing communities of south-west Sydney. It will address capacity shortfalls for many key clinical and support services that were not addressed in Stage 1, including:

- a. Emergency Department capacity
- b. Mental Health Inpatient and Community Support Services
- c. Interventional suites
- d. Acute medicine, surgical, and maternity inpatient capacity
- e. Intensive care capacity
- f. Paediatric Services
- g. Ambulatory and Outpatient Services.

Increased clinical capability and self-sufficiency levels at Campbelltown Hospital and within the South Western Sydney Local Health District (SWSLHD) (the LHD thereafter), as expected at the completion of the redevelopment, means that more patients can receive care close to home without travelling to a hospital far from their community. This is in line with the NSW State Health Plan of delivering the 'the right care, in the right place, at the right time' through the initiatives of keeping people healthy, providing high quality clinical care, and delivering truly integrated care. The redevelopment will be informed by the NSW Better Value Health Care initiative which seeks to identify and implement opportunities for delivering better value care with particular focus on better value healthcare, strategic commissioning and contestability, and workforce capacity.

1.2. Interpretation

This Functional Design Brief (the brief hereafter) sets out the functional design requirements of the Stage 2 Redevelopment of Campbelltown Hospital. Other requirements for the redevelopment are outside the scope of the brief. The brief is written to enable a traditional design and construction procurement method.





It must be noted that the functional relationships and space requirements identified within the brief are based on:

- a. The projected capacity requirements to 2026/27 as provided by the LHD.
- b. New models of care, which will be informed by further detailed service and workforce planning and analysis of the recurrent cost implications of the proposed models.

1.3. Classifications and Definitions

External and internal functional relationship diagrams are displayed throughout the brief. The classifications and associated definitions are outlined in the table below.

Table 1 Functional Relationship Classifications and Definitions

Classification	Definition
Immediate Access 	Being the shortest direct, horizontal route. The route must be an unimpeded route. Door to door travel time between the two areas or services identified as having an 'immediate' functional relationship.
Direct Access 	Being a direct horizontal or vertical route. The route must be an unimpeded route. Door to door travel time between the two areas or services identified as having a 'direct' functional relationship must not exceed two minutes and there must be minimal corner turns between the two areas or services.
Ready Access 	Being a direct horizontal or vertical route. Door to door travel time between the two areas or services identified as having a 'ready' functional relationship must not exceed five minutes.
Routine Access 	Being a direct horizontal or vertical route. Door to door travel time between the two areas or services identified as having an 'easy' functional relationship must not exceed ten minutes.

1.4. Definitions and Acronyms

Table 2 Definitions and Acronyms

Term	Meaning
ATSI	Aboriginal and Torres Strait Islander People
ACU	Acute Cardiac Unit - Provides close monitoring and high dependency care for a variety of high acuity cardiac conditions.
ASU	Acute Surgical Unit - A consultant driven, independent unit that manages all acute general surgical admission.
ACAT	Aged Care Assessment Team - Specialist multidisciplinary geriatric/aged care teams in hospitals and community settings to address the need for comprehensive holistic management approaches to the complex and interrelated medical, functional, mental health, cognitive and social needs of frail, older people.
Ambulatory Care	Provision of healthcare services on a same day basis on the hospital campus integrated with acute care services. Can include patients of outpatient clinics, medical day units.
ACC	Ambulatory Care Centre - The facility where ambulatory care services are provided, including community health, outpatient services, allied health services and medical day only services.
AushFG	Australasian Health Facility Guidelines - An initiative of the Australasian Health Infrastructure Alliance (AHIA) to enable planners and designers of health facilities throughout Australasia to use a common set of guidelines and specifications for the base elements of health facilities.
Bariatric Medicine	The branch of medicine that deals with causes, prevention, and treatment of obesity. Bariatric patients refer to patients who fits two or more of the following criteria: Weighs ≥ 120 kgs; BMI (Body Mass Index) ≥ 35 ; Seated hip width >20 " (51 cms).
Birth Suite	Rooms equipped for labour, delivery and recovery for mothers giving birth.

Term	Meaning
BMS	Building Management System - A computer-based control system that controls and monitors the building's mechanical and electrical equipment such as ventilation, lighting, power, fire and security systems.
CAU	Cancer Assessment Unit - A unit within the Cancer Therapy Centre that provides rapid access for patients of the service that require urgent assessment, management and symptom control.
CSSD	Central Sterilising Services Department - Processes reusable equipment through inspection of equipment, cleaning, packaging and the sterilising process.
Civil Secure Unit	A civil secure mental health inpatient unit that provides long term rehabilitation in a therapeutic, secure environment.
Close Observation Unit	A specially staffed and equipped area of a hospital that provides an intermediate level of care between intensive care and general unit care.
Community Health Services	A range of community based prevention, early intervention, assessment, treatment, health maintenance and continuing care services delivered by a variety of providers.
CPTED	Crime Prevention Through Environmental Design - A multidisciplinary approach to deterring criminal behaviour through environmental design.
CALD	Culturally and Linguistically Diverse - A broad concept and encompasses the differences that exist between people, such as language, dress, traditions, food, societal structures, art and religion.
DoSA	Day of Surgery Admission - The process whereby patients are admitted to hospital and have surgery on the same day.
ED	Emergency Department
ESSU	Emergency Short Stay Unit - Inpatient unit managed by Emergency Department staff that is designated and designed for the short term (generally up to 24 hours) treatment, observation, assessment and reassessment of patients initially triaged and assessed in the Emergency Department.
Environmental Services	Refers to cleaning, linen and waste services.
The Facility/The Facilities	A generic term referring to a complex of buildings, structures, roads and associated equipment such as a hospital or health care facility that represents a single management unit for financial, operational maintenance or other purposes within the Campbelltown Hospital campus.
Full Time Equivalent (FTE)	Number of full-time staff it would take to fulfil the requirements of the position, area, or department referenced.
Functional Design Brief (FDB)	A description of the functions to be accommodated and the relationships between functions for a proposed capital project.
High Dependency Care	Care for people who need more intensive observation, treatment and nursing care than is possible in a general unit but slightly less than that given in intensive care.
High Volume Short Stay Unit (HVSSU)	Surgical unit that manages planned surgery/procedures requiring admission up to 72 hours.
Hospital in The Home (HiTH)	Delivers selected types of patient-centred multidisciplinary acute care to suitable, consenting patients at their home or clinic setting as an alternative to inpatient (hospital) care.
Information Management and Technology (IM&T)	All technological resources and how they are managed in accordance with needs and priorities.

Term	Meaning
Inpatient Units	Includes inpatient medical units, inpatient surgical units, Women's Health Inpatient Units, paediatric inpatient units, rehabilitation unit, mental health unit, intensive care unit, special care nursery, or any combination of these as the context requires.
Medical Assessment Unit (MAU)	Specifically designed to improve the coordination and quality of care for patients, increase efficiency in inpatient management and ultimately, assist with improving patient flow across the hospital. It provides assessment, care and treatment for unplanned patients for a designated period (usually 48 hours) prior to transfer to a medical unit or home where appropriate.
Model of Care	A description of how care is managed and organised; the model of care provides the clinical and organisational framework for the service.
New Ways of Working (NWOW)	An approach to engaging staff in creating flexible, collaborative and creative activity-based workplaces.
Outpatients	Clinical services delivered to non-admitted patients.
Palliative Care in The Home (PiTH)	Services that provide palliative and end of life care in the home or a Residential Aged Care Facility.
Patient-centred Care	The definition adopted by the Australian Commission on Safety and Quality in Health Care defines it as an innovative approach to the planning, delivery, and evaluation of health care that is grounded in mutually beneficial partnerships among health care providers, patients, and families.
Post Anaesthetic Care Unit (PACU)	The unit where patients recover from anaesthesia post-surgery before returning to the relevant surgical unit.
Primary Health Network	Primary health care refers to universally accessible, generalist services (e.g. General Practice, community / early childhood nursing services) that address the health needs of individuals, families and communities across the life cycle.
Psychiatric Emergency Care Centre (PECC)	A discrete short stay unit collocated with the Emergency Department for the management of patients presenting with low to moderate acuity mental health problems.
Rehabilitation in The Home (RiTH)	Services that provide rehabilitation therapy in the home or a Residential Aged Care Facility.
Role Delineation	The NSW Health Guide to Role Delineation of Clinical Services (2016) provides a framework that describes the minimum support services, workforce and other requirements for clinical services to be delivered safely. It delineates the level of clinical services, not hospitals or health facilities as a whole.
Special Care Nursery	A unit that provides care for sick and pre-term babies.
South Western Sydney Local Health District (SWSLHD)	The District is a network of acute, subacute, and community health facilities. Acute facilities include Bankstown-Lidcombe, Bowral, Camden, Campbelltown, Fairfield and Liverpool Hospitals.
Surgical Assessment Unit (SAU)	A short stay surgical inpatient unit that provides access to rapid surgical assessment, diagnosis and treatment for adults with non-critical, undifferentiated surgical conditions.
Telehealth	Delivery of health-related services and information via telecommunications technologies.
Telemedicine	Use of telecommunications technology for medical diagnosis and patient care when the provider and client are separated by distance. Telemedicine includes pathology, radiology, and patient consultation from a distance.

Term	Meaning
Tertiary Services	Specialised services at a major hospital with a role delineation level six usually associated with teaching and research functions.

1.5. Planning Principles

The following principles apply to the overall planning and design:

- a. A patient-centred environment with respect to patients' privacy, dignity, comfort, and their overall experience and satisfaction.
- b. Separation of flows between patients, the public, and staff/goods.
- c. Operational efficiency, including:
 - i. minimising recurrent building costs, including maintenance
 - ii. reducing travel distances for staff and ensure efficient patient flows
 - iii. reducing the demand on non-renewable energy resources and optimise energy savings.
- d. Location of services and infrastructure that:
 - i. supports models of care and service delivery to minimise duplications
 - ii. reduces travel times for both staff and patients.
- e. Patient and staff safety and wellbeing - minimising the risk of infection, injury, accident and damage through design, finishes and detailing.
- f. Infection prevention and control strategies throughout the facility that are consistent with national guidelines, including the availability of hand gels, ready access to personal protective equipment, attention to finishes.
- g. Acoustic and vibration treatments to provide quietness and confidentiality in appropriate areas and to minimise the impact on patient comfort from noises of helipad, plant and rail line.
- h. Compliance with federal and state work health and safety legislation, policies and guidelines.
- i. Flexibility within the building to adapt to changes in service provision including supporting current and future models of care and models of service delivery, changes in demand and staffing profiles.
- j. An unambiguous and intuitive external and internal wayfinding strategy that meets NSW Health Standards.
- k. Appropriate outdoor space and green space for all users of the hospital.
- l. Strategically located and centralised staff zones including education and training facilities, office accommodation, staff dining room, rest and change facilities.
- m. A pneumatic tube system will implemented for pathology and pharmacy services.
- n. The same rights, choices and opportunities for people with disabilities and impairments as others in the community.
- o. Buildings and spaces that are accepted by all ethnic and cultural groups with the provision of culturally respectful places to support cultural gatherings.
- p. A built environment that contributes to the provision of a safe environment for patients, staff and visitors to the facility.
- q. An elder-friendly environment that ensures that gradients are minimised, way finding highly visible, parking for wheelchairs and mobility scooters is available, and that the environment is dementia friendly. Consideration must be given to seating at regular intervals for the elderly and disabled patients traversing throughout the facility.
- r. Falls prevention strategies throughout the facility including glare minimisation, observation of higher risk patients, gradients complying with relevant codes and standards, stairs that are uniform, non-slip and clearly visible, stable furniture and clear, non-slip surfaces throughout the facility.
- s. Capability to manage health emergencies and health incidents in line with NSW Health policies. This includes minimising the risk to the facility in the event of a disaster, capacity to continue to deliver core services, capacity for surges of casualty numbers and secure storage for disaster response equipment.
- t. Natural light is essential in all overnight patient care areas and preferable in other patient care areas.

- u. The facility design will provide a breastfeeding friendly environment and support for mothers to breastfeed. The principles of the Baby Friendly Health Initiative will be followed.
- v. Advances in technology (e.g. transition to Wi-Fi) may alter the need for data points and access to fixed computers.
- w. Technological advances related to medication management may have space and design implications and will be considered in all areas where medications will be required.

FACILITY-WIDE APPROACHES AND POLICIES

2. FACILITY-WIDE DESIGN PRINCIPLES

2.1. Patient-Centred Care

2.1.1. Patient-Centred Environment

Wherever patients access services or receive care, the environment should be welcoming, engaging and sensitive to the specific needs of the patients. Such an environment should have the following elements to support patient-centred care:

- a. Access to private space for discussions between patients and staff.
- b. Facilitate patient's participation in determining care:
 - i. during bedside handover
 - ii. during case conferencing with other health professionals.
- c. Areas suitable for gatherings of family and friends.
- d. Access for patients to outdoor and indoor areas.
- e. Ready access to information via patient terminal/entertainment system, internet kiosks in public and waiting areas, with links hospital and community services.

2.1.2. Elder-Friendly Environment

An elder-friendly approach applies to patients as well as their family, staff and visitors. Elder-friendly initiatives must be considered in all aspects of the design to ensure that the safety, comfort, security and considered needs of the aging and elderly are well provided.

- a. Gradients from drop-off points to entry must not exceed falls of 1 in 12.
- b. Way finding will be intuitive and highly visible.
- c. Sheltered seating must be provided in taxi and vehicle drop-off points.
- d. Seating should be provided where appropriate every 15 metres along the travel routes.
- e. The design will incorporate the 'Key Principles for Improving Healthcare Environments for People with Dementia' (ACI Aged Care Network, 2014). The environment should allow patients experiencing behavioural and psychological symptoms of dementia to freely mobilise in a safe, secure and clinically appropriate space.
- f. Parking for mobility scooters, wheelchairs and other mobility aids should be made available within the main entry, rehabilitation, Emergency Department, and Ambulatory Care Department.
- g. A public amenity area for carers should incorporate facilities for sanitary needs, change facilities and access to an accessible shower if required.
- h. Inpatient units must include handrails in corridors, bathrooms and patient rooms to encourage safe movement, and colours that highlight contrast between edges of floors, doors and handrails.
- i. Indirect ambient lighting should be provided to avoid glare against signs and flooring.
- j. Staff call points in the shower must be accessible from floor and standing heights.

2.1.3. Cultural Considerations

- a. Cultural differences will be recognised and respected. Clinical spaces will reflect diverse cultural, linguistic, and spiritual needs of patients, carers, and families, including a specific focus on the needs of people from culturally and linguistically diverse populations and Aboriginal and Torres Strait Islander peoples.
- b. The facility will include provision of appropriate spaces that support specific cultural practices.
- c. The Aboriginal Health Impact Statement (PD2017_004) issued by NSW Health aims to ensure the health needs and interests of Aboriginal people are incorporated in the development of new and revised health policies, programs and

strategies. Under this policy, the Campbelltown Redevelopment Project must help ensure that the diverse health needs of Aboriginal people are respected and supported.

2.1.4. Carers and People with Disabilities

The Principles informing how SWSLHD staff will care for and work with people with disability and carers are founded on the NSW Health CORE values of Collaboration, Openness, Respect and Empowerment as well as the principles in the NSW Health Disability Inclusion Plan 2016 – 2019, the NSW Carers Strategy 2014-2019, and the SWSLHD Transforming Your Experience Strategy.

SWSLHD will embed a culture of person-centred care which places people with disability, their carers and families at the centre of decision-making regarding their care to ensure that their rights to independence, choice, control and inclusion are respected and upheld. Such design will take into consideration:

- a. Ease of access to information to ensure all people are well informed about the facility, care and services they can expect, including mindfulness of the design of way finding and hospital information for vision or hearing impaired users
- b. An environment that ensures all reasonable adjustments are made to support participation and consumer safety for consumers as well as staff with a disability. Examples include adjustable desks, nurse call buttons with adjustable and easy to reach positions.
- c. Participation, communication and engagement throughout the design process to elevate the voices of carers and people with a disability.
- d. Ease of access to private, public and non-for-profit sectors to achieve integrated care.
- e. The needs of diverse and vulnerable communities including hidden carers, people with a disability, younger populations, people from culturally and linguistically diverse (CALD) backgrounds including refugees and Aboriginal and Torres Strait Islander peoples and people who identify as lesbian, gay, bi-sexual, transgender or intersex.
- f. An environment which supports inclusive culture for patients, carers and visitors, including physical space which allows wheelchairs and other access equipment by the bedside.
- g. Building realistic, sustainable systems and services which are open and responsive to change.

2.1.5. Age Integrated Design

- a. Campbelltown Hospital proposed operation includes the integration of paediatric, adolescent and adult services. As such, design will facilitate the seamless and considerate transition from paediatric to adolescent to adult services throughout the patient journey.
- b. Flexible design that is comforting and welcoming to both adults and adolescents through the use of colour and finishings will be required throughout the facility, and will improve upon the physical podding of treatment spaces which will allow age-appropriate cohorting of patients.
- c. In support with patient booking/admissions technology, the integration of waiting and reception areas to campus facilities, retail spaces, and outdoor spaces may also be used to encourage natural and comfortable separation of paediatric and adult spaces, while allowing a safe and gradual transition between them.

2.2. Service and Staff Integration

- a. Integration of all services will occur wherever possible with the zoning of areas into ambulatory and 24 hours zones.
- b. Integration across and between services will occur to ensure sharing of support and administrative functions across all areas. Where detailed, integration of waiting and reception areas will also occur.
- c. Integration of administrative functions of the facility will also be included. Staff spaces will preferably be shared while accessible to clinical environments and will be designed in adherence with guidelines with a focus to maintain the varying functionalities of staff work spaces and activities.
- d. An external environment will be provided to allow integration of internal and external spaces and sharing of these spaces between groups.
- e. Integration with public transport and other social infrastructure will be facilitated.

2.3. Clinical Support Services

- a. Pharmacy
 - i. Medications will be stored in accordance with NSW Health and statutory requirements. Drugs that require cold storage and dangerous drugs (Schedule 8 and 4D) will be stored in accordance with the NSW Poisons and Therapeutic Goods Regulation
 - ii. All medication storage including vaccines and anti-venom will continue as per the current facility-wide processes
 - iii. Any patient medications brought in on admission will be stored in accordance with policy guidelines
 - iv. An automated dispensing system is proposed to be placed in the Emergency Department, Intensive Care Unit .Medication management systems for all other units will be determined as part of overall hospital strategy
 - v. Pneumatic tube system delivery of allowed medications will be utilised across the hospital
 - vi. Every patient's medication profile and treatment will be reviewed by a unit based clinical pharmacist, and patients will receive medication counselling prior to discharge.
- b. Pathology
 - i. Appropriate samples will be delivered to pathology via a pneumatic tube system
 - ii. Further detail is to be confirmed from pathology consultation regarding point of care testing devices, technician and work space requirements, and future innovations in paperless ordering and barcoding.

2.4. Technology

- a. Information management and technology services will comply with the NSW Framework for New Health Technologies and Specialised Services (GL2017_020) and the following approaches:
 - i. a consistent standard of information management and technology coverage across the state and LHDs,
 - ii. a coordinated approach to information management and technology system development, deployment and training,
 - iii. enables clinicians and managers to focus on the core business of providing patient care,
 - iv. more rapid deployment of reliable information technology systems across districts.
- b. Clinical information systems, business processes and corporate information systems, and information technology systems infrastructure will be provided. Systems are to provide digital, and wireless, medical imaging processing, reporting and storage capability (PACS / RIS) will be incorporated into campus wide strategies. Technical services for maintenance and operational support of the information technology system will be provided centrally.
- c. A range of clinical and administrative applications will be provided under New South Wales Health corporate initiatives.
- d. Design will assume a wireless, fast, and accessible service with improved communication between systems.
- e. A server room must be provided to house servers required to operate the building and other infrastructure, clinical services, clinical support, and non-clinical services to be specified in the ICT Strategy.
- f. The information management and technology system must support staff to deliver care across a range of settings and clinical environments both internally and externally. This will be in the form of fast, wireless connectivity across all units for patients, staff and visitors.
- g. The following information technologies must be available for the delivery and management of service provision across the campus:
 - i. all meeting / education rooms will be designed with capacity for video and teleconferencing, access to journey boards and ability to easily project and share imaging and other clinical information for collaboration, education, research and interpreter services
 - ii. an integrated digital network for nurse call, staff, and public assist functions
 - iii. an integrated security system
 - iv. an integrated network for patient entertainment systems
 - v. pneumatic tube system for pathology and pharmacy services
 - vi. radio frequency identification active and passive tracking systems potentially for high value / critical equipment
 - vii. integrated telephone and communications systems

- viii. telehealth and telemedicine facilities for collaboration, education and research, and patient care delivery across the district
- ix. data network providing suitable data rates,
- x. wireless network
- xi. integrated messaging system.

2.5. Flows

2.5.1. Patient Flows

The following principles apply to the facility-wide patient flows:

- a. Waiting times and queuing are minimised.
- b. Patient and public access do not disrupt workflow of clinical and operational staff.
- c. Waiting areas are appropriately located and supervised, without compromising the privacy of information (e.g. immediately adjacent to reception or information points).
- d. There are separate patient and public flows in all clinical units and during transit between clinical units, separation of patient and public flows is preferred.
- e. Priority functional relationships for critical or high volume flows noted in the functional relationship matrix should be achieved.
- f. Patients or public do not have access to any non-designated areas and pathways
- g. Flows should minimise travel distances during patient transfers
- h. vertical priority access between high acuity areas is to be achieved.
- i. Where possible, flows for paediatric and adult patients should be separated.
- j. A non-public or back-of-house pathway for the deceased is to be included.
- k. Flows from the helipad should bedirect access to the facility from helipad

2.5.2. Staff and Service Flows

Staff flow principles are as follows:

- a. The design must provide staff access through public entrances and through dedicated staff access points controlled by swipe card technology. A staff entry separate from the general public entry should be provided to all clinical areas where possible.
- b. A dedicated after-hours entry for staff will be required for the whole facility. Casual and agency staff must be able to easily access the After Hours Nurse Manager's office after-hours.
- c. After-hours areas include clinical areas operating 24 hours, 7 days a week, After Hours Nurse Manager's office, staff amenities, car park, and bike lockers. Staff will have access to clinical and non-clinical areas based on need and designated level of access.
- d. There must be secure access to after-hours parking for staff. The design must facilitate safe passage from car parking to staff entrances at all hours.

Goods and waste management service flows will avoid unnecessary travel through clinical areas. Flow principles are as follows:

- a. All goods will be received on the loading dock, with some exceptions such as deliveries after-hours.
- b. Vehicle access to the loading dock must be capable of being secured. Secure access for goods awaiting distribution from the dock will be required.
- c. Goods will be delivered throughout the facility via clean pathways separate from the public and patients. A dedicated goods lift(s) must be provided for the delivery of goods, food and clean linen and removal of waste, dirty linen and food return.

- d. Access to goods delivery pathways will only be given to hospital and district staff and authorised visitors.
- e. Dirty and clean flows are separated for the Perioperative Unit and the Central Sterilising Service is provided with a peripheral area for the arrival and unpacking of goods.

2.6. Security

2.6.1. Safety And Security

- a. Security services will be provided by the Security Service.
- b. The Security Service will comply with the NSW legislation, policy and guidelines as well as the Australasian Health Facility Guidelines – Part C, incorporating the Crime Prevention through Environmental Design principles.
- c. The Security Service will include the following activities:
 - i. patrolling, protecting, watching or guarding any property or person
 - ii. response to emergency situations
 - iii. active monitoring of CCTV, recording and retrieving surveillance information
 - iv. installing, maintaining, repairing or servicing security equipment (outsourced)
 - v. providing advice in relation to security equipment, security methods or principles
 - vi. an activity, or class of activities, that is connected with security or the protection of persons or property that is prescribed by the regulations
 - vii. traffic control
 - viii. fire safety control and training
 - ix. providing training or instruction in relation to the any of the above activities.
- d. The built form, urban integration and landscaping should contribute to a safe and secure environment through the use of Crime Prevention Through Environmental Design principles.
- e. Hazard identification and risk control strategies are priorities in areas of increased likelihood of security incidents.
- f. Control of access to all building areas must be centralised using networked electronic systems. Security staff are responsible for providing and managing proximity access cards.

2.6.2. Main Entry

- a. The main entry must be welcoming and culturally sensitive, with a sense of place and identity as well as capability of efficiently receiving and directing high volumes of people. The main entry must have 'invisible' security as far as practicable. Main entry reception must be able to be secured after-hours and no unauthorised access is allowed to any department on the same level or on any other levels.
- b. The main entry door to Campbelltown Hospital will reflect overarching operational processes.
- c. Concierge function may be considered to support whole of campus operations. Assistance with way finding may be supported by volunteers.
- d. Consideration of an after-hours entry for women in labour will be required so that they are not required to present to the Emergency Department to obtain entry to birth suite/maternity services.
- e. Supervision of access to and from the main entry and all activities and functions within the area, including commercial spaces, will be managed jointly by administrative and security staff.
- f. Security of the main entry will be provided by the Security Department with some physical presence from patrols and CCTV.
- g. An alternative, electronically controlled entry that is separated from the main entry will be provided to staff arriving and leaving the hospital.
- h. There will be direct access to public car parking, drop-off and pick-up zone, taxi ranks and bus stops.
- i. No goods deliveries will be made or accepted via the main entry.
- j. Commercial vendors will have access to their spaces during hours of operation.

2.6.3. Public Access

- a. Public access will be through the main entrance.
- b. After-hours access will be from 10:00pm to 6:00am and only via the entrance adjacent to the Emergency Department All external doors and access points must be capable of being closed and locked after-hours.
- c. The design must facilitate and control after-hours access by authorised persons through systems that are linked to staff bases. Staff must control entry and be able to verify the identity of the person prior to entry.
- d. Hours for visitors will be designated for each clinical inpatient department with the overarching principle to support 24/7 access for patients and visitors.. Visitors will make arrangements with the Nurse Unit Manager of the department for after-hours access. A security escort may be required for visiting after-hours.
- e. All inpatient units will be locked after-hours with access monitored and controlled locally by the inpatient unit staff as well as centrally by the Security Service.

2.6.4. Staff Access

- a. All access to staff-only areas will be controlled electronically through smartcard technology which is centrally controlled by the Security Service.
- b. Design must provide access for staff through public entrances and through dedicated staff access points. A separate staff entry away from public view should be provided for all after-hours rostered staff.
- c. Design should allow for casual and agency nursing staff to access the facility after-hours and be within close proximity to the After Hours Nurse Manager's and the flow team's offices.
- d. Areas that will be accessible by staff after-hours include staff amenities (including staff lounge/dining room, car park and bike lockers).
- e. Staff will have access to clinical and non-clinical areas based on needs.
- f. Design must provide for safe passage from car park to the staff entrance at all hours. There must be secure after-hours parking for on call staff.
- g. Staff will require secure access to the staff car park after-hours.
- h. Medical Emergency Team requires significant access and 'emergency access' function on the lifts.

2.6.5. After-Hours Access

- a. After-hours access is defined as 10:00pm to 6:00am.
- b. After-hours movement throughout the campus, where possible, will be restricted to appropriately authorised staff which will be clearly identified by Wayfinding (adjacent to/within Main Hospital Entrance)
- c. Public and visitor access after-hours is restricted to a designated control point, adjacent to the main hospital entrance.
- d. Design must enable restriction and control of after-hours access to and from individual departments, access to and movement via vertical transportation, and between lift lobbies (TBC) and department entrances.
- e. Effective wayfinding must assist the public once authorised or supervised, to travel from after-hours entrance to inpatient units.
- f. Commercial spaces (where agreed) may require after-hours access depending on the terms of lease.
- g. Technology solutions will be considered to enable after-hours access and ease of movement for authorised visitors.

3. OPERATIONAL POLICIES AND PRINCIPLES

3.1. Admission, Discharge and Patient Transfer

All admissions and discharges will be in accordance with the approved operational processes within the facility and will be designed to support integrated service delivery. All patients will be admitted and discharged with a whole of facility management process.

3.1.1. Planned Admissions

- a. All planned admissions will be managed by the Patient Flow Unit.
- b. Future plans will be developed to enable all elective or planned surgical and medical patients to be referred for admission using an electronic referral for admission form and will be pre-admitted electronically.
- c. It is proposed that all planned admissions will have the ability to check-in/complete paperwork for their admission online.
- d. An electronic kiosk will be available to allow patients to self check-in on arrival to the hospital for their admission or outpatient appointment. An automated system will notify the patient when the relevant service is ready to see them.
- e. It is proposed that all planned admissions will receive a pre-admission package containing admission specific documents including those required for completion by the patient.
- f. Elective surgical and procedural admissions will present to the perioperative unit with the exception of a small number of cases that require admission prior to the day of surgery due to clinical needs.
- g. Elective surgical admissions will be streamed from the main admissions area to the surgical admission unit which will be adjacent to the High Volume Short Stay Unit.
- h. Patients being referred to a specialist from a general practitioner for admission can be admitted via the Emergency Department following assessment in the Emergency Department and liaison with the Patient Flow Unit, or directly to the unit if approved by the admitting specialist, the Medical Assessment Unit, or the Surgical Assessment Unit.
- i. Planned day medical admissions will be admitted to the Day Medical Unit.
- j. Direct admissions to the inpatient or short stay areas will be organised by the admitting specialist in consultation with the Patient Flow Unit.
- k. Hospital in The Home admissions are undertaken by the Hospital in The Home service.

3.1.2. Unplanned Admissions

- a. Unplanned admissions will be accepted from the Emergency Department or via Hospital in the Home processes as appropriate
- b. Unplanned surgical admissions referred from visiting specialist medical officer's rooms or seen by staff specialists in ambulatory areas may be admitted directly to the inpatient unit.
- c. Unplanned admissions referred by a general practitioner, with agreement of the admitting officer, will be seen in the Emergency Department prior to admission or directly to the short stay units.
- d. Pre-arranged inter-hospital patient transfers can be admitted directly to the inpatient unit.
- e. Mental health unplanned admissions will occur through the Emergency Department or directly via PECC Unit or via dedicated Mental Health access.

3.1.3. Patient Transfer

- a. Transfer into and out of the facility will occur on a planned, urgent and emergency basis.
- b. Patient transfers from other facilities will be accepted on a pre-arranged and urgent basis.
- c. Each clinical unit will have responsibilities for transfer and acceptance of patients who require advanced or specific interventions, procedures, or management.

3.1.4. Discharge

- a. On discharge, patients will have access to the Post-Acute Care Service / Hospital in The Home or the community nursing services.
- b. Protocol-based, nurse-initiated discharge will be in place in a number of units in line with whole of campus operational procedures.
- c. Discharge planning for all booked admissions will commence at pre-admission.

3.2. Amenities

3.2.1. Patient Amenities

- a. Relatives and visitors need direct access to drinking water food court and/or vending machines.
- b. The majority of toilets are to be unisex with disabled toilets providing baby and adult capable change areas. Nurse and duress alarms are to be in all patient toilets and as per Australasian Health Facility Guidelines for height.
- c. A multi-faith space will be provided with 24 hour access.
- d. Television entertainment (including patient information) will be required in the waiting and clinic patient rooms
- e. A play area is to be provided within the waiting areas where children are likely to be present such as the Emergency Department, paediatric and women's areas.
- f. A parenting room / breastfeeding room will be accessible This will allow families to have a breakout space away from the units and public spaces.
- g. Spaces will be provided to allow privacy for grieving relatives and carers. This will be culturally appropriate to suit the diverse needs of the population.
- h. A patient lounge area with access to a courtyard is desirable.
 - i. Arrival zones across the facility will have access to: a unique identity upon arrival and ready access to a staff member
 - ii. separate patient and public access points and flows
 - iii. waiting areas that are comfortable and welcoming to the friends and families of patients undergoing treatments
 - iv. a meeting / interview room located near the point of reception where there is provision with the Schedule of Accommodation.

Culturally and linguistically diverse patients and Aboriginal and Torres Strait Islander patients and their families are to be supported through way finding, waiting areas and public spaces.

3.2.2. Staff Amenities

- a. The design must assist staff to perform their tasks safely and efficiently in an appealing environment.
- b. The design must incorporate innovative approaches to staff respite throughout the internal and external environments of the facilities.
- c. The following key aspects of staff friendly working environments must be included:
 - i. a safe physical environment that is free of clutter and easy to navigate
 - ii. a design that supports the operational practices of staff within the facilities and does not hinder the provision of care and service
 - iii. easy access to materials and equipment required by staff to perform their tasks
 - iv. minimised travel distances
 - v. logically planned and organised spaces
 - vi. standardisation for repetition and familiarity
 - vii. acoustic treatments for clear communication and reduced noise interference from plant and engineering services
 - viii. specialised acoustic treatments and soft furnishings to elicit relaxation and comfort in staff rest areas
 - ix. safe storage of personal property, accessible from within the unit
 - x. natural light throughout the unit
 - xi. direct access to external views of nature are desirable.
 - xii. access to green space and areas for relaxation away from the unit
 - xiii. access to opportunistic learning spaces close to their unit.
- d. The location of any staff amenity must be convenient, logical and relative to its function. Staff amenities will include:
 - i. end of journey facilities
 - ii. staff rooms

- iii. combined public and staff commercial dining facilities
 - iv. on-call rooms
 - v. library
 - vi. internet kiosks
 - vii. staff property / locker bays
 - viii. staff change, showers and toilet facilities
 - ix. parenting rooms.
- e. Staff dining facilities must be provided away from the unit with the exception of those clinical units where staff may be required to return at short notice. These are detailed in the relevant departmental chapters of this Brief.

3.2.3. Workplace Design

- a. Workspaces including office accommodation will be provided on a demonstrated needs basis and support a range of workplace activities. The following drivers will support the planning and design phase:
- i. Staff responsibilities
 - ii. Visitor requirements (support personnel, volunteers and auxiliary)
 - iii. Confidentiality/Privacy
 - iv. Clusters/Mix of office types
 - v. Functional Space
 - vi. Collaboration Zones
 - vii. External Relationships
 - viii. Accreditation Requirements
 - ix. Research and Clinical Trials
 - x. Consideration for future needs
 - xi. Governance/Team/Culture Management
 - xii. Transparency
 - xiii. Improve Team Morale/Outcomes/Communication
 - xiv. Staff Retention/Attraction
 - xv. Technology – Seamless/Intuitive/Connected within and across Networks
 - xvi. Diversity of Models (Traditional/New)
 - xvii. Security
- b. Staff who work across a number of locations across the campus will not be allocated with more than one dedicated office or workspace.
- c. Office support areas such as meeting rooms, beverage bays, reception points and staff toilets will be provided on a shared basis across units.
- d. Offices will not be used for activities involving patient consultation or treatment.

3.3. Infection Prevention and Control

3.3.1. Single Rooms

- a. Guidance on the requirement for isolation will be from the AusHFG - Part D: Infection Prevention and Control and the Standards Australia Handbook HB 260-2003, Hospital acquired infections - Engineering down the risk.
- b. The location and types of isolation rooms are set out in the Schedule of Accommodation.
- c. Isolation rooms when not required for care of infectious patients may be used for any inpatient after the room has been vacated and cleaned as per terminal cleaning requirements.
- d. Class S or Standard isolation rooms will be used for patients requiring a single room with dedicated ensuite and hand basin for contact or droplet isolation.

- e. All standard and special single bed rooms may function as Class S isolation rooms.
- f. Class N isolation rooms are for patients requiring a single room at negative pressure with dedicated ensuite and hand basin, with a non-shared anteroom or personal protective equipment bay, for patients who require airborne isolation. Patients with diseases including but not limited to certain classes of influenza, haemorrhagic fevers, and varicella will require a Class N isolation room.
- g. Class P isolation rooms are for patients requiring a single room at higher pressure than adjacent areas, with dedicated ensuite and hand basin, with an anteroom or personal protective equipment bay, for susceptible patients who are at risk of airborne transmission of infection e.g. bone marrow recipients and immunocompromised patients.
- h. Rooms should only be either class N or class P, not a combination of both.

3.3.2. Other

- a. Infection control will be managed within a framework of clinical governance.
- b. Infection control precautions will be universal and include the following:
 - i. hand washing and use of alcohol based hand rubs
 - ii. use of personal protective equipment
 - iii. appropriate use of rooms
 - iv. sharps disposal
 - v. appropriate finishes, furnishings and fittings
 - vi. protocols for handling clean and dirty linen
 - vii. cleaning - both routine and terminal
 - viii. separation of clean and dirty goods including storage and during transport
 - ix. management of rooms.
- c. Hand washing facilities
 - i. The service will comply with NSW Health: Infection Prevention and Control Policy PD2017_013
 - ii. All staff must be able to manage hand hygiene as set out in the Infection Prevention and Control Policy PD2017_013 and the NSW Infection and Prevention Control Practice Handbook
 - iii. Alcohol based hand rubs and hand washing facilities will be made available to all staff, patients and visitors throughout the campus as per the AusHFG Part D at the point of care.
- d. Personal protective equipment
 - i. Staff, patients and visitors will use personal protective equipment according to the level of precaution required. Personal protective equipment includes the following:
 - gloves
 - facial protections such as masks and eye protectors
 - gown or apron.
 - ii. Personal protective equipment will be available in all clinical departments in designated bays located according to the AusHFG Part D.
- e. Sharps disposal
 - i. Sharps are managed under NSW Health: Sharps Injuries - Prevention in the NSW Public Health System PD 2007_052 and all NSW Health policies as stated including NSW Health: Clinical and Related Waste Management for Health Services and NSW Health: Infection Prevention and Control Policy PD 2017_013.
 - ii. Work health and safety policy requires the elimination or control of all foreseeable risks which includes sharps injuries.
 - iii. Sharps injury prevention includes the management of disposal.
 - iv. Management of sharps disposal requires compliance with the following:
 - containers must be placed as close as practical to the point of use
 - sharps disposal containers must be capable of accommodating all sizes and quantities of sharps in use for the specific area
 - sharps disposal containers used on resuscitation and emergency equipment trolleys will be standardised

- sharps disposal containers will be mounted according to risk assessment and manufacturer's recommendations, the range of heights and reach of healthcare workers, and the nature of the location and procedure
 - there will be a secure and standardised method for securing and carrying sharps containers throughout the campus.
- f. Furnishings and finishes
- i. Furnishings and finishes will support a safety in design approach. Specifically, they will:
 - be consistent with principles of infection prevention and control
 - be vandal proof
 - be highly fire retardant
 - be durable and capable of sustained and repeated use
 - be able to be maintained according to the required cleaning and maintenance regime
 - be easily cleanable and not porous in patient waiting and treatment areas.
 - ii. All building materials will be safe from emission of harmful gases and will contribute to ecologically sustainable development throughout their lifecycles.

3.4. Provision of Non Clinical Support Services

3.4.1. Food Services

- a. Food services will be provided by HealthShare NSW and will provide food and beverages to:
 - i. Campbelltown and Camden inpatients and outpatients
 - ii. Limited internal event catering
 - iii. Community Health Services.
- b. HealthShare NSW services will manage the procurement of food and groceries through an electronic menu system.
- c. All new inpatient units will have access to a bedside electronic ordering system.
- d. Diet aides (menu monitors) will support the food services and will be located in a work space in close proximity to the central kitchen.
- e. The model for food production will be the purchase of outsourced chilled and frozen foods for regeneration / re-thermalisation in a central kitchen. The kitchen will also provide fresh short order cooking, special diet preparation (including vitamised or pureed foods and drinks), preparation of cold foods such as salads and sandwiches, and final preparation and presentation of meals. The meals will be delivered in insulated carts designed specifically for this purpose. The 'My Food Choice' model of service and delivery will be utilised. It is a new, more personalised way of serving meals in hospital in which patients are given a menu of hot meals at lunch and dinner. Some specific areas such as the mental health unit may receive hot and cold bulk food for individual plating at the inpatient unit level.
- f. Meals and sandwiches will be available for patients who missed the scheduled meal times.
- g. Mid meals will be provided for patients as required. Mid meals will be delivered from the central kitchen to the inpatient unit beverage room for distribution to the patients throughout the day and evening.
- h. Pre-packed special diet items produced offsite will also be provided.
- i. A formula room will prepare formula for babies and infants in a centralised location.
- j. Drinking water for patients will be provided in recyclable bottles with cups depending on the patient requirements.
- k. Space to store and charge the food delivery carts is to be provided in the central kitchen.
- l. Each inpatient unit will have a beverage bay with storage for mid meal items and for out-of-hours patient meals, dishwasher and microwave. Space will be required for parking and charging of two insulated food delivery meal carts (during meal times) and one mid meal food delivery cart.
- m. All patient trays will be collected and returned to the central kitchen by the appropriate HealthShare NSW staff.

- n. All cleaning will be done in the central kitchen. Any non-disposable dinnerware or cutlery used by patients will be stored in the pantry; any bulk food delivery or storage items, including serving utensils, will be returned to the central kitchen for cleaning and storage.
- o. Dinnerware and eating utensils will be recyclable.
- p. Commercial food outlets will be available for patients, staff, visitors and will provide event catering.
- q. Deliveries of food and consumables for the food service will be made to a dedicated clean loading dock with direct access to the central kitchen.
- r. Storage requirements in the central kitchen must include large cool rooms, freezers, dry store and equipment storage rooms.
- s. Food and waste will be disposed in the central kitchen via the food and waste pulper machine. The by-product of the food and waste pulper will be removed from the kitchen via a corridor outside the department to the waste hold area on the loading dock.

3.4.2. Supply Services

- a. The materials management service will be responsible for materials management including supply of goods and services, management of onsite logistics and loading docks and the movement of goods and materials around the campus.
- b. All loading docks for receipt of goods and stores based on just-in-time delivery.
- c. The model of service will enable the implementation of a lean, highly efficient supply chain to all parts of the campus, which aims to minimise cost while meeting the State targets for reduced greenhouse emissions and environmentally sustainable purchasing practices.
- d. Work practices will comply with Workplace Health and Safety legislation, policy and guidelines including Work Health and Safety: Better Practice Procedures PD 2013_050 issued by NSW Health.
- e. Goods and services will be procured by staff according to policy and through an electronic system managed by the materials management service.
- f. The materials management service will manage deliveries and redistribution of goods, equipment and supplies including management of the following:
 - i. loading dock and receipt of goods
 - ii. stores and supplies
 - iii. delivery of goods to departments
 - iv. equipment both new purchase and on loan
 - v. central sterilising service goods.
- g. Pharmacy stores are currently managed by pharmacy. Fluid policy and point of care delivery will be confirmed.
- h. Waste and linen are managed by the domestic services. Operational processes and design will be reviewed by the District to reflect the increased volume of disposable supplies and linen.
- i. An imprest system for supplies and consumables will be in place for all departments in addition to specialised orders for specific departments such as the Central Sterilising Services Department, operating theatres, pathology, pharmacy and medical imaging.
- j. A central equipment store will be provided for the management of hospital-wide clinical equipment such as intravenous pumps, syringe drivers, pressure relieving mattresses, beds, and cots.
- k. Goods and waste management service flows will avoid unnecessary travel through clinical areas. Flow principles are as follows:
 - i. all goods will be received on the loading dock. Vehicle accessing the loading dock must be capable of being secured. Secure access for goods awaiting distribution from the dock will be required
 - ii. goods will be delivered throughout the campus via clean pathways separate from the public and patients. Dedicated goods / staff lifts must be provided
 - iii. access to goods delivery pathways will only be given to hospital and district staff and authorised visitors (e.g. medical imaging technicians)

- iv. food service delivery must have dedicated clean access to the kitchen stores including cold stores
- v. all forms of waste and dirty linen will be collected from holding rooms and departments and must be removed via a dirty pathway.

3.4.3. Waste Services

- a. Management of waste internally is part of the service provided by environmental services, with the removal of waste from site managed by contractors.
- b. Waste management includes the collection, holding and dispatch of the main waste streams which include clinical, chemical, cytotoxic, recyclable, organic, liquid, sharps, and general waste. Clinical (includes infectious waste), cytotoxic, pharmaceutical, chemical and radioactive waste are classified as hazardous waste within the waste regulation. Radioactive waste is managed by the generating department.
- c. Within inpatient and clinical departments, waste disposal (with the exception of sharps disposal which will occur at point of use and cytotoxic waste which will only be available in certain areas) will occur in dirty utility rooms and will then be transferred to a central disposal holding area on each floor prior to being transferred at regular intervals to the appropriate holding area adjacent to the loading dock.
- d. Waste management staff will collect and replace waste bins and containers, and deliver them to designated bin holding areas or consolidate waste in compactus located at the loading dock.
- e. Recycling and other waste segregation will be done at the point of source e.g. inpatient unit, colour-coded bins. This segregation of waste will require an extensive receptacle system with holding spaces in the kitchen, kitchenettes, beverage bays, public areas, dirty utilities and disposal rooms and loading dock for the separation of waste.
- f. The waste management system will utilise 120 litre to 660 litre sized bins, which will be distributed in adequate numbers in all clinical and non-clinical departments. The bins will be taken on a regular daily basis to a holding area adjacent to the loading dock. Waste management staff will take bins to compactors, empty the bins, wash them in a bin washer and return them to a clean holding area adjacent to the loading dock.
- g. Clinical (otherwise known as contaminated) waste will require separate receptacles. Clinical waste may not be disposed of in the sewerage system, and will be managed in accordance with NSW Health policy and guidelines. Clinical waste includes:
 - i. sharps
 - ii. human tissue excluding hair, teeth and nails
 - iii. bulk body fluids and blood
 - iv. visibly blood stained body fluids and visibly blood stained disposable material and equipment
 - v. laboratory specimens and cultures.
- h. Waste area needs to include a holding area for clinical waste including sharps and cytotoxic waste, secure paper, paper/cardboard recycling, compactors for mixed recycling and waste, food waste and e-waste. Waste compactors will have the capacity for weighing / scaling.
- i. The waste area will allow for bin washing.
- j. Waste will be removed from the designated collection points by dedicated contractors.
- k. A freezer must be provided for the storage of human tissue whilst awaiting collection.
- l. A compactor located at the loading dock will be used for cardboard.
- m. Waste including compactors and pulping unit will be removed by contractors.
- n. Pharmaceutical waste will be disposed in accordance with NSW Health policy and guidelines.

3.4.4. Cleaning Services

- a. Cleaning services will be provided by the local health district staff and/or contractors as determined.
- b. The cleaning service must ensure that work practices do not interfere with the safety and comfort of patients, staff and visitors.
- c. The cleaning service will provide:
 - i. overall coordination and management of cleaning services

- ii. all routine scheduled cleaning
 - iii. ad hoc cleaning when required
 - iv. response to requests for cleaning human spills / waste in public spaces including hospital car park where a workplace health and safety issue may exist
 - v. correct segregation of waste, storage and disposal of waste. The increase in waste from item such as disposable linen within the operating and procedural areas will be taken into account when developing future waste management processes
 - vi. management of cleaning materials and chemicals
 - vii. monitoring of vermin.
- d. The cleaning of patient areas is the highest priority and will be scheduled during operational hours. The cleaning of non-clinical departments will be scheduled for after-hours.
 - e. Cleaner's rooms must be lockable and provided in all clinical and non-clinical departments to accommodate small quantities of cleaning agents and equipment including a sluice.
 - f. A central store will house bulk cleaning supplies and large cleaning equipment.
 - g. Commercial grade laundry machines and dryers must be provided for washing microfiber materials including mops.
 - h. Colour coding according to individual areas must be used for all reusable cleaning equipment to ensure that they are placed at the intended area. Area are coded as follows:
 - i. isolation areas – yellow
 - ii. toilets, bathrooms and dirty utility rooms – red
 - iii. food service and preparation areas – green
 - iv. general cleaning – blue
 - v. operating theatres – white.
 - i. The design of all food storage and preparation spaces, waste areas, voids and sub floors should enable efficient vermin and pest control and management, prevent them from establishing and congregating.

3.4.5. Linen Services

- a. Linen supply will be provided by HealthShare NSW.
- b. Storage, collection and exchange of all linen supply items are performed by the district staff.
- c. As a significant proportion of theatre linen will be disposable in the future appropriate waste management process are required.
- d. The linen service must comply with the NSW Health Infection Control Policy PD 2017_013 and Australian Standards for laundry practice and textiles for healthcare facilities and institutions.
- e. Linen will be supplied by a contractor to the back dock and then taken to the imprest after sorting at the dock.
- f. The model for linen supply will be based on imprest linen trolleys including trolley exchange to designated clinical units and departments on a daily or twice daily basis, Monday to Sunday.
- g. Clinical units that use small amounts of linen will be supplied from decanted stocks in the linen store.
- h. The Environmental Services Unit will manage the ordering, distribution and collection of patients' medical supplies, operating theatre bundles, scrubs, slide sheets, curtains and bed screens.
- i. A clean linen store adjacent to the loading dock will store items additional to imprest for emergency use and on demand requirements.
- j. The clean linen store will stock bed linen, inpatient unit linen, bed curtains and specialty items.
- k. Clean linen store will be required to have a post disaster capacity of 24 hours.
- l. Trolleys will be delivered and retrieved by the linen service contractor at the loading dock.
- m. Provision is to be made for the use of bar coding technology to record quantities of returned unused linen. This will be the responsibility of the contractor.

- n. Clean linen trolleys must be delivered from the loading dock via service lifts to each clinical unit or department.
- o. Used linen trolleys must be returned to the loading dock for collection by the contractor.
- p. Dirty linen will be left in linen skips at the point of care, which will then be taken to the dirty utility room or direct to the disposal room and placed in transfer carts. Transfer carts are then collected and taken to the loading dock.
- q. Linen which is wet, contaminated or heavily soiled will be placed in supplied plastic bags and put into a dirty linen bag.
- r. A coded system will be used for cytotoxic patient linen.
- s. Dirty linen will be collected several times daily, 365 days a year.
- t. The mental health unit will have laundry facilities for patient use with one to two washing machines and dryers.
- u. One patient and family accessible laundry with one washing machine and dryer must be provided in each of the public hospitals on campus.
- v. Staff uniforms will be supplied but not laundered by an external provider. This is ordered online and posted so there is no requirement for a fitting area.

3.4.6. Engineering Services

- a. Engineering services will be provided or contracted out by district staff.
- b. A small workshop and staff area will be required for engineering services staff.
- c. Within the design, access must be provided to all relevant parts of the facility to permit investigation, maintenance and repair to be carried out safely.
- d. Points of access must:
 - i. be located independently of occupied units
 - ii. not pose a risk to the operation of the facility
 - iii. not obstruct thoroughfares
 - iv. not create a hazard.
- e. Access via ceiling access panels is to be minimised.
- f. Access to valves, dampers and other controls must be located in non-clinical areas and away from sterile areas.
- g. Emergency isolation valves must be reachable without the use of a ladder.
- h. Isolation valves for plumbing and thermostatic mixing valves must be located below associated fixtures.
- i. External building envelope must provide access to equipment and means for its cleaning and maintenance.
- j. Surrounding landscaping must not impede access for cleaning the exterior of the buildings.
- k. Where ladders are to be used, there must be supporting and fixing provisions for safe usage.

3.4.7. Porterage

- a. Security will manage a porterage service to aid patients and clinical staff providing direct patient care such as patient transport, clinical equipment transfer and other related activities.
- b. Porterage services will be requested by clinical staff via an electronic task management and notification system.
- c. Porterage staff will be a mobile workforce, who will be required to assist throughout the facility during security responses.
- d. Porterage includes providing support to volunteers within the central admissions and transit lounge areas and responsible for assisting patients (and their luggage) to travel to inpatient units, birthing suite, the perioperative suite or to their vehicles on discharge.

3.5. Workplace Health and Safety

- a. The design must comply with the relevant Work Health and Safety legislation and quality standards, as a minimum requirement.

- b. The design must mitigate work health and safety risks through innovative approaches and considered planning to ensure the wellbeing and safety of the staff. Facilities must provide:
- i. equipment and technologies that minimise manual handling, including designing for future capacity within the structural elements of the buildings
 - ii. ergonomic storage systems and storage spaces
 - iii. corridor and doorway with appropriate widths for the activities of the unit/service
 - iv. standardisation of generic rooms
 - v. ergonomically designed workspaces
 - vi. materials and finishes that minimise slips, trips and falls
 - vii. appropriate floor resistance
 - viii. appropriate floor surfaces where staff are expected to be standing for long periods
 - ix. reduced travel distances for staff wherever practical
 - x. assurance that the storage, handling and disposal of hazardous materials are in accordance with relevant quality standards (including cytotoxic agents)
 - xi. features specific to radiation, laser and sharps safety in accordance with relevant quality standards.
- c. Primary consideration must be given to the following workplace health and safety issues when designing the work environment:
- i. number of staff involved
 - ii. security of staff and others
 - iii. intended purpose of an area
 - iv. working spaces
 - v. floor plan and layout
 - vi. floor surfaces and access ways, particularly in relation to disabled persons
 - vii. working surfaces
 - viii. lighting and temperature regulation
 - ix. storage areas
 - x. workload and work procedure
 - xi. potential service expansion
 - xii. manual handling and the use of equipment.
- d. Engineering strategies should be used to eliminate and minimise risks, particularly in high-risk spaces such as patient bathrooms, car parks, stairs, paediatric and mental health environments.
- e. Bariatric patients mobilise and manoeuvre differently and this must be factored into the planning of their environments. The design must include features that will facilitate the care of bariatric patients as well as the safety of the staff, including:
- i. access / egress and patient transport to, from and within facilities
 - ii. special bedrooms for bariatric care will have the structural capacity for ceiling mounted lifting and transferring hoists that are capable of safely moving patients up to 350kg
 - iii. patients over 350kg will be managed in differently
 - iv. the doors to the bedroom and ensuite must be double leaved with a minimum opening of 1500mm
 - v. there must be a clear circulation around the bed at a minimum of 1500mm
 - vi. mobile equipment bays must be provided for storing portable lifting hoists close to point of use
 - vii. specifications for specialised bariatric equipment should be factored into the planning of the spaces
 - viii. the weight capacity of specific fixtures within the patient bedroom should be sufficient to support the patient leaning or bracing
 - ix. all clinical units across all hospitals will require special accommodation for bariatric care
 - x. the needs of bariatric patients must be included in the planning for all medical imaging, perioperative, ambulatory care and community health services

- xi. corridor access between emergency, perioperative suite and medical imaging requires provision for a turning circle to be sized to manage bariatric beds
 - xii. ease of access to one of the gymnasiums for bariatric patients
 - xiii. all core lifts should be able to accommodate bariatric patients. At least one other lift should be capable of accommodating a bariatric bed and 6 staff
 - xiv. for the distribution of special rooms for bariatric patients refer to the inpatient chapter of the brief.
- f. Hazardous substances and dangerous goods will be used in many areas including cleaning, disinfection, laundering, medical imaging, maintenance, anaesthesia, and laboratory analysis. The design must contribute to the prevention of incidents associated with the use of hazardous substances and dangerous goods and to allow effective response to incidents if they do occur.
- g. Use of hazardous construction and finishing materials is to be avoided.

3.6. Inpatient Units - Design Criteria

- a. Bedroom types will comprise of:
- i. generic single bed and two bed rooms
 - ii. isolation rooms
 - iii. paediatric rooms
 - iv. mental health rooms
 - v. special rooms for obese and bariatric patients and patients requiring fully assisted care
 - vi. bedroom variations to suit specialised clinical needs and patient acuity.
- b. The ratio of single bed rooms for generic inpatient rooms is 60% (target).
- c. The distribution of specialties (i.e. home ward) throughout the facility is to be confirmed.

3.6.1 Principles

- d. Inpatient bedroom configurations and elements must be standardised to contribute to safe and efficient practice surrounding patient care and the patient experience.
- e. All bedrooms must have access to direct natural light and views of nature when lying in bed. Window size and shape should minimise glare particularly for elderly patients.
- f. The environment within all patient bedrooms must:
- i. assist patient recovery while providing for comfort, rest, and quietness
 - ii. reduce the incidence of hospital acquired infections through the appropriate separation of patients and the strategic location of hand wash basins
 - iii. reduce the risk of patient falls
 - iv. provide good visibility of the patient by staff passing in the corridor while still preserving patient privacy
 - v. support staff to provide care safely and undertake tasks efficiently.
- g. The net functional floor area must be maximised to facilitate:
- i. the use and manual handling of point of care technologies and equipment
 - ii. provide sufficient circulation space for a response team in the event of a medical emergency
 - iii. early mobilisation of the patient and the ability to position a recliner chair beside the bed
 - iv. treatments and therapies within the patient room
 - v. social interactions between the patient and visitors/carers, including furniture and finishing that would enable carers to stay overnight as appropriate.
- h. The arrangement within the bedroom must be logical and ordered to provide an unencumbered workspace for staff and to reduce the risk of falls for patients.
- i. Bedrooms must contain three zones:
- i. the patient zone
 - ii. the staff zone

- iii. the carer/family/visitor zone including potential to stay overnight.

3.6.2. Design Criteria - Single Rooms

The safe care principals underpinning single-bed rooms include:

- a. improved medication safety through noise and distraction reduction.
- b. enhanced infection control through minimising potential cross infection between patients sharing rooms, hand washing basins and ensuite facilities.
- c. improved functional space in the room and ensuite for therapies and treatments - reducing the will move the patient around the facility.
- d. improved patient privacy and dignity.
- e. increased patients' control of the environment - reducing stress and improving rest and sleep.
- f. increased privacy enabling staff handover conversations at the bedside and increased opportunity for patients to have greater involvement in their own care.
- g. facilitates family / carers to stay overnight to support and be involved in care delivery if appropriate.
- h. improved falls management and safety.
- i. night lighting to prevent falls.
- j. supports a dignified and compassionate death.
- k. provides maximum flexibility and efficiency in bed utilisation, reducing the number of patient transfers to manage gender mix, infection control, dying patients and 'unsettled' patients. Each transfer incurs a staff cost and increased risk of error.
- l. Specific design criteria include:
 - i. the briefing and components listed in the AusHFG for a single patient room are to be taken as the minimum requirement, noting that the 1:50 room layout serves as a guide only and should not limit innovative approaches
 - ii. all single bed rooms must be designed to provide standard isolation and contact precautions by staff with space for the storage of personal protective equipment
 - iii. same handed rooms are not mandated although recognised for improved acoustic control through the patient headwall and staff familiarity
 - iv. headwall configurations and medical service panels must be flexible to support capability for acuity-adaptable rooms
 - v. hand washing basins must be located in the direct line of sight of the patient and be near the room entry with an unimpeded route
 - vi. curtains for bed screening are not required however privacy screening must be provided
 - vii. integrated blinds on the internal and external walls must be included for bedrooms in clinical areas deemed at high risk for infection control
 - viii. window glazing and the viewing panels in entry doors are to provide visualisation of the patient by a staff member passing by
 - ix. a shelf or niche for the display of personal items must be provided to enable personalisation of the room
 - x. the distance between the bed and the ensuite is to be the shortest possible unobstructed route, fitted with grab rails along the way, with the toilet to be in the line of sight of the patient.

3.6.3. Design Criteria - Double Rooms

- a. The briefing and components listed in the AusHFG for a two bed patient room are to be taken as the minimum requirement, noting that the 1:50 room layout serves as a guide only and should not limit innovative approaches.
- b. In addition to the requirements, the following specifications must be met:
 - i. the clearance from the foot of the bed must allow for the unencumbered movement of the beds in and out of the room
 - ii. both beds should share a similar view to the outside
 - iii. full bed screen curtaining must be provided.

3.6.4. Design Criteria - Pods

- a. The following attributes apply to acute care pods located in general inpatient units utilised for the care of patients requiring close and consistent observation such as high acuity patients or cognitively impaired patients. Design components include:
 - i. maximise visibility in single bed rooms where possible
 - ii. maximise visibility in double bed rooms and consideration of a combined 2 x 2 bed room unit without a wall between the two units or visual ability between the two units
 - iii. for high acuity patients:
 - provide decentralised staff stations/monitoring bays close to the pod of rooms / beds
 - provide sufficient circulation space for a response team in the event of a medical emergency
 - maximise infection control through minimising potential cross infection between patients
 - maximise decentralised storage facilities close to the high dependency pod.
- b. For cognitively impaired patients:
 - locate the pod in a quiet section of the unit
 - facilitates family / carers to stay overnight to support and be involved in care delivery if appropriate
 - use design elements that assist cognitively impaired patients to remain safe and supported, such as distinctive coloured doors to indicate the location of the toilet, paint out other doors to detract attention, create a wanderers circuit utilising black lines on the floor to deter passage beyond a certain point.

3.7. Standard Rooms

3.7.1. List Of Standard Rooms

3.8. Infrastructure Capacity to 2026/27

3.8.1. Capacity Table

Table 3 Capacity Profile 2026/27

	Clinical Services Planning		Concept Design Option Capacity Profile (2026/27)			
	2017	2026/27	Existing	New	Refurb	Shell
Acute Services						
Emergency Department						
ED Short Stay Unit						
Medical Imaging (Modalities)						
Nuclear Medicine (Modalities)						
ICU						
Theatres and Procedure Rooms						
Interventional Radiology, Endovascular						
Cardiac Catheter Lab						
High Volume Short Stay (EDO / Overnight)						
High Volume Short Stay (DO)						
Surgical Day Only						
Paediatrics IPU						
Paediatrics - Day Only						
Paediatrics – PACs (Ambulatory)						
Paediatrics – Outpatient (Clinics)						
MH – PECC						
MH Adolescent						
MH Adult						
MH Adult Observation						
MH ICU						
MH Acute Youth						
Women’s Health – Maternity IPUs						
Women’s Health – Maternity (DO) (included in Maternity briefing)						
Birthing						
Special Care Nursery						
Women’s Health – Maternity-Outpatients / Antenatal						
Cancer - Medical Oncology						
Cancer – Linacs						
Cancer – Outpatients						
Accommodation						
Inpatient Unit – Medical						
Inpatient Unit – Surgical (Generic design, Home Wards TBC)						
Inpatient Unit – Generic Shell						
Medical – Day Only Unit						
Adult Outpatient – Med/Surg/Cancer/Women’s Health						
Clinical measurement (Modalities) (may be distributed)						
Renal – Satellite						
Renal - In-Centre						
Dental						

3.8.2. Adjacency Matrix

	Kitchen	Linen Services	Environmental Services	Supply Services	Intensive care Unit	Perioperative	CSSD	HVSSU	Interventional Radiology	Interventional Cardiology	MAU	SAU	Inpatient Medical Acute	Inpatient Surgical Acute	Mental Health Inpatient	PECC	Emergency Department	Clinical Investigations	Medical Imaging	Nuclear Medicine	Pharmacy	Pathology	Cancer Therapy Centre	Ambulatory Care and Outpatients	Women's Health Inpatient	Birthing Suites	Special Care Nursery	Paed Inpatient Acute	Paed Inpatient Short Stay	Paed Ambulatory	Paed Community Health	Administration	Security	Teaching/Research	Mortuary	External vehicular access	Parking	Helipad				
Kitchen	4	3	2									4	4				4								4													2				
Linen Services	4	4	2									4	4				4	4	4				4	4	4	4	4	4	4	4	4	4							2			
Environmental Services	3	4	2									4	4				4	4	4				4	4	4	4	4	4	4	4	4	4							2			
Supply Services	2	2	2																																					2		
Intensive Care Unit					2		2	2	2	2		2		3	3	1	3	2		4					4	3		3					4	4	4	3		4	1			
Perioperative					2	1	1	1	1	3	3		2	4		2		4	4	4	4	4	3	3	2	3	3	3	3	3			4	4	4	4	3	4	3			
CSSD					2	2	2	2	2	3	3	3	3	3	3	3	4	4					3	3	3	3	3	3	3	3	3	4			4	4	4	4	3	4		
HVSSU					2	1	1	2	2	2	3	3	3	3	3	2	3	4		4	4	4	4	3	3	4	3	3	3	3	3				4	4	4	4	3	4		
Interventional Radiology					2	3	1	2	2	3	3	3	3	3	3	2		2	3	4	4	4		3	3		3	3							4	4	4	4	4			
Interventional Cardiology					2	3	1	2	2	3	3	3	3	3	3	2		2	3	4	4	4		3	4		3	3							4	4	4	4	3			
MAU					3	4	3	3	3	3		4						3	3	3	3																					
SAU					3	4	3	3	3	3		4						3	3	3	3																					
Inpatient Medical Acute	4	4	4		3							4	4		2		3	3	3	2	3		2	3							3		4	4	4	4	3		4			
Inpatient Surgical Acute	4	4	4		2	4	2	2				2		4		2		2				2																				
Mental Health Inpatient	4	4	4		3	4	4	4				3	4		3	3		4	4	4	4		3												3			1	3			
PECC	4	4													3		3																				4		2			
Emergency Department	4	4	4		3	3	4	3	3	3	3	3	3	3	3	2				1		3	3		3	3		3	3				4	1	4	4	1	3	2			
Clinical Investigations	4	4	4		3	4		2	2			3							4																	4	4	4		4		
Medical Imaging					3	4		3	3	3	2	2	2	2	4	2	1	4		3	4		3	2	2		2	2	2	2				4	4	4			3			
Nuclear Medicine											3	3	3	3					3				4	4	3		3	3	4					4	4	4			4			
Pharmacy				2	4	4	4	4	4	4	3	3	3	3	4		3	4	4		4	4	4	2	4		4	4	4	3				4	4	4			4			
Pathology					4	4	4	4			4	4	4	4	4		3			4	4		4	4	2	4		4	4	4				4	4	4			4			
Cancer Therapy Centre	4	4			3	3	3	3				3					3	3	3	1	4		3														4		1	1		
Ambulatory Care and Outpatients	4	4			4	4	4	4	4	3	3	3	3	3	3		3	3	4	4	3	1	3		2	2								4	4	4		3	4			
Women's Health Inpatient Unit	4	4	4		3	4	3	4	4				4		4		3		3	4	4	4	3		3		1	1							4	4	4		4			
Birthing Suites	4	4			2	4	4										3								2		1								4	4	4	3	4			
Special Care Nursery	4	4			2	4	2										3	3	4	4		3	2	1		3								4	4	4	4	4	3			
Paed Inpatient Acute	4	4	4		3	3	4	3	4				3		3		3	3	4	4		3			3		2	2	2	4	4	4	4	4	4	4	4	3	4	3		
Paed Inpatient Short Stay	4	4	4		3	3	4	3	4					3		3		3	3	4	4		3			3		2	2	2	4	4	4	4	4	4	4	4	3	4	3	
Paed Ambulatory																	3	3	4	3			2				2	2	2	3	4	4	4	4	4	4			4		4	
Paed Community Health	4	4																																4	4	4	4			4		
Administration					4	4						4					4	4	4	4		4					4	4	4	4	4	4	4	4	4	4						
Security					4	4	4	4	4	4		4		3		1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4					2	
Teaching/Research					4	4		4	4	4		4				4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4						
Mortuary					3	4		4	4	4		4					4								4	4	4	4											2			
External vehicular access	2	2	2		3	3	3						1	2	1								1	3		3	3	3	3								2		4			
Parking					4	4	4	4				4		3		3	4	3	4	4			1	4	4	4	4	4	4	4	4	4	4	4					4			
Helipad					1	3												2										3	3	3						2						

1	Immediate Access (vertical or horizontal)
2	Direct Access time within 2 minutes
3	Ready Access within 5 minutes
4	Routine Access within 10 minutes
	Adjacency not critical

Note: excludes adjacencies using pneumatic tube. Refer to departmental brief alongside this adjacency summary for further detail.

DEPARTMENTAL FUNCTIONAL BRIEFS

4. EMERGENCY DEPARTMENT

4.1. Scope of Service

- a. The Emergency Department will provide a comprehensive range of services including resuscitation, acute care and rapid assessment, a low complexity urgent care centre for medically ambulatory patients, and short stay assessment. Services will be provided for adult and paediatric patients.
- b. Emergency Medicine services will be delivered at Role Delineation level 6.
- c. The ED will comprise 7 resuscitation bays, 51 adult treatment spaces (including 9 isolation rooms), 24 paediatric treatment spaces (including 3 isolation rooms) and 25 emergency short stay which includes requirement for up to 4 Paediatric Short Stay Unit (PSSU) to be appropriately demarcated to meet the Clinical Services Plan requirements to 2026/27.
- d. The design is to reflect a fully operational environment with the bed shell to have capability to be fully integrated in the future.
- e. The Emergency Department will have a key role in Campbelltown Hospital disaster preparedness and response systems.
- f. Campbelltown Hospital will not be a designated NSW Major Trauma Referral Centre, however the Emergency Department will continue to receive trauma cases via ambulance and private transport.

4.2. Model of Care

- a. The model of care is based on a strong philosophy of senior medical and nursing staff leading models of care and for unit flow to reduce waiting times, provide timely care for patients in the most appropriate setting, and to facilitate flow through the Emergency Department.
- b. The service will provide a rapid assessment, diagnostic and treatment service in an expected four hour timeframe.
- c. Emergency services will be supported by a range of allied health services including pharmacy, social work and physiotherapy.
- d. Emergency Department models of care include triage, early assessment and streaming, rapid access to resuscitation, diagnosis, symptom control and treatment. Patients will be streamed from triage according to clinical acuity, predicted length of stay and likely departure destination. There will be separate flows for adult and paediatric patients.
- e. The Emergency Department will comprise the following areas to facilitate the model of care:
 - i. Triage and Senior Assessment Streaming/Clinical Initiatives Nurse (CIN) - for early assessment and care planning followed by streaming into one of the patient care streams
 - ii. Resuscitation - for treatment and stabilisation of critical patients
 - iii. Paediatrics - treatment area, including acute and ambulatory areas for paediatric patients requiring diagnosis and treatment. This area will also include adolescent patients presenting with behavioural disturbance
 - iv. Adult Acute - acute treatment area for complex, non-ambulatory, high acuity adult patients requiring intensive clinical investigation and treatment
 - v. Mental Health - acute area for the appropriate management and treatment of patients presenting with a mental health condition
 - vi. Geriatric - acute treatment area for older persons presenting with acute geriatric syndromes, including dementia, delirium, psychogeriatric, falls and sepsis requiring intensive clinical investigation and treatment
 - vii. Adult Urgent Care Centre - for adult low acuity, low complexity (single system) medically ambulant patients who can be discharged within 2 hours
 - viii. Emergency Short Stay Unit - for patients requiring longer periods of clinical investigation or observation up to 24 hours.

- f. A 6 bed Psychiatric Emergency Care Centre will have a functional and controlled access with the Emergency Department, and will operate under the governance of the Mental Health Service.
- g. The Emergency Department will be collocated with a 25 bed Emergency Short Stay Unit for adult and paediatric (with design to provide for appropriate demarcation) patients requiring observation, specialist assessment and diagnostics following care in the Emergency Department, who would otherwise have required either admission or extended care in the Department.
- h. Special purpose clinical spaces in the Emergency Department will include:
 - i. Procedure room / minor operations - with mobile Image Intensification capability
 - ii. Procedure rooms
 - iii. Mental Health assessment
 - iv. Safe Assessment Room(s)
 - v. Other special purpose clinical spaces will allow for the following services/functions:
 - vi. Plaster application
 - vii. Ear, Nose and Throat
 - viii. Eye
 - ix. Gynaecology
 - x. Isolation, including negative pressure.
- i. Minor procedures may be performed at the bedside. More complex procedures and those requiring privacy will be performed in procedure rooms in adult and paediatric areas. General anaesthesia will not be provided in the Emergency Department except as required during resuscitation. Procedural sedation may be administered to facilitate procedures.
- j. A special purpose procedure room with resuscitation room design specifications, including medical gases and nitrous oxide, will provide a suitable environment within the Emergency Department for unstable adult and paediatric patients from resuscitation to access rapid screening using digital image intensification modalities for orthopaedic and other procedures requiring procedural sedation.
- k. Point of Care Testing will be integrated into the design of department and will include appropriately housed equipment and technical support to facilitate timely access to pathology results, diagnosis and treatment planning.
- l. A resuscitation simulation room within the Emergency Department with 24 hour access will form an integral component of the model of care for interdisciplinary team education and training. It will also act as a key strategy for workforce recruitment and retention.
- m. Paediatric care will be provided in dedicated, separate functional areas, including treatment spaces and patient reception areas.
- n. The Emergency Department will provide for the rapid assessment of patients presenting with mental health conditions and the facilitation of an efficient transfer to an appropriate mental health environment.
- o. The Emergency Department will have dedicated staff to provide assessment and management programs to ensure appropriate and coordinated care is provided to frail older people presenting to the department.
- p. Streamlined access to admission alternative programs for patients with complex care illnesses, including Hospital in the Home and Macarthur Ambulatory Care Services will be provided.
- q. Pathways into next day Rapid Access clinics (e.g. diabetes, TIA, and AF) will be developed to reduce overnight stay for patients who are assessed as 'safe to be home for the night'.

4.3. Operational Description

4.3.1. Operating Hours

- a. The Emergency Department will be open 24 hours per day, 7 days a week, all year round.

4.3.2. Access, Admission and Discharge / Transfer

- a. Patients may arrive via private vehicles, self-presentation, with family or carers or via the NSW Ambulance Service, Patient Transport Service or the NSW Aeromedical Retrieval Services, including Newborn and Paediatric Emergency Transport Service.
- b. Patients will enter via the public entry or by the ambulance entry and proceed to triage.
- c. The clerical area will be staffed 24 hours per day. This support will be located at the reception desk and provides a point of contact for patients presenting to be triaged to the department.
- d. Technology to support an automated arrival system or kiosk registration capability will be incorporated into the design and work processes within the department.
- e. The pathway for patients will be that they are either:
 - i. Assessed, treated and transferred home or to the community
 - ii. Assessed, treated and transferred to another facility
 - iii. Assessed, treated and transferred to Hospital in The Home or outpatient services
 - iv. Assessed and admitted to a Short Stay Unit
 - v. Assessed, admitted and transferred to the Operating Theatre, Procedural Suite or Interventional Suite prior to admission to an inpatient unit
 - vi. Assessed and admitted to Medical Assessment Unit or Surgical Assessment Unit
 - vii. Assessed and admitted to an Inpatient Unit.
- f. Patients meeting agreed criteria may be referred directly to the Medical Assessment Unit or Surgical Assessment Unit for assessment and treatment, e.g. a patient with appendicitis referred by a GP.
- g. Women presenting with Obstetric related conditions > 20/40 weeks will be referred to the Birthing Suite for assessment, if clinically appropriate.
- h. Access by patients and visitors will be required at all hours however the access point needs to be secure, able to be monitored and through one central reception desk. Internally, staff will require secure all hours access to the department that is separate from public flows.

4.3.3. Clinical Support Services

4.3.3.1. Pharmacy services

- a. An automated medication management system will operate within the Emergency Department.
- b. During working hours, patients filling outpatient discharge prescriptions will be referred to pharmacy.
- c. After-hours, patients may be provided with a script or starter packs along with a prescription.

4.3.3.2. Pathology services

- a. Point of care testing for arterial blood gas analysis, basic biochemistry and other tests will be available within the department. Multiple points of access within the department will be required.

4.3.3.3. Medical Imaging services

- a. Critically ill patients will be x-rayed by mobile devices in the acute/resus treatment area. Ambulant patients will walk to the Emergency Department Satellite Medical Imaging Department for medical imaging investigations. Patients requiring transport to the Main Medical Imaging Department will use either a bed or wheelchair with assistance from patient services or a porter. Nursing and/or medical escort for critically ill, unstable patients and other individual patients will be provided in accordance with SWSLHD operational policies.
- b. The Emergency Satellite Imaging Department will have capacity and flexibility to provide services for adult and paediatric patients, with separate flows and reception areas. Satellite Medical Imaging will provide services in hours and for out of hours support to Hospital.
- c. The Emergency Satellite Imaging Department will include: 1 x CT Scanner, 1 x General X-Ray units, 1 x Ultrasound, availability to Mobile X-Ray units and reporting room within the unit to meet the Clinical Services Plan requirements to 2026/27. A 1 x MRI and 1 x image Intensifier is proposed to support the role of Campbelltown Hospital as the Paediatric Referral Centre for SWSLHD.

4.3.3.4. Education, training and research

- a. There will be a close affiliation with a variety of educational institutions providing undergraduate and postgraduate programs for nursing, medical and allied health staff.
- b. The Emergency Department is accredited by the Australasian College for Emergency Medicine, and the design should facilitate both formal and informal education and training activities.
- c. A single space to accommodate over 55 people at one time is preferred over multiple small areas

4.3.3.5. Clinical information technology

- a. Access via computer terminals to clinical information systems, including patient administration system, medical imaging and pathology, will be immediately available at the staff station and in every treatment space. A combination of fixed and mobile computers will be required.
- b. The communication system will support the use of multiple clinical systems and biomedical devices (supported via the medical service panel or pendant), including the physiological monitoring system.
- c. Monitoring requirements in the Emergency Department include:
 - i. All resuscitation bays, acute bays and beds, and beds in the Emergency Short Stay Unit require physiological monitoring, except mental health enclosed bays
 - ii. Each clinical area will require central monitoring function
 - iii. All acute bays and the procedure room requires cardiac and haemodynamic monitoring
 - iv. Procedure rooms must have monitoring connected to central monitoring system
 - v. 50% of the paediatric bays will be physiologically monitored.

4.3.4. Non-Clinical Support Services

4.3.4.1. Food services

- a. Light meals and mid meals will be delivered by trolley and stored in the beverage bay (to include a refrigerator and freezer). An area will be designated to park this trolley. All trays and utensils will be returned to the kitchen. Refrigeration will be close to patient areas for storage of food and snacks.
- b. Meals will not routinely be supplied to relatives, the exception being parent/caregivers of children in the department who will be provided light meals and mid meals only.

4.3.4.2. Linen services

- a. Multiple linen storage areas will be required to support the model of care and unit design.

4.3.4.3. Supply services

- a. Imprest stocks are provided on a scheduled basis with stock levels monitored via bar coding devices.
- b. Central sterilised stocks and equipment are delivered/collected following cleaning in the Central Sterilising Services Department.
- c. Any specialist stocks are ordered via the supply department as required.

4.4. Relative Location and Unit Configuration

4.4.1. Functional Relationships

- a. The Emergency Department requires a discreet point of entry that is separate to the Main Hospital entrance in order to provide controlled access to the Emergency Department to enhance 24 hour security and functionality of the department.
- b. The Emergency Department will have the following principal external functional relationships, excluding the Satellite Imaging Department:
 - i. Ambulance bays - immediate horizontal access for the movement of patients and staff
 - ii. Emergency Department patient drop-off bays - direct access for the movement of patients and carers

- iii. Car park - ready access for the movement of patients, carers and visitors
 - iv. Main entrance - horizontal access for the movement of patient, carers and visitors
 - v. Helipad - direct vertical access for the transfer of patients arriving and departing via helicopter
 - vi. Psychiatric Emergency Care Centre – functional and controlled access for the movement of patients and staff
 - vii. Rapid Access Clinics - direct access for the movement of patients, carers and visitors
 - viii. Perioperative and Interventional Suite and Birth Suites - ready access for the movement of patients, staff and equipment
 - ix. Intensive Care - ready access for the movement of Patient, staff and equipment
 - x. Inpatient units - ready access for the movement of patients, staff and equipment
 - xi. Short Stay Units - ready access for the movement of patients, staff and equipment
 - xii. Main Medical Imaging Department - routine access for the movement of patients, staff and equipment.
- c. The Emergency Department will require the following internal functional relationships, including the Emergency Satellite Imaging Department:

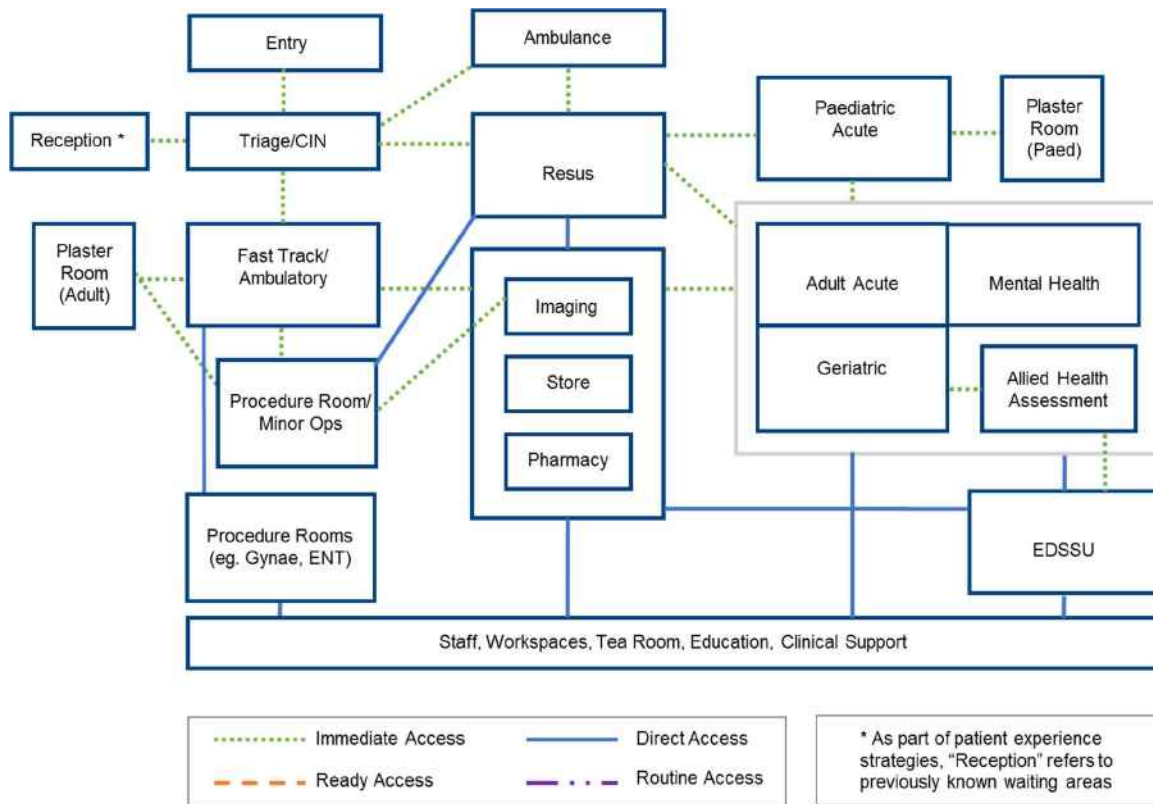


Figure 1 ED internal relationships

4.5. Specific Design Requirements

4.5.1. General

- a. Refer to Emergency Department specific evidence based design principles articulated in NBR's Architect's Envision Patient Experiences in Emergency. In addition, a key design principle for this department is the forunit movement of care for patients, particularly not having to return to the main reception area for multiple waiting periods.
- b. The design will enable separation of public and patient flows and separate staff entry to the Emergency Department.

- c. Separate clinical and reception areas should be available for assessment and treatment of children in a safe and secure environment.
- d. The design must enable clear line of sight within the functional units of the department.
- e. The design will include multiple access points to pathology and pharmacy throughout the department to minimise staff travel distances.
- f. The Resuscitation area should be directly adjacent to the CT in Satellite Imaging. Access to the CT will also be designed to allow discrete and direct after-hours access for inpatient imaging that would otherwise occur in the main imaging department during normal operating hours.
- g. Two ultrasound rooms as well as a reporting room for satellite imaging will be required within the emergency department unit.
- h. Access to isolation rooms should minimise traversing the department as much as possible.
- i. Consideration of the elderly patient in the geriatric area of the Emergency Department will be required, particularly those that are cognitively impaired. This may require acoustic attenuation and consideration of the placement of 1 to 2 bays that could be used by this client group while attending for assessment and treatment. Dementia-friendly design will be incorporated.
- j. Particular attention will be taken with the design of areas that mental health patients may use to ensure both patient and staff safety, for example no ligature points or dead-end corridors, not in close proximity to paediatric areas, dual exit points. Design will provide a high level of privacy for both open and enclosed bays.
- k. The mental health safe assessment rooms and the paediatric treatment room will require acoustic attenuation to account for the potential for patients with disturbed behaviours.
- l. The arrangement of the beds should allow for flexibility of bed usage, including the capacity to flex up and down as required whilst maintaining the model of care, particularly between the adult acute, geriatric and mental health areas.
- m. Ceiling mounted exam lights will be required in all patient treatment areas.
- n. Medical gases will be required in all patient areas of the Emergency Department. Medical gases and monitoring equipment will be required in the plaster room and all procedure rooms.
- o. Physiological monitoring will be required in all acute patient care areas except enclosed Mental Health bays. A central monitoring capability for each treatment zone will be required.
- p. Access to natural light is desirable to patient care areas.
- q. Capacity for mounted computers/monitors will be required at every bed.
- r. Clean and dirty utilities may be shared between treatment areas.

4.5.2. Entry / Reception and Triage

- a. Clear signage identifying entry, drop-off areas, short term parking and ambulance / emergency services drop-off and parking areas will be provided. Signage language and CALD / disability considerations will be made as per hospital wide design principles.
- b. The public entry will lead directly to triage area where patients will be registered and triaged prior to early assessment and streaming, and then be directed to a reception area. The department will also have a separate entry for ambulance.
- c. The dedicated reception area that is separated from the main reception area with an appropriate play space will be required for paediatric patients. The paediatric area should be visible to staff at all times.
- d. The triage area must be large enough to accommodate multiple triage bays, an ambulance bay and include mobile triage capability. Detail to be confirmed in design.
- e. The triage area will have a clear line of sight to the public entry, ambulance entry and the patient reception areas.
- f. Each triage bay will allow for private conversations away from the reception area. The triage area will have direct access to an ice machine and freezer.
- g. The triage area will provide direct access via the internal circulation to the treatment areas of the Emergency Department.

- h. The triage area will be designed to allow privacy while not discouraging interaction in a neutral and supportive environment.
- i. A space will be located behind the triage area to accommodate 4 treatment spaces (2 beds and 2 chairs) for the early assessment and streaming of patients by Clinical Initiatives Nurses and medical staff to facilitate timely access to appropriate care for patients, and to assist in reducing length of stay in the Emergency Department.
- j. An interview / meeting room for distressed relatives will be located near resuscitation and close to triage. The room should be culturally appropriate for the population and have capacity to accommodate 15 people - or 2 x 5 person. Another interview / meeting room will be provided for other private interviews/family discussions including child protection services.
- k. A NSW Police Blood Alcohol Locker is to be located in a discrete location within this area.
- l. A gun safe is to be incorporated into a secure area on entry into the department.

4.5.3. Resuscitation

- a. The resuscitation area will comprise of 7 resuscitation bays, one of which will be bariatric capable and two paediatric capable.
- b. Each resuscitation bay will be visually connected to the main staff station and requires a slave monitor at the foot of the bed which should be able to be viewed from the head of the patient.
- c. Resuscitation bays will include a critical care camera.
- d. A special purpose procedure room with resuscitation room design specifications, including medical gases and nitrous oxide, will provide a suitable environment for unstable adult and paediatric patients from resuscitation to access rapid screening in the Emergency Department using digital image intensification modalities for orthopaedic and other procedures requiring procedural sedation. A type A hand wash bay will be required.

4.5.4. Treatment Area - Adults

- a. Adult areas will include the following:
 - i. 21 adult Urgent Care Centre bays, alternatively referred to as Fast Track or Ambulatory for patients who are ambulant
 - ii. 16 acute adult treatment bays, including 6 enclosed bays, 2 with negative / positive pressure isolation and 2 with bariatric capability
 - iii. A 7 bay mental health treatment area with a safe assessment room and collocated interview room with dual access
 - iv. A 7 bay geriatric treatment area
 - v. 2 procedure rooms, one each in the Urgent Care Centre and adult acute areas
 - vi. 1 plaster room with plaster trap.
- b. The negative pressure rooms (class N isolation) will cater for patients presenting with suspected infectious diseases. These rooms will be multi-purpose and will not preclude other uses. One room will be ideally located in the acute area with direct access from the outside and located near the decontamination shower.
- c. Urgent Care Centre bays will:
 - i. Be in a location that ensures it is not used as a thoroughfare to any other areas of the department
 - ii. Be able to flex up and flex down to meet the model of care requirements
 - iii. Ideally have the capacity for an unescorted route by ambulant patients to the Satellite Medical Imaging Department.
- d. Ideally Urgent Care Centre should have an egress out of the department.
- e. 3 enclosed treatment bays in the mental health area will be designed for low stimulus and privacy considerations, with the capacity for containment for patient safety. The design will incorporate high level of privacy in all mental health bays and ideally incorporate natural light.
- f. A staff station will be required in a central location. The staff station must be large enough to be able to accommodate 20 staff members and allow oversight of the electronic patient journey board. The staff station must include a suitable area for privacy of staff conversations / phone calls. This will include a reception desk for visitors.

- g. Acute adult treatment bays must be visible from the staff station.

4.5.5. Treatment Area - Paediatrics

- a. Paediatric areas will include the following
 - i. 21 acute paediatric treatment bays
 - ii. 2 standard paediatric isolation rooms and 1 negative pressure isolation room
 - iii. 4 of the 21 enclosed bays with sensory design features for disturbed adolescents
 - iv. 2 paediatric procedure rooms with medical gases and suction
 - v. 1 plaster room and plaster trap.
- b. Isolation rooms should be located to aid the least amount of travel through the department.
- c. The design of consulting and treatment areas must permit parents / carers to remain with the child. A paediatric play area will be included in close proximity to the designated paediatric treatment space.
- d. Consideration should be given to the inclusion of television entertainment, paediatric entertainment units, and other sensory equipment in paediatric treatment areas/procedure rooms.
- e. Physiological monitoring will be required to 50% of beds.

4.5.6. Emergency Short Stay Unit

- a. The Emergency Short Stay Unit will be collocated with the Emergency Department and provide short stay accommodation up to 24 hours, for patients requiring observation, specialist assessment and diagnostics following care in the Emergency Department, who would otherwise have required either admission or extended care in the Emergency Department.
- b. The 25 Bed Emergency Short Stay Unit will comprise:
 - i. 23 treatment bays
 - ii. 2 single treatment bays - Class S isolation.
 - iii. 4-6 bays will be configured for paediatric flow demarcation

4.5.7. Ambulance

- a. The ambulance entry must be separate from the public entry and must be of level grade. The entry requires a secure automated door and airlock.
- b. An additional 2 bays must be provided for ambulance vehicles that have finished offloading patients to allow access for arriving ambulances.
- c. Space will be required for ambulance offload. Internal space must be able to accommodate at least 4 ambulance trolleys.
- d. The design should ensure the privacy of the patient during transfer into the department.
- e. Weighing scales capable of taking a bariatric trolley will be provided. These will be located in the airlock, not the main thoroughfare.
- f. A space for the ambulance and police officers to write up notes in the NSW Ambulance Communications Base room, adjacent to the triage area but not in the main department, will be required.
- g. Ideally a staff beverage bay and microwave will be provided in or near the ambulance area.
- h. An equipment cupboard will be required for the storage of ambulance equipment.

4.5.8. Decontamination

- a. A decontamination shower adjacent to the ambulance entry which provides direct access from the ambulance bay into the Emergency Department that meets Australian Standards for decontamination must be provided.
- b. Contaminated patients from industrial sites and chemical, biological and radioactive incidents as well as toxicology patients will be decontaminated using the shower prior to transfer into the Emergency Department.

- c. In the event of multiple casualties the assistance of NSW Fire Brigade / HAZMAT occurs. In this situation, the HAZMAT team will set-up the decontamination facility close to the Emergency Department and require easy access to the fire hydrant for the multiple casualties decontamination shower. A suitable space external to the department needs to be available for this.
- d. Direct access into the negative pressure isolation room will be required from the ambulance bay via swipe card accessed door.

4.5.9. Storage

- a. 12 mobile equipment / trolley bays per clinical area will be required, except in resuscitation where trolleys will be kept in each patient bay.
- b. Appropriate storage for mobile workstations will be required.
- c. Wheelchair parking will be required in the patient reception area.
- d. Oxygen cylinder storage will be required.
- e. A fluid / blanket warmer bay with immediate access to resuscitation will be required.
- f. Storage space will be required near Emergency Short Stay Unit for functional assessment equipment e.g. stair assessment and other therapy aids.
- g. An in department equipment store with power will be required to store the following bulk/ large equipment:
 - i. Bi-pap machines / HiFlow machines
 - ii. bariatric equipment
 - iii. IV poles and pumps
 - iv. syringe drivers
 - v. clinical trolleys (intravenous, plaster, dressing etc.) in regular use will be stored in mobile equipment bays
 - vi. patient lifters
 - vii. resuscitation
 - viii. crutches
 - ix. wheelchairs
 - x. sterile stock
 - xi. IV fluids
 - xii. Allied Health assessment stairs
 - xiii. disaster equipment.

4.5.10. Security

- a. 24 hour security coverage will be provided on-site. A security staff base will be located nearby the Emergency Department with visual oversight (CCTV or direct vision) of the external entrances, ambulance bays and reception areas.
- b. Clerical and nursing staff at the reception desk and triage may be at increased risk of aggression from visitors or patients. A rear door exit route from the office areas into the Department will be included. The reception desk and triage areas will also have security screening and video surveillance. Operationally, non-recorded observation of the camera views will be able to be viewed on any nominated staff computer (according to appropriate access rights and programs).
- c. The nominated cameras and infrastructure will be of a suitable quality to use in the event of prosecution.
- d. Duress buttons will be appropriately located throughout the Emergency Department. Both fixed and mobile duress points will be required. The fixed points include the reception, triage, distressed relatives room and interview room. Mobile duress will be required to locate a staff member and include 'man down' capacity. Security staff will respond to duress alarms, perform perimeter security checks, escort relatives after-hours to units, and escort staff as required.
- e. All entrances to the Department will be secure with appropriate access control devices. Access to paediatric areas will be by appropriate access control devices.
- f. The ability to lock-down the entire Emergency Department electronically will be required.

4.5.11. Public and Patient Amenities

- a. Relatives will have access to the kiosk or vending machines and water fountains. There will be no facility to provide visitor meals in the Emergency Department. The exception is for caregivers of children in the department.
- b. Public toilets and baby change areas within the Emergency Department will be required. Access to an assisted unisex toilet will be required. These toilets and parenting areas are to be located within the reception area and include nurse call points.
- c. Television entertainment will be provided in the reception area.
- d. A play area will be provided within the paediatric reception area.

4.5.12. Staff Amenities

- a. A staff room and lockers will be provided for staff belongings and will be located in the staff area with access to an outdoor area preferred. This area may be shared with other units.
- b. A staff shower and toilets will be provided.

4.5.13. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. The staff establishment may include:
 - i. Medical specialists qualified in Emergency Medicine
 - ii. Junior medical staff
 - iii. Nursing staff
 - iv. Allied health staff including, physiotherapy, social work
 - v. Administrative staff
 - vi. Clinical support staff including patient services assistants
 - vii. ASET / Aged Care Assessment teams.

4.5.14. Clinical Information Technology

- a. There must be an appropriate number of essential power points located at all staff stations to support technology in the event of a power outage.
- b. A Critical Care telemedicine or other technology system will be incorporated into the resuscitation bay.
- c. Capability to view the patient information and clinical systems (e.g. patient monitoring system) from central staff locations will be required, as is the ability to view any patient information from the one location in the acute area.
- d. Monitoring requirements in the Emergency Department:
 - i. All resuscitation bays, acute bays and beds, and beds in the Emergency Short Stay Unit require physiological monitoring
 - ii. All acute bays and the procedure room requires physiological monitoring
 - iii. Procedure rooms must have monitoring connected to central monitoring
 - iv. 50% of the paediatric bays will be physiologically monitored
 - v. Any fixed monitoring devices will be fixed at an appropriate height and loose furniture will be evaluated for its potential use as a weapon.

4.5.15. Education, Training and Research

- a. Education, research and quality improvement activities in the department will be supported by a meeting / tutorial room for approximately 50 persons with tele / videoconferencing facilities.
- b. Resuscitation simulation room capability within the Emergency Department providing 24 hour point of care access is an integral component of the model of care for interdisciplinary team education and training and a key workforce recruitment and retention strategy.

- c. Storage capacity close to or within the training area will be required to accommodate the training equipment. Final requirements for this storage space will be resolved during the design process.
- d. Provision will be made to support up to 14 students per shift. This is a combined medical, nursing and allied health student load.

4.6. Workforce Issues

- a. Increased volume and complexity of adult and paediatric presentations - workforce recruitment, education and training.
- b. Simulation room capability within the department is an integral component of the Emergency Department model of care and a key workforce recruitment and retention and retention strategy.

4.7. Technology

- a. Fixed and mobile duress alarms will be used in the Emergency Department .
- b. Further detail TBC from pathology consultation regarding point of care testing devices and future innovations in paperless ordering and barcoding.

4.8. Change Management

- a. Relation of emergency services from Camden Hospital
 - i. Transition plan for both facilities and key stakeholders
 - ii. Increased activity volumes at Campbelltown
 - iii. Telehealth link to Camden.
- b. Increased volume of paediatric and mental health presentations
 - i. Workforce and training implications.
- c. Short stay specialty units
 - i. Operational processes.

5. ADULT ACUTE INPATIENT MEDICINE

5.1. Scope of Service

- a. Campbelltown Hospital will provide a broad range of acute inpatient medicine services for adults, with general medicine and most sub specialty services at Role Delineation level 6.
- b. Adult medicine inpatient units will accommodate patients 16 years and over. Functional requirements for paediatric inpatient services are described in the Paediatrics chapter of the Functional Design Brief.
- c. Acute medicine inpatient services will include:
 - i. General Medicine including Geriatric Medicine
 - ii. Respiratory and Sleep Medicine
 - iii. Gastroenterology Services
 - iv. Cancer Services
 - v. Infectious Diseases
 - vi. Neurology and Stroke
 - vii. Acute Rehabilitation
 - viii. Dermatology
 - ix. Endocrinology
 - x. Rheumatology
 - xi. Haematology
 - xii. Cardiology
 - xiii. Drug Health
 - xiv. Palliative Care
 - xv. Renal and Hypertensive Medicine
 - xvi. Immunology, Allergy and HIV.
- d. Integrated sub specialty medicine services will be provided via networked arrangements within the LHD.
- e. Sexual Assault services will continue to be provided at Liverpool Hospital.
- f. Overnight acute medicine services will be provided from a bed base as outlined in the capacity table, including a Medical Assessment Unit, to meet the Clinical Services Plan requirements to 2026/27.
- g. Sub-acute palliative care, maintenance and rehabilitation services will be provided at Camden Hospital and in community based settings, including the home.

5.2. Model of Care

- a. Medicine inpatient units will provide suitable accommodation for the diagnosis, care and treatment of inpatients by multidisciplinary teams. This may include patients presenting with acute or chronic illness, and those with complex care needs. Facilities will be provided to meet the needs of patients requiring short stay, extended stay and high acuity care. Special consideration will be provided for older people, bariatric, infectious, people with a disability, family and carers.
- b. Inpatient care will be provided in 28-32 bed inpatient units that are designed to accommodate a range of specialities and sub specialities that will vary over time. Patients with a similar diagnosis will be cohorted to provide specialty nursing and allied health requirements, and to maintain specialised skills.
- c. General inpatient units will have a standard design to enhance the functionality of workforce and operational processes. Some specialised units will require unique design considerations to meet the needs of the clinical specialty and their patient populations.
- d. Medicine inpatient units will provide a patient-centred multidisciplinary model of care that supports the delivery of high quality, safe and efficient clinical care. Features of the model of care will include:
 - i. The inclusion of patients and their family / carer in the planning and delivery of care. Carer zones will be incorporated into the design for the unit. Active involvement of carers during the acute hospital stay enhances

- patient-centred care, provides greater understanding of care requirements, and assists clinicians, patient and carers in transfer of care planning
- ii. Collaboration by the multidisciplinary healthcare team including, medicine, nursing, allied health, clinical and non-clinical support staff
 - iii. Provision of treatment or therapies either at the patient bedside, in the treatment room or therapy space.
 - iv. Clinical handover will be undertaken at the bedside and involve the patient in the care process to enhance the patient experience and minimise the risk of clinical error.
- e. Key principles in the medicine inpatient model of care include:
- i. Line of sight - all patients can be seen and can see staff
 - ii. Decreasing nursing travel distances
 - iii. Decreasing bed bypassing (moving a patient or visitors past other beds)
 - iv. Clustering of bed cohorts
 - v. Close proximity to therapy spaces
 - vi. Consolidation of shared services.
- f. Inpatient units will be configured according to clinical specialty. The proposed clinical groupings include:
- i. Cardiology
 - ii. Respiratory
 - iii. Neurology / Stroke
 - iv. Cancer - Medical Oncology, Radiation Oncology, Haematology, Palliative Care
 - v. Acute Geriatric Medicine
 - vi. General Medicine - Rheumatology, Immunology, Infectious Diseases, Endocrinology, Renal Medicine, Drug Health, Dermatology
 - vii. Gastroenterology
 - viii. Medical Assessment Unit.
- g. Close Observation Unit/Higher Acuity Area
- i. Designated high acuity areas will be located within some inpatient units. These units will be a specially staffed and equipped area that provides an intermediate level of care between intensive care and general inpatient unit care.
 - ii. High acuity areas are proposed for the following specialties:
 - Cardiology
 - Respiratory
 - Neurology / Stroke
 - Cancer
 - Haematology
 - General Medicine / MAU.
- h. Medical Assessment Unit
- i. The Medical Assessment Unit will be a short stay medical inpatient unit that will provide access to interdisciplinary team rapid assessment, diagnosis and treatment for adults with non-critical, complex, undifferentiated medical conditions.
 - ii. A proposed joint Medical Assessment Unit / Surgical Assessment Unit is under consideration. Further model of care and functional detail to be confirmed by the LHD.
- i. 'Rehabilitation in Place' is a key component of the inpatient medicine model of care. The model provides individualised functional assessment and retraining programs delivered by specialised allied health staff designed to optimise functional and social independence. Services are provided in functional therapy spaces located in proximity to inpatient units.
- j. The nursing model of care will be designed to provide specialised nursing care, enhance the professional development of the nursing workforce, and provide the flexibility to accommodate changes in models of care and fluctuations in activity and patient acuity. Nursing services will be delivered through a team nursing model that includes a combination of registered and enrolled nurses, assistants in nursing, and nursing students under supervision.

- k. Allied health workforce and therapy spaces will be provided to support the acute inpatient medicine services, and to enhance the professional development of the allied health workforce. Immediate access to functional assessment and retraining spaces, including gymnasiums, and appropriate clinical and non-clinical therapy spaces will be incorporated into the design.
- l. Teaching, education and research will be incorporated into the model of care and unit design.

5.3. Operational Description

5.3.1. Operating Hours

- a. The medicine inpatient units will operate 24 hours-per day, 7 days per week.

5.3.2. Access, Admission and Discharge / Transfer

- a. Patients will be admitted to the Medicine Inpatient Units from the following areas:
 - i. Planned admissions, including inter-hospital transfer
 - ii. Emergency Department
 - iii. Procedural or Interventional Unit
 - iv. Intensive Care
 - v. Outpatient Areas.
- b. Planned and unplanned admissions will be coordinated through the Admissions Department or Patient Flow Manager during hours or the After Hours Nurse Manager or Patient Flow Manager out of hours.
- c. Discharge planning will commence at the pre admission clinic or time of admission as an essential component of care planning. Patients will be discharged to home other healthcare facility. Transfer of care may be direct or via the Patient Transit Lounge.

5.3.3. Clinical Support Services

5.3.3.1. Pharmacy services

- a. The standard inpatient unit will store imprest stock medications and intravenous fluids in the clean utility room. Some units may require a separate medication room for high volume or complex preparation drugs.

5.3.4. Non Clinical Support Services

5.3.4.1. Security

- a. The unit will remain secure at all times with controlled access and video monitoring of access points and waiting areas. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms (mobile / fixed) and as required on request from clinical staff.
- b. Additional security considerations will be required with extended visiting hours and overnight stay arrangements.

5.4. Relative Location and Unit Configuration

5.4.1. Functional Relationships

- a. The Acute Medicine Inpatient and Medical Assessment Units will be located with the 24 hour acute clinical services area of the hospital.
- b. Medicine inpatient units will have the following key external functional relationships:
 - i. Inpatient unit shared areas, e.g. gymnasiums, diagnostic services – immediate access for the movement of patients, staff and equipment
 - ii. Emergency Department - ready access for the transfer of patients, staff and equipment
 - iii. Intensive Care Unit - ready access for the transfer of patients, staff and equipment

- iv. Pathology - direct access via mechanical circulation for the transportation of specimens and blood products
- v. Pharmacy - direct access via mechanical circulation for the transportation of medications
- vi. Main Entrance - ready access for staff, patients, and the public
- vii. Medical Imaging - ready access for the transfer of patients, staff, and equipment
- viii. Outpatients and Ambulatory Care - ready access for staff, patients and the public
- ix. Transit Lounge - ready access for staff, patients and the public
- x. Pharmacy - ready access for staff, patients and the public
- xi. Back of house services - ready access for staff and equipment
- xii. Car park – routine access for staff patients and the public.

c. Standard medicine inpatient units will have the following key internal functional relationships:

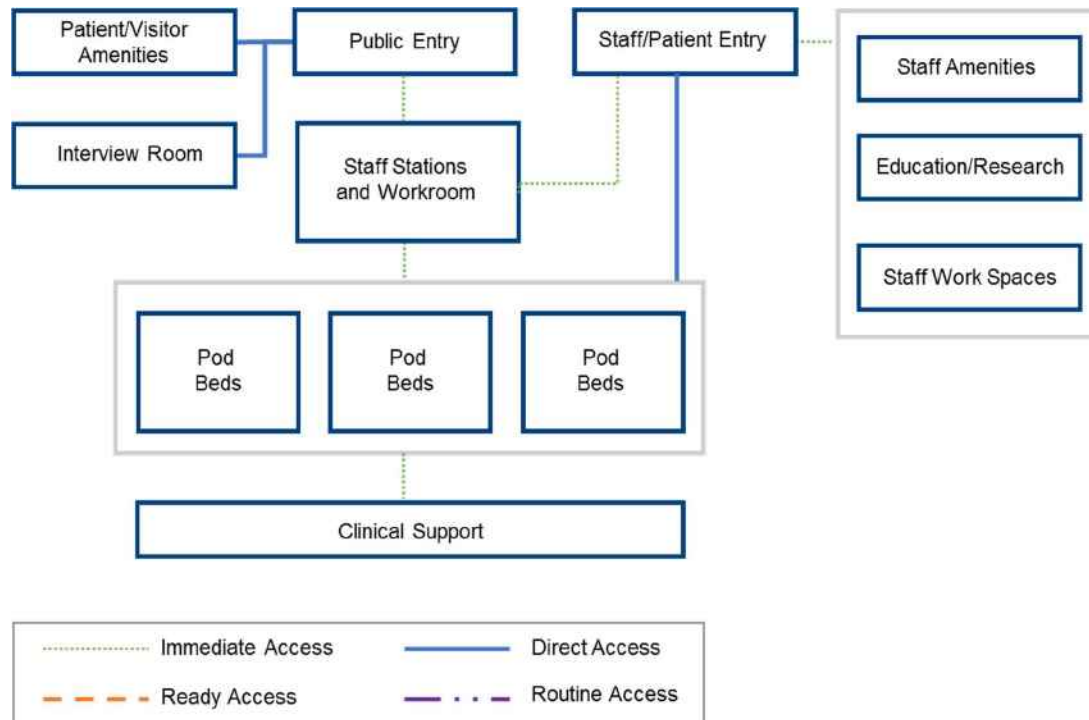


Figure 2 Adult Inpatient Medicine internal relationships

5.5. Specific Design Requirements

5.5.1. General Requirements

- a. Patients in inpatient units will be provided clinical care and support which cannot be provided safely in another environment such as home, clinic or community centre.
- b. A high proportion of patients will be 65 years and older, many of whom will have co-morbidities and some of whom will be confused or have dementia. An inpatient care environment will support the safe management of patients who may be confused or agitated and have the tendency to wander. Evidence based design principles for people with dementia/acute delirium (Prof Fleming - NSW/ACT Dementia Training Study Centre) will be incorporated into the design.
- c. The units will also accommodate for seating in waiting spaces near lifts.
- d. The unit should be located to allow sharing of common support areas such as patient lounge/waiting areas, some staff amenities and meeting/tutorial space between other units. Staff must be able to access shared areas between inpatient units without having to travel through other inpatient units.
- e. Patient lounges will be located with visibility from a staff station.

- f. Immediate access to functional assessment and retraining spaces, including gymnasiums, appropriate clinical and non-clinical therapy spaces and storage will be required to support the 'Rehabilitation in Place' model of care. Rehabilitation spaces and ADL assessment areas can be incorporated into the patient lounge as per individual unit requirements.
- g. The units will operate with a central staff station and adjoining central work room, with additional small staff stations.

5.5.2. Patient Treatment Spaces

5.5.2.1. General

- a. The design of the general inpatient unit will be required to support multiple levels of care including high acuity, intermediate, and supported self-care.
- b. 28-32 bed inpatient units will be configured to provide:
 - i. Dedicated speciality or mixed specialty units
 - ii. Speciality clusters within a single unit
 - iii. Pods for the management of high acuity patients
 - iv. A mix of single and two bed rooms - each pod should be approximately 60% single rooms
 - v. Infection control
 - vi. Bariatric capability.
- c. Infectious and immunocompromised patients will be managed in isolation rooms according to their protective requirements. This will include a number of Class N isolation rooms with ante rooms, positive pressure rooms and single rooms. The negative pressure rooms should be at the front of the unit.
- d. Ceiling-mounted patient lifting devices will be included over 4 beds - this will include a mix of single and 2 bed rooms.
- e. To facilitate the delivery of care at the bedside each patient bedroom will have three designated fit for purpose zones including the patient zone, staff zone and family / carer zone.
- f. A staff station will be located close to the inpatient unit entry to provide an identifiable point of reception for the unit, and to enhance security and safety for patients and staff.
- g. The main staff station will be collocated with a large work room.
- h. The medication rooms should be in close proximity to staff stations and separate to clean utilities. Access to medication storage areas will be controlled, visible and limited to authorised persons. Other medications, IV fluids and sterile supplies will be stored in the clean utility room close to the patient areas.
- i. The location and design of the medication room should minimise travel distances, noise and disruption to staff undertaking medication-related activities to reduce the risk of clinical error.
- j. The rehabilitation space will accommodate therapies, assessments, and activities such as walking, sitting and lying. The area will also be suitable for physiotherapy, gait analysis, strength training, speech training, and include a bariatric suitable double plinth for lying, sitting, balancing, and reaching. This space will allow bariatric and wheelchair access and can be shared with other inpatient units.
- k. A 10m continuous stretch will be located near the units for allied health assessment.
- l. The NUM office will be located in the clinical area

5.5.2.2. Cancer services

- a. Inpatient cancer services will include medical oncology, radiation oncology, haematology and acute palliative care.
- b. It is proposed that high acuity observation areas and isolation capability will be required for cancer services in order to provide sufficient capacity for new inpatient haematology and acute palliative care services onsite.
- c. Haematology High Acuity Unit:
 - i. The high acuity unit will require Class P isolation rooms with HEPA filtering to accommodate patients undergoing bone marrow transplantation and/or being severely immunocompromised
 - ii. 1 Class N negative pressure isolation room will be required
 - iii. Telemetry monitoring capability will be required.

- d. Access to appropriate clinical and non-clinical therapy spaces, including outdoor space will be required.
- e. Incorporation of special design considerations to provide an appropriate environment for palliative care patients.

5.5.2.3. Cardiology

- a. Cardiology services will provide support, monitoring and treatment of patients with cardiac conditions, including those which are life threatening or potentially life-threatening. The services provided include:
 - i. Non-invasive haemodynamic monitoring
 - ii. Non-invasive cardiac monitoring
 - iii. Elective cardioversion
 - iv. Discharge planning and patient education/rehabilitation.
- b. Acute Cardiac Unit
 - i. High acuity cardiology beds with hardwired physiological/cardiac monitoring capability in all the patient areas including the associated procedure rooms and patient amenities
 - ii. Room design requirements are as per Australian Health Facility Guidelines, Coronary Care Unit
 - iii. A centralised monitoring system will be located in a central location within the unit, with access from staff workstations stations
 - iv. A designated ST Elevated Myocardial Infarction bed will be provided to receive an urgent unstable admission.
- c. All cardiology inpatient beds require hardwiring / telemetry monitoring capability, with incorporation of infrastructure to support future proofing.
- d. Key functional relationships include cardiac catheter laboratory, cardiac echo, nuclear medicine, stress test and cardiac rehab, medical imaging.

5.5.2.4. General medicine

- a. Endocrinology
 - i. Patients receiving Radio nucleotide treatment (Iodine-131) require single room accommodation and ensuite, with radiation shielding to protect staff from radiation exposure
- b. Infectious Diseases
 - i. Configuration, isolation, bariatric and negative pressure rooms to be confirmed in design.
- c. Renal Medicine
 - i. Ideally all bed spaces will be configured with access to reverse osmosis water supply and appropriate plumbing for dialysis waste disposal.

5.5.2.5. Gastroenterology

- a. Location in proximity to GI surgery inpatients is considered by clinicians to be the best model in view of the strong synergy between the specialities, both for patients and clinical staff.

5.5.2.6. Geriatric medicine

- a. Acute geriatrics
- b. Behavioural Unit
 - i. A closed secure section of unit with the capacity to accommodate behaviourally disturbed patients who require a specific environment that ensures safe and effective care while maintaining the safety of staff
 - ii. The patient's behavioural patterns require this unit to be a low stimulus environment with increased visibility of patients a priority
 - iii. Design to provide diversional areas and minimise cues for egress - detail to be confirmed in design
 - iv. Mix of single and shared rooms preferred
 - v. Access to outdoor spaces required

- vi. Evidence based design principles for people with dementia / acute delirium (Prof Fleming - NSW/ACT Dementia Training Study Centre) will be incorporated into design.
- c. Patients in the Emergency Department or referred from community service providers that are determined as requiring short stay geriatric assessment will be treated in the Medical Assessment Unit.
- d. Extended stay geriatric patients require access to clinical and non-clinical therapeutic spaces to optimise functional and social independence, including outside area to encourage mobilisation, practice daily routines, and continue hobbies which encourage wellbeing such as gardening.

5.5.2.7. Neurology / Stroke

- a. Acute Stroke Unit
 - i. The stroke unit will be part of the neurology inpatient unit and capable of delivering high acuity care to patients with stroke including prehospital protocols, thrombolysis, acute stroke and post-acute care and telehealth
 - ii. All beds require high visibility and line of sight
 - iii. Telemetry monitoring capability required for some beds
 - iv. High falls risk area - design considerations
 - v. Immediate access to rehabilitation therapy spaces required
 - vi. Key functional relationships include: Emergency Department, Medical Imaging / CT
 - vii. Bariatric and isolation requirements.
- b. Immediate access to functional assessment and retraining spaces, including gymnasiums, appropriate clinical and non-clinical therapy spaces will be required.

5.5.2.8. Rehabilitation

- a. Acute rehabilitation onsite to be confirmed - collocation with Geriatric Medicine if applicable.
- b. Sub-acute at Camden Hospital.
- c. Immediate access to rehabilitation therapy spaces as part of 'Rehabilitation in Place' model of care.

5.5.2.9. Respiratory

- a. Acute Respiratory Unit
 - i. High acuity beds for the management of patients with respiratory failure, and will include non-invasive ventilation capacity
 - ii. Medical gases will be required in all beds
 - iii. 1 bariatric room required
 - iv. No class N isolation rooms required in the acute unit
 - v. Telemetry monitoring required for some beds
 - vi. Storage to accommodate larger assisted ventilation machines will be required.
- b. 2 Class N isolation rooms will be required in the general inpatient area.
- c. 2 bariatric capable rooms will be required.
- d. Class N isolation capability in the procedure room will be required - for sputum induction therapies on patients requiring isolation.
- e. The unit will be able to be locked down for containment purposes in the event of infectious disease outbreaks.
- f. Immediate access to rehabilitation therapy spaces required.
- g. Key functional relationships include: procedural suite/bronchoscopy, pulmonary function testing and pulmonary rehabilitation.
- h. Sleep Studies Laboratory
 - i. Inpatient service (night and day) requires co-location with Respiratory inpatient unit for staff and patient safety after-hours
 - ii. 2-3 bariatric capable beds required

- iii. Design to accommodate day / night lighting arrangements.

5.5.3. Storage

- a. The standard storage requirements for each inpatient unit will be met by the following:
 - i. Capacity for the storage of a small stock of consumables and currently used equipment close to the point of use is to be incorporated into the design. Ideally this would be a mobile solution
 - ii. Storage with power outlets for charging will accommodate medical equipment which will be used regularly within the inpatient unit but will not be required to be stored at the bedside, e.g. intravenous pumps and other infusion devices, bariatric and manual handling equipment
 - iii. All the equipment and consumable store rooms require flexible open spaces with mobile shelving to maximise storage options, internet access, charging facilities and a small write up space
 - iv. Storage for portable lifting devices will be provided in or near the inpatient units
 - v. The inpatient units may share storage for allied health and rehabilitation equipment as part of a rehabilitation area. Appropriate space for storage of equipment used for functional assessment and retraining will be required.

5.5.4. Patient and Visitor Amenities

- a. One interview / counselling room for patients and relatives will be located within the inpatient unit. The room requires adequate space for up to 15 family members.
- b. Visitors should have ready access to a lounge area or outdoor space, and incorporate quiet spaces and privacy in design.
- c. Access to a staff room with beverage bay, meal preparation area and refrigerator will be required. Access to an outdoor area is preferred.

5.5.5. Staff Amenities

- a. Lockers and staff toilet facilities will be located in the staff area within the unit.
- b. Access to a staff room with beverage bay, meal preparation area and refrigerator will be required.

5.5.6. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A multidisciplinary clinical work room located adjacent to the staff station will house the electronic journey board and be used for multidisciplinary team meetings, education and teaching.
- c. Meeting rooms and education facilities will be located in proximity to inpatient units, including in shared spaces between inpatient units.
- d. The staff establishment may include:
 - i. Nursing staff including nursing managers, clinical nurse consultants, clinical nurse educators, registered and enrolled nurses and assistants in nursing
 - ii. Allied health staff including, physiotherapy, social work, pharmacy, dietetics, occupational therapy, social work
 - iii. Administrative staff
 - iv. Clinical support staff including environmental services and patient services assistants.

5.6. Workforce Issues

- a. Sub-speciality service development - new services and increasing complexity, multidisciplinary workforce recruitment, education and training, aunit implications.
- b. Nursing workforce skill development and model of care, including high acuity level of care.
- c. Integration of allied health staff into inpatient clinical teams - model of care, recruitment and training.

5.7. Technology

- a. Organisational direction, governance and infrastructure to support telemetry monitoring in the inpatient units.
- b. Consideration should be made for patient tracking technology (including the use of RFID locators) that can interact with the patient journey board and provide information on the location and status of patients.

5.8. Change Management

- a. Sub-speciality service development
 - i. New services and increasing complexity
 - ii. Volumes and staging
 - iii. Workforce, education and training.
- b. Development of new inpatient haematology and palliative care services.
- c. High acuity model of care in inpatient units.
- d. High acuity areas
 - i. Model of care, governance, flows and operational processes
 - ii. Location, bed number, technology and design requirements
 - iii. Workforce requirements, education and training, aunit implications, nursing ratios and operational costs.
- e. Transition plan for increase in subspecialty services and complexity.

6. ADULT INPATIENT SURGICAL SERVICES

6.1. Scope of Service

- a. Surgical services will provide a range of general and subspecialty services for patients requiring planned and unplanned surgical and interventional procedures and treatment. General surgery and most subspecialty services will be provided at Role Delineation level 6. Integrated sub specialty surgical services will be provided via networked arrangements within the LHD.
- b. Surgical inpatient units will provide care for adult patients, 16 years and over. Paediatric inpatient services are described in the Paediatric Services chapter of the brief.
- c. Acute surgical services will include:
 - i. General Surgery / Acute Surgical Unit
 - ii. Orthopaedic surgery, including elective joint replacement surgery
 - iii. Upper GI surgery, including metabolic surgery and endoscopy
 - iv. Colorectal surgery
 - v. ENT surgery
 - vi. Thoracic surgery
 - vii. Cardiac surgery - no procedures requiring cardiopulmonary bypass
 - viii. Neurosurgery - spinal only
 - ix. Dental surgery
 - x. Ophthalmology
 - xi. Urology
 - xii. Vascular surgery
 - xiii. Breast Oncology surgery.
- d. Gynaecology surgical procedures will be performed onsite, with post-operative care to be provided within the Women's Health Inpatient Unit.
- e. The Colorectal Surgery unit at Campbelltown Hospital will continue to increase in volume and surgical complexity.
- f. Campbelltown Hospital upper GI Surgical services will be the district provider for metabolic surgical services.
- g. Gynaecology Oncology and Upper GI Oncology surgical procedures will continue to be performed at Bankstown and Liverpool Hospitals. Ongoing treatment will be provided by multidisciplinary cancer service providers at Campbelltown Hospital and in community settings. Capacity and flexible design will be required to accommodate future changes in models of care and networking arrangements within the LHD.
- h. Network arrangements for Neurosurgery, Cardiothoracic, Complex Vascular, Major Trauma, Severe Burn and Spinal Injury will be managed in accordance with NSW Critical Care and Specialty Referral Networks.
- i. Overnight acute surgical services will be provided from a bed base as indicated in capacity table including a Surgical Assessment Unit, to meet the Clinical Services Plan requirements to 2026/27.

6.2. Model of Care

6.2.1. General

- a. Surgical inpatient units will provide suitable accommodation for the diagnosis, care and treatment of inpatients by multidisciplinary teams. This may include patients presenting with acute or chronic illness, and those with complex care needs. Facilities will be provided to meet the needs of patients requiring short stay, extended stay and high acuity care. Special consideration will be provided for older people, bariatric, infectious, people with a disability, family and carers.
- b. Inpatient care will be provided in 28-32 bed inpatient units that are designed to accommodate a range of specialities and sub specialities that will vary over time. Patients with a similar diagnosis will be cohorted to provide specialty nursing and allied health requirements, and to maintain specialised skills.

- c. General inpatient units will have a standard design to enhance the functionality of workforce and operational processes. Some specialised units will require unique design considerations to meet the needs of the clinical specialty and their patient populations.
- d. Surgical inpatient units will provide a patient-centred multidisciplinary model of care that supports the delivery of high quality, safe and efficient clinical care. Features of the model of care will include:
 - i. The inclusion of patients and their family/carer in the planning and delivery of care. Carer zones will be incorporated into the design for the unit. Active involvement of carers during the acute hospital stay enhances patient-centred care, provides greater understanding of care requirements, and assists clinicians, patient and carers in transfer of care planning
 - ii. Collaboration by the multidisciplinary healthcare team including, medicine, nursing, allied health, clinical and non-clinical support staff
 - iii. Provision of treatment or therapies either at the patient bedside, in the treatment room or therapy space
 - iv. Clinical handover will be undertaken at the bedside and involve the patient in the care process to enhance the patient experience and minimise the risk of clinical error.
- e. Key principles in the surgical inpatient model of care include:
 - i. Line of sight - all patients can be seen and can see staff
 - ii. Decreasing nursing travel distances
 - iii. Decreasing bed bypassing (moving a patient or visitors past other beds)
 - iv. Clustering of bed cohorts
 - v. Close proximity to therapy spaces
 - vi. Consolidation of shared services.
- f. Inpatient units will be configured according to clinical specialty. The proposed clinical groupings include:
 - i. Orthopaedic surgery
 - ii. Upper GI / Colorectal surgery - located in proximity with Gastroenterology Medical Inpatient Unit
 - iii. General Surgery - Acute Surgical Unit
 - iv. Surgical Specialities
 - v. Surgical Assessment Unit.
- g. High Acuity Areas
 - i. Designated high acuity areas will be located within some inpatient units. These units will be a specially staffed and equipped area that provides an intermediate level of care between intensive care and general inpatient unit care
 - ii. High acuity areas are proposed for the following specialties:
 - Upper GI / Colorectal
 - Orthopaedics
 - Surgical Specialities
- h. Surgical Assessment Unit
 - i. The Surgical Assessment Unit will be a short stay surgical inpatient unit that will provide access to rapid surgical assessment, diagnosis and treatment for adults with non-critical, undifferentiated surgical conditions. The Surgical Assessment Unit will be under the governance of the Acute Surgical Unit
 - ii. Location in close proximity to the Emergency Department and medical imaging will be required to optimise function and patient flow
 - iii. A proposed joint Medical / Surgical Assessment Unit is under consideration. Further model of care and functional detail to be confirmed by the LHD.
- i. High Volume Short Stay Unit
 - i. High Volume Short Stay Surgery is defined as planned surgery / procedures requiring admission up to 72 hours
 - ii. It includes both Day Only surgery and Extended Day Only (EDO) surgery (23-hour surgery)
 - iii. Functional requirements for the High Volume Short Stay Unit are documented in the HVSSU chapter of the brief.
- j. 'Rehabilitation in Place' is a key component of the inpatient surgical model of care. The model provides individualised functional assessment and retraining programs delivered by specialised allied health staff designed to optimise

functional and social independence. Services are provided in functional therapy spaces located in proximity to inpatient units.

- k. The current multidisciplinary ortho-geriatric and colorectal-geriatric models of care will be continue to be provided. This collaborative model of care will be implemented for upper GI surgery in the future.
- l. The nursing model of care will be designed to provide specialised nursing care, enhance the professional development of the nursing workforce, and provide the flexibility to accommodate changes in models of care and fluctuations in activity and patient acuity. Nursing services will be delivered through a team nursing model that includes a combination of registered and enrolled nurses, assistants in nursing, and nursing students under supervision.
- m. Allied health workforce and therapy spaces will be provided to support the acute inpatient surgical services, and enhance the professional development of the allied health workforce. Immediate access to functional assessment and retraining spaces, including gymnasiums, and appropriate clinical and non-clinical therapy spaces will be incorporated into the design.
- n. Teaching, education and research will be incorporated into the model of care and unit design.
- o. It is preferred that adult inpatient units will include the capability to have telemetry monitoring in some beds.

6.3. Operational Description

6.3.1. Operating Hours

- a. The inpatient surgical units will operate 24 hours per day, 7 days per week.
- b. Operational process for visiting hours and overnight stay arrangements to be confirmed by the LHD.

6.3.2. Access, Admission and Discharge / Transfer

- a. Patients may be admitted to the Surgical Inpatient Units from the following areas:
 - i. Planned admissions, including intra- and inter-hospital transfer and direct admissions from consultant rooms arranged via the Patient Flow Manager
 - ii. Emergency Department
 - iii. Procedural or Interventional Unit
 - iv. Outpatient Areas.
- b. Direct referrals from outside the hospital may also occur through an admitting specialist.
- c. Planned and unplanned admissions will be coordinated through the Admissions Department or Patient Flow Manager during hours or the After Hours Manager or Patient Flow Manager after-hours.
- d. Discharge planning will commence at the pre admission clinic as an essential component of care planning. Patients will be discharged to home other healthcare facility. Discharges may be direct or via the Patient Transit Lounge.

6.3.3. Clinical Support Services

6.3.3.1. Pharmacy services

- a. The standard inpatient unit will store imprest stock medications and intravenous fluids in the clean utility room. Some units may require a separate medication room for high volume or complex preparation drugs.

6.3.4. Non-Clinical Support Services

6.3.4.1. Security

- a. The unit will remain secure at all times, with controlled access and video monitoring of access points and waiting areas. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms (mobile / fixed) and as required on request from clinical staff.
- b. Additional security considerations will be required with extended visiting hours and overnight stay arrangements.

6.4. Relative Location and Unit Configuration

6.4.1. Functional Relationships

- a. The Acute Surgical Inpatient and Surgical Assessment Units will be located with the 24 hour acute clinical services area of the hospital.
- b. External relationships may differ depending on the unit, however will be generally prioritised as follows:
 - i. Emergency Department – direct access
 - ii. Perioperative Department / Theatres – direct access
 - iii. Radiology – direct access
 - iv. Rehabilitation Areas - Orthopaedic, Upper GI, and Vascular Surgery inpatients will require access to a rehabilitation area which will allow various allied health treatments, staff and storage – direct access
 - v. Main Entry / Admissions– ready access
 - vi. Some Medical Inpatient Units – ready access
 - vii. Pathology (via pneumatic tubes) – direct access
 - viii. CSSD – routine access
- c. Standard inpatient medicine units will have the following key internal functional relationships:

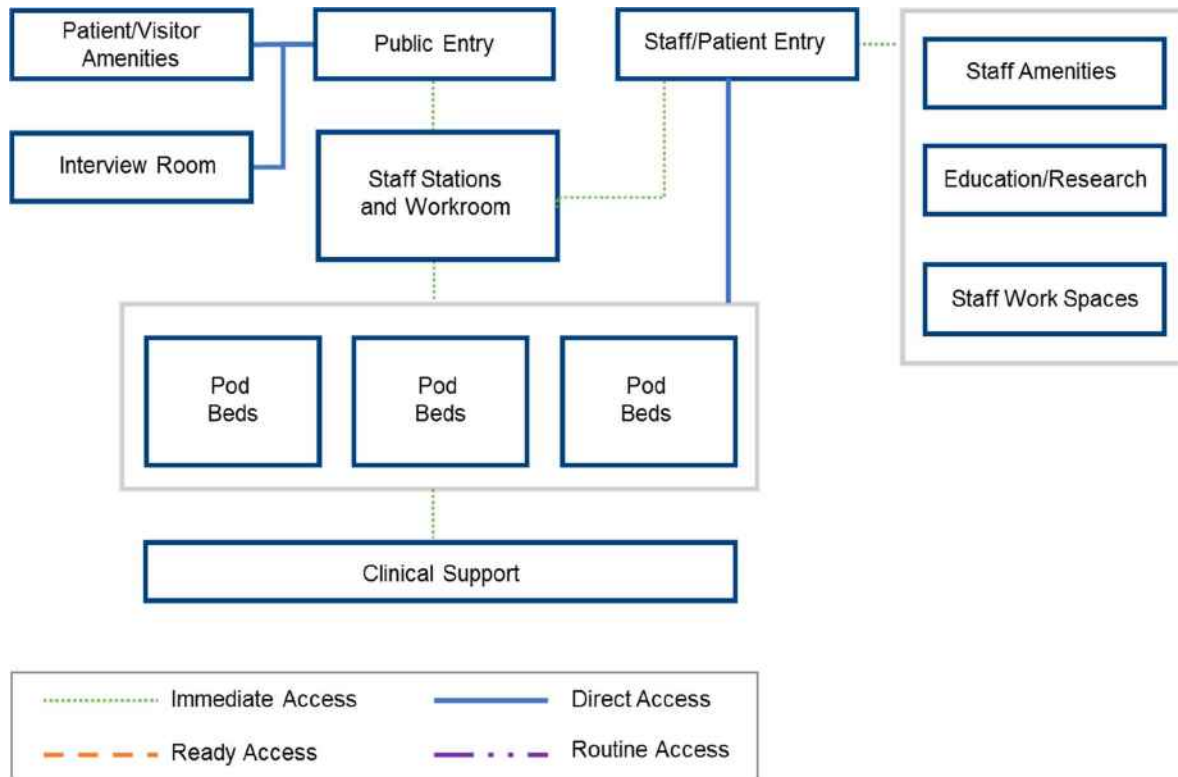


Figure 3 Inpatient Surgical internal relationships

6.5. Specific Design Requirements

6.5.1. General

- a. Patients in inpatient units will be provided clinical care and support which cannot be provided safely in another environment such as home, clinic or community centre.

- b. A high proportion of patients will be 65 years and older, many of whom will have co-morbidities and some of whom will be confused or have dementia. An inpatient care environment will support the safe management of patients who may be confused or agitated and have the tendency to wander.
- c. All inpatient units should be designed to facilitate an elder-friendly environment that promotes independence while maintaining patient and staff safety.
- d. The unit should be located to allow sharing of common support areas such as patient lounge/waiting areas, some staff amenities and meeting/tutorial space between other units. Staff must be able to access shared areas between inpatient units without having to travel through other inpatient units.
- e. Immediate access to functional assessment and retraining spaces, including gymnasiums, appropriate clinical and non-clinical therapy spaces and storage will be required to support the 'Rehabilitation in Place' model of care.

6.5.2. Patient Treatment Areas

- a. The design of the standard inpatient unit will be required to support multiple levels of care including high acuity, intermediate, and supported self-care.
- b. Standard inpatient units will be configured to provide:
 - i. Dedicated speciality or mixed specialty units
 - ii. Speciality clusters within a single unit
 - iii. Pods for the management of high acuity patients
 - iv. A mix of single and two-bed rooms - each pod should be approximately 60% single rooms
 - v. Infection control
 - vi. Bariatric capability.
- c. Design and ICT will allow for telemetry patient monitoring in all bed spaces.
- d. Infectious and immunocompromised patients will be managed in isolation rooms according to their protective requirements. This will include a number of Class N isolation rooms with ante rooms, and single rooms. The negative pressure rooms should be at the front of the unit.
- e. Ceiling-mounted patient lifting devices will be included over 4 beds - this will include a mix of single and 2 beds rooms.
- f. To facilitate the delivery of care at the bedside each patient bedroom will have three designated fit for purpose zones including the patient zone, staff zone and family / carer zone.
- g. Each unit will contain some areas where visibility of 4 patients from a single station for high acuity or patients that require additional support without an increase in noise or sleep requirements. As many 2 bed bays as possible should meet this requirement.
- h. A staff station will be located close to the inpatient unit entry to provide an identifiable point of reception for the unit, and to enhance security and safety for patients and staff.
- i. The main staff station will be collocated with a large work room.
- j. The medication rooms should be in close proximity to staff stations and separate to clean utilities. Access to medication storage areas will be controlled, visible and limited to authorised persons. Other medications, IV fluids and sterile supplies will be stored in the clean utility room close to the patient areas.
- k. The location and design of the medication rooms should minimise travel distances, noise and disruption to staff undertaking medication-related activities to reduce the risk of clinical error.
- l. Orthopaedic, Vascular, Colorectal and Upper GI units will be collocated and will all have access to an outdoor space for functional retraining, functional assessments with allied health therapies. This space will allow bariatric access and can be shared with other inpatient units.
- m. The rehabilitation space will accommodate therapies, assessments, and activities such as walking, sitting and lying. The area will also be suitable for physiotherapy, gait analysis, strength training, speech training, stair assessment and include a bariatric suitable double plinth for lying, sitting, balancing, and reaching. This space will allow bariatric and wheelchair access and can be shared with other inpatient units. The rehabilitation space will be located close to the orthopaedic unit.
- n. A 10m continuous stretch will be located near the units for allied health assessment.

- o. The NUM office will be located in the clinical area.

6.5.3. Patient and Visitor Amenities

- a. An interview / counselling room for patients and relatives will be located within the IPU. The room requires adequate space for up to 10 people.
- b. Patient lounge will be designed with natural light.
- c. Visitors should have ready access to a lounge area or outdoor space, and incorporate quiet spaces and privacy in design.

6.5.4. Staff Amenities

- a. Lockers and staff toilet facilities will be located in the staff area within the unit. One staff toilet will be located on clinical area of the unit.
- b. Access to a staff room with beverage bay, meal preparation area and refrigerator will be required. Access to an outdoor area is preferred.

6.5.5. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A multidisciplinary clinical work room located adjacent to the staff station will house the electronic journey board and be used for multidisciplinary team meetings, education and teaching. Meeting rooms and education facilities will be located in proximity to inpatient units, including in shared spaces between inpatient units.
- c. The staff occupying each clinical unit may include:
 - i. Nursing staff including nursing managers, clinical nurse consultants, clinical nurse educators, registered and enrolled nurses and assistants in nursing
 - ii. Allied health staff including, physiotherapy, social work, pharmacy, dietetics, occupational therapy, social work
 - iii. Administrative staff
 - iv. Clinical support staff including environmental services and patient services assistants.

6.6. Workforce

- a. Integration of allied health staff into inpatient clinical teams - recruitment and training.
- b. Nursing workforce skill development and model of care, including high acuity level of care.
- c. RITH/Community out-reach service considerations.

6.7. Technology

- a. Organisational direction, governance and infrastructure to support telemetry monitoring in inpatient units.
- b. Consideration should be made for patient tracking technology (including the use of RFID locators) that can interact with the patient journey board and provide information on the location and status of patients.
- c. It has been suggested surgical registrars require access to private study areas away from clinical area which contain computer access.

6.8. Change Management

- a. High acuity model of care in inpatient units - model of care to be developed, workforce and staff training implications.
- b. Transition plan for increase in subspecialty services and complexity.

7. INTENSIVE CARE

7.1. Scope of Service

- a. Campbelltown Hospital will provide Role Delineation level 6 Intensive Care services from a 30 bed Intensive Care Unit, with capability to meet the Clinical Services Plan requirements to 2026/27. The unit will provide care for adults from 16 years of age requiring intensive therapies including, but not limited to, provision of mechanical ventilation, renal replacement therapy and invasive cardiovascular monitoring.
- b. Integrated Intensive Care services will be provided across the LHD and the Sydney Children's Hospital Networks. Patients with severe trauma, burn or spinal cord injury, and those requiring cranial neurosurgical, cardiothoracic or complex vascular procedures will be transferred to an appropriate facility within NSW Critical Care Tertiary Referral Network.
- c. The Intensive Care Service at Campbelltown Hospital will provide networked intensive care services to the Role Delineation level 4 Intensive Care Service at Bowral Hospital using telemedicine technologies. This will include daily patient review and care planning, medical staff rostering, clinical governance and an integrated education program.
- d. Critically ill paediatric patients 4-12 years of age may be stabilised in the Intensive Care Unit while awaiting Newborn and Paediatric Emergency Transport Service (NETS) retrieval to a specialist paediatric facility. Patients over 12 years old may be considered on a case by case basis.
- e. The Intensive Care Service will provide Medical Emergency Team (MET) capability for the hospital through the Medical Emergency Team. A consultation and outreach service will be provided for clinically unstable or deteriorating patients in all areas of the hospital, in accordance with operational policies.
- f. A Central Venous Access Device service will be provided from the Unit. This will include the provision of a Central Line service and a future Total Parenteral Nutrition service to support the growing sub specialty medicine and surgical specialities provided at the hospital.
- g. A Transoesophageal Echocardiography service will be provided in the Unit for clinically unstable patients.
- h. Exclusions:
 - i. Campbelltown Hospital will not be a designated NSW Trauma Referral Centre
 - ii. High acuity patients that do not require admission to intensive care will be admitted to designated areas on inpatient units under the care of the specialty inpatient team. Inpatient units with high acuity areas will include; paediatrics, cardiology, cancer, respiratory, stroke and general surgery
 - iii. Neonates and children under 4 years of age awaiting NETS retrieval will be stabilised in an age appropriate environment including Paediatric Unit Close Observation or Special Care Nursery.

7.2. Model of Care

- a. The model of care will provide for the assessment, diagnosis, treatment and care of critically and seriously ill patients. Patients will be admitted to Intensive Care Unit following review and assessment by the Intensive Care specialist or delegate.
- b. The Intensive Care Unit will be staffed by appropriately trained medical, nursing, allied health and support staff. The Unit will form part of the networked integrated intensive care service workforce model across the District and comply with NSW Role Delineation of Clinical Services (2017) requirements for a Level 6 Intensive Care Service.
- c. Medical, nursing and allied health workforce models and clinical competencies will be provided in accordance with appropriate colleges and professional bodies:
 - i. The proposed medical staffing model is 4 medical teams each with one specialist, one senior registrar and one junior registrar per shift
 - ii. The proposed nursing staff model is Nurse Manager and Clinical Nurse Consultant, Nursing Unit Manager / NUM Coordinator, Access Nurse and extended hours Clinical Nurse Educator, registered and enrolled nursing staff per shift
 - iii. The proposed allied health staff model is to be further clarified

- d. A Clinical Emergency Response System / Medical Emergency Team and outreach service will be provided from the Unit, with designated outreach nurses assigned for each shift. A designated 'hot bed' space will be provided within the Unit to receive an urgent unstable admission from within the hospital.
- e. The Intensive Care Unit will have remote monitoring capability for all telemetry units in areas of the hospital outside of the Intensive Care Unit and Acute Cardiac Unit. Hospital model for telemetry monitoring is to be confirmed.
- f. An advisory role on clinical assessment, treatment planning and/or advisory support to other facilities will be provided through the use of telemedicine services.
- g. Education, training and research is integral to the service provided by the Unit and will be provided for medical, nursing, allied health and support staff, and students undertaking programs affiliated with the Hospital. Simulation facilities will be provided within the Unit to facilitate 24 hour access to interdisciplinary team education and training.
- h. A clinical workroom/meeting room will be used for multidisciplinary team meetings, case management discussions, review of clinical investigations and clinical documentation. One-on-one clinical handover will occur at the patient bedside.
- i. Procedures and interventions will be undertaken at the bedside where possible.
- j. Allied health treatment will be provided at the patient bedside.
- k. Many types of medical imaging modalities e.g. mobile x-ray, transthoracic and transoesophageal echocardiography and ultrasonography will be available within the unit.
- l. The NSW Health Electronic Record for Intensive Care (eRIC) will facilitate point of care electronic medical record recording and access to patient administration systems, medical imaging and pathology.
- m. The Unit will utilise technology enabled assistive communication devices and translation services to enhance patient-centred care for populations requiring special consideration e.g. people with a disability or those from culturally and linguistically diverse backgrounds, and patients with communication impairments (e.g. aphasia) or those unable to communicate due to ventilation requirements.

7.3. Operational Description

7.3.1. Operating Hours

- a. The Intensive Care Unit will be open 24 hours per day, 7 days per week.

7.3.2. Access, Admission And Discharge / Transfer

- a. A centralised electronic admission and discharge process will provide timely access and flow through the Intensive Care Unit.
- b. Patients will be admitted to the Intensive Care Unit from the following areas:
 - i. Emergency Department, including inter-hospital transfer
 - ii. Retrieval service
 - iii. Perioperative, Procedural or Interventional Unit (including booked admissions for post-operative care)
 - iv. Inpatient units.
- c. Visitors will have access to the Unit at all hours via a secure, monitored central entry point.
- d. Staff will require all-hours access to the Intensive Care Unit that is separate from public flows.
- e. Patients will often be transferred to another unit within the hospital to continue their medical and nursing care prior to discharge from the Hospital. In the instance of retrievals from other hospitals, patients may be transferred back to the referring facility once their critical episode of care is complete.
- f. Transfer or discharge from the Intensive Care Unit will be at the discretion of the intensive care medical team. Patients will be discharged when the intensivist/senior registrar determines that the patient is clinically ready for transfer of care to inpatient unit medical teams, another facility or return to the community setting.

7.3.3. Clinical Support Services

7.3.3.1. Pharmacy services

- a. An automated medication management system will operate within the Intensive Care Unit.
- b. Drugs will be centrally accessible and kept in multiple sites throughout the Intensive Care Unit.

7.3.3.2. Pathology services

- a. Pneumatic tube access will be required at a central location in the unit, and should be positioned in an area accessible only by staff.
- b. Point of care testing is to be available within the Unit. This will include a blood gas machine and other stat laboratory devices, the storage of blood collection and pathology equipment and a terminus point for the pneumatic tube.

7.3.3.3. Imaging services

- a. A digital mobile x-ray unit will be located in proximity to the Intensive Care Unit to enable timely access to imaging, and to limit the amount of movement and impact on the machine. Secure storage will be required to accommodate mobile x-ray equipment.
- b. The Intensive Care Unit will have portable ultrasound machines. A CT scanner will be located in close proximity to the Unit.

7.3.4. Non-Clinical Support Services**7.3.4.1. Food services**

- a. Light meals and mid meals will be delivered by trolley and stored in the beverage bay (to include a refrigerator). An area will be designated to park this trolley. All trays and utensils will be returned to the kitchen. Refrigeration needs to be close to patient areas for storage of food and snacks.
- b. Dietary supplements prescribed by dietitians or medical officers will be delivered with patient meal trays. A supply of enteral nutrition and dietary supplements will also be stored in the Unit.

7.3.4.2. Education, training and research

- a. The Unit will comply with the College of Intensive Care Medicine, Australia and New Zealand accreditation requirements for training in Intensive Care Medicine.
- b. The Intensive Care Unit will be integrally involved in the Australian Institute of Medical Simulation and Innovation (AIMSi) Simulation Centre and have a strong commitment to academic education and research.
- c. A simulation training room will be included in the non-clinical area of the unit.

7.3.4.3. Security

- a. The Unit will be secured at all times and there will be an intercom with audio-visual capacity at the entry for visitors to contact staff.
- b. All entrances to the Unit are to be secure with appropriate access control devices.
- c. Fixed duress alarms will be available within the unit.
- d. Design will accommodate a balance between welcoming environment for visitors and staff safety 24 hours per day.

7.3.4.4. Waste management

- a. A large volume of contaminated, clinical and general waste, including recyclable items, is generated from the unit.

7.3.4.5. Supply services

- a. Impress stocks are provided on a scheduled basis with stock levels monitored via bar coding devices.
- b. Central sterilised stocks and equipment are delivered/collected following cleaning in the Central Sterilising Services Department.

7.4. Relative Location and Unit Configuration

7.4.1. Functional Relationships

- a. The Intensive Care Unit will have the following prioritised external functional relationships
 - i. Emergency Department - immediate access for the transfer of patients, staff and equipment
 - ii. Helipad - immediate access for the transfer of patients, staff and equipment
 - iii. Perioperative and Interventional Suite - direct access for the transfer of patients, staff and equipment
 - iv. Medical Imaging Department - direct access for the transfer of patients
 - v. Acute Cardiac Unit - direct access for the transfer of patients, staff and equipment
 - vi. Inpatient units - ready access for the transfer of patients, staff and equipment
 - vii. Birthing Suite - ready access for the transfer of patients
 - viii. Pharmacy - direct access via mechanical circulation for the transportation medications
 - ix. Pathology - direct access via mechanical circulation for the transportation of specimens and blood
 - x. Biomedical Engineering - ready access for the transfer of staff and equipment.
 - xi. Mortuary - ready access for the transfer of patients.
- b. Immediate access to a CT after hours is not essential.
- c. The Intensive Care Unit will have the following internal functional relationships:

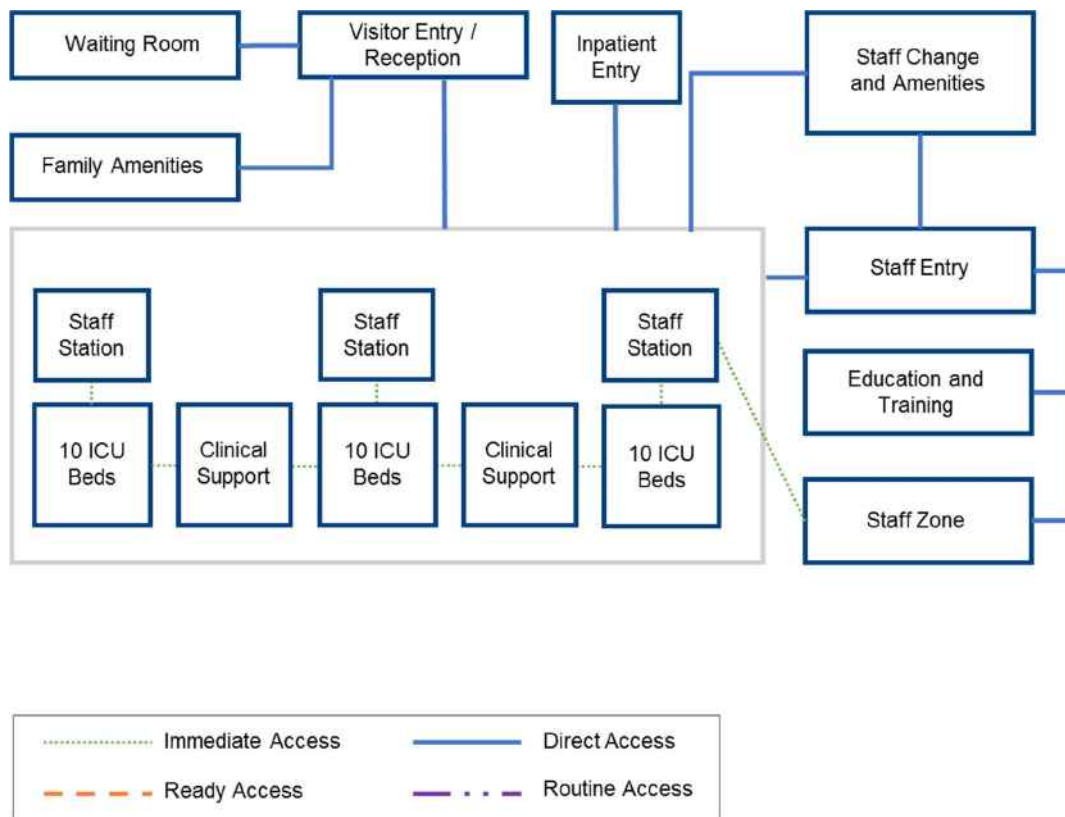


Figure 4 ICU internal relationships

7.5. Specific Design Requirements

7.5.1. General

- a. Separate routes in and out of the Intensive Care Unit will be designed for the public and staff and support services.

- b. The Unit will comprise the following zones:
 - i. an entrance
 - ii. a waiting area external to the Intensive Care Unit
 - iii. patient areas
 - iv. a staff area
 - v. support areas.
- c. The design will maximise patient visibility for staff from staff stations and between patient bedrooms. It is preferable that the staff are able to visualise 1 to 4 patients at one time.
- d. The design will facilitate flexible models of care to cope with unexpected changes in workforce profile as a result of increased workload or reduced staffing numbers at short notice.
- e. The design will allow the clinical environment to adapt quickly to manage situations such as an infectious pandemic by allowing pods to function independently of each other.
- f. The design must ensure that each pod of beds is able to be individually accessed, without travelling through the adjacent pod.
- g. The ICU will maximise access to natural light, with access to an outdoor area preferred.
- h. The larger interview room will require dual access from both the entry/waiting area and the clinical area of the unit.

7.5.2. Patient Areas

- a. The Unit will have 30 intensive care beds to be configured in 3 pods with all single rooms designed with a space allocation and flexibility to accommodate a range of patients.
- b. Pod 1 will consist of:
 - i. 8 standard ICU enclosed beds. 2 of these should have bariatric capability and 4 with renal dialysis functionality
 - ii. 1 class N ICU bed including ensuite
 - iii. 1 fully enclosed positive pressure ICU bed including ensuite
 - iv. 2 additional ensuites
- c. Pod 2 will consist of:
 - i. 8 standard ICU enclosed beds. 2 of these should have bariatric capability and 4 with renal dialysis functionality
 - ii. 1 fully enclosed Class N ICU bed including ensuite
 - iii. 1 fully enclosed positive pressure ICU bed including ensuite
 - iv. 2 additional ensuites.
- d. Pod 3 will consist of:
 - i. 7 standard ICU enclosed beds. 2 of these should have bariatric capability and renal dialysis functionality
 - ii. 2 fully enclosed Class N ICU bed including ensuite
 - iii. 1 fully enclosed positive pressure ICU bed including ensuite
 - iv. 1 additional ensuite
 - v. 1 bathroom to accommodate flat-bed shower trolley and medical gases.
- e. A technology enabled designated space will be required for the remote centralised monitoring of patient telemetry units outside the Intensive Care Unit or Acute Cardiac Unit. This space should incorporate fixed and mobile telemedicine technology to enhance intensive care service integration with referral hospitals, and support outreach services provided onsite. This area should be located in proximity with the designated 'hot bed' space for receiving urgent admissions to the Unit.
- f. 1 procedure room will be provided for patients requiring invasive procedures not able to be performed at the patient bedside, this may include inpatients from other units within the hospital.
- g. Ceiling mounted medical services pendants will be provided in all the Intensive Care Unit patient rooms and the procedure room. There will be at least 2 pendants per room preferably with lifters included. The design and layout of the patient room must take into account the type of services pendants chosen to ensure the room meets operational requirements.

- h. All patient care areas require ceiling mounted examination lights (this requires coordination with other ceiling mounted equipment).
- i. Facilities for the care of bariatric patients will include ceiling mounted lifting hoists. 6 of 30 patient rooms will be fitted with ceiling mounted hoists, ideally 2 per pod. 2 of the 6 will be suited for 400kg.
- j. 6 bed spaces will be configured with access to reverse osmosis water supply and appropriate plumbing for dialysis waste disposal and storage for reverse osmosis water.
- k. Infectious and immunocompromised patients will be managed in isolation rooms according to their protective requirements. This will include a number of Class N isolation rooms with ante rooms and single rooms.
- l. Ensuites associated with isolation rooms must accommodate the needs of a highly dependent patient, additional staff and equipment.
- m. Medical gases will be required in all patient areas including patient toilet and shower facilities and the external patient balcony.
- n. Consideration will be required in design to provide an appropriate environment for the care of paediatric and adolescent patients.
- o. Each patient room must have access to natural light through provision of external windows positioned to provide patients with external views when sitting up in bed.
- p. There will be adequate space around each bed to allow the patient to sit out of bed while also accommodating up to two visitors in chairs.
- q. An external patient area, such as a balcony, which has capacity for an inpatient to be taken outside in a clinically secure and safe manner is highly desirable. Access to medical gases, power and handwash bay will be required in this area. The space will ideally allow fresh air, sunlight and natural elements with the ability to be fully modulated to suit the environment. Design considerations that incorporate sensory elements, similar to mental health sensory room design are ideal.
- r. Waiting areas will be located adjacent to the entrance/reception and allow separation of visitors based on their individual needs and proximity to individual pods.

7.5.3. Public and Patient Amenities

- a. Amenities for visitors will include:
 - i. Space for fully reclining chairs to support family members and others staying overnight within the patient rooms.
 - ii. A waiting room with access close by to public toilets and baby change area will be required at the entrance to the Intensive Care Unit.
 - iii. A family room with access to a shower, toilet and beverage bay is to be adjacent to the Unit for visitors who are staying overnight.
 - iv. Access to the kiosk and vending machines. The hospital will not routinely provide meals to visitors to the Unit.
 - v. A bereavement/interview room for distressed relatives and other quiet spaces will be located within the Unit.
 - vi. One separate interview/counselling room for relatives will be located within the Unit and one at the entry with a double door into the unit and into the waiting area.

7.5.4. Storage

- a. The Unit has a large storage requirement which will be met by the following:
 - i. Capacity for the storage of a small stock of consumables and currently used equipment close to the point of use will be to be incorporated into the design. Ideally this would be a mobile solution.
 - ii. If design does not limit speed of access, sterile stock may be stored in one location.
 - iii. Capacity for the storage of medical and surgical equipment for use within the Unit requiring power for charging. This includes equipment which is used on a regular enough basis to be stored within the Unit, but is not required to be stored at the bedside.
 - iv. Space for storage of emergency back-up medical equipment for use within the Unit. This equipment includes monitors, ventilators etc., which may be required in emergencies or when equipment in use fails. Without a ready supply of such equipment, patient care could be compromised. This storage requirement should be minimal.

- v. Space for storage of mobile medical imaging equipment within the Unit will be required along with PPE (including lead aprons) and access to power.
 - vi. Space for storage of equipment capable of increased safe weight capacities.
 - vii. Space to permanently store portable dialysis units and fluids (2+ pallets) when not in use.
 - viii. Storage for specialised and individual equipment associated with allied health therapy will be stored within the Unit in a location separate from the patient room, unless it will be required for continuous therapy.
- b. 7.5.5 Workplace Design Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
 - c. A meeting / tutorial room with telehealth capacity for up to 50 staff will be required. The amphitheatre auditorium design style is preferred to incorporate future proofing initiatives e.g. conference venue with break out rooms.
 - d. An additional large education room and small meeting / interview room will be required.
 - e. The clinical / handover room should be located directly next to each staff station and provides a private work area for members of the multidisciplinary team including registrars, residents and allied health staff. The area will be used for handover, case management discussions, viewing of x-rays, storage of Unit manuals and resource material and clinical reporting / write-up. The clinical / handover room will contain an electronic patient journey board and requires access to personal computers and telephones. Clinical handover will also occur at the patient bedside.
 - f. The location and design of staff write-up bays should maximise observation of bed areas.
 - g. The respiratory workroom must have medical gases and be directly accessible from within the Intensive Care Unit for the maintenance, repair and cleaning of ventilators and other equipment.
 - h. Simulation facilities will be provided within the clinical support area. Requirements include; simulation equipment and technology, bed, medical gases, suction, a hand wash bay and storage space for training equipment.
 - i. The staff establishment may include:
 - i. Medical specialists qualified in intensive care medicine, anaesthetics or another medical specialty - Advanced trainees, fellows and junior medical officers – 13 (4 per day)
 - ii. Junior medical staff – 34 (3 x senior, 3 x junior per shift)
 - iii. Nursing staff including nursing managers, clinical nurse consultants, clinical nurse educators, registered and enrolled nurses – 165 (1 NM, 2 NUM2, 4-5 Coordinators (1 per shift), 3 CNE (1 am/pm mon-fri), 4.5 Access nurses (2 per shift), CNCs)
 - iv. Allied health staff including, physiotherapy, social work, pharmacy (1:15)
 - v. Equipment officer - TBC
 - vi. Administrative staff, Clinical Support Officer (M-F), unit clerk - TBC
 - vii. Clinical support staff including environmental services and patient services assistants - TBC
 - viii. Organ and Tissue Donation Coordinator
 - ix. Academic and research staff.

7.5.5. Staff Amenities

- a. A separate staff tea room, lockers, shower and toilet facilities will be provided within the staff area.
- b. Access to an outdoor area preferred.
- c. A shared overnight facility is to be available for on-call staff and is to be located in close proximity to the Intensive Care Unit. This will include 3 single ensuite rooms.

7.5.6. Clinical Information Technology

- a. Physiological monitoring will be required in all bed spaces and procedure rooms.
- b. Telemedicine, teleconferencing and interpreter service conferencing capability needs to be provided within the Unit. This includes technology enabled assistive communication devices e.g. electronic communication boards, translation services, iPads
- c. Access to wireless network with fixed and/or mobile computer will be required in each clinical space, including patient rooms.

- d. Each bed space requires a write up bay shared between 2 beds, may be internal or external to the bed rooms depending on detailed design. These write up bays will include computers, slave monitors and appropriate communications to allow staff to hear monitors if the bedroom doors are closed.
- e. Capability for remote centralised monitoring of telemetry beds outside ICU - technology requirements and operational processes to be developed.
- f. Point of care testing capability on medication trolleys preferred - hospital wide system considerations.

7.6. Workforce Issues

- a. Increased role delineation of the hospital, unit capacity, complexity and support requirements - adult and paediatrics
 - i. Workforce, education and training, operational processes.
- b. Medical Emergency Team and REACH program
 - i. Workforce recruitment, education and training, operational processes
 - ii. Operational processes and support requirements for high acuity model of care on inpatient units.
- c. Central Venous Access Devices (CVAD) and Total Parenteral Nutrition Services
 - i. Model of care and location of procedural space – ICU or Procedural Suite?
 - ii. Workforce requirements, flows and operational processes.
- d. Education, training and research is integral to the service provided by the Unit and will be provided for medical, nursing, allied health and support staff, and students undertaking programs affiliated with the Hospital. Simulation facilities will be provided within the Unit to facilitate 24 hour access to interdisciplinary team education and training. This is seen as a key workforce recruitment and retention strategy.
- e. The senior medical workforce model will comprise staff specialists and visiting medical officers with cross appointments within the District to enhance service capability and workforce development.
- f. A centralised junior medical officer recruitment strategy, scheduling and training program will operate within the District.
- g. A centralised recruitment strategy will be required for nursing and allied health staff.

7.7. Technology

- a. Technology and infrastructure requirements to support telemetry monitoring outside ICU.
- b. In-centre simulation technology and telemedicine fixed and mobile solutions required to provide networked services within the LHD.
- c. Telemedicine, teleconferencing and interpreter service requirements include technology enabled assistive communication devices e.g. electronic communication boards, translation services, iPad.

7.8. Change Management

- a. Increased medical / surgical complexity and interventional services onsite
 - i. Workforce, education and training, operational processes.
- b. Increased volume and complexity of paediatric services onsite
 - i. Intensive Care Unite education, training and equipment requirements, operational processes.
- c. Model of care for high acuity areas within general and sub-specialty inpatient units
 - i. Recognition and management of the deteriorating patient, processes and education
 - ii. Intensive Care Outreach service process and workforce requirements
 - iii. Location of cardiac monitoring outside the Intensive Care Unit, and remote or centralised monitoring of telemetry beds
 - iv. Nursing workforce, education and training requirements for inpatient unit staff.

8. HIGH VOLUME SHORT STAY UNIT

8.1. Scope of Service

- a. The perioperative service will include a High Volume Short Stay Unit (HVSSU), providing high volume surgery services at Role Delineation level 5 for adult service and Role Delineation level 4 service for children under 18 years of age. Children under the age of 5 years will be managed at the discretion of an anaesthetist and surgeon.
- b. The HVSSU will include :
 - i. day of surgery pre-operative admissions
 - ii. procedure rooms
 - iii. operating theatres
 - iv. recovery spaces (separate from main theatre spaces) including:
 - Post Anaesthetic Care Unit (PACU, Stage 1)
 - A Stage 2 and 3 recovery area (Day Only area) with 3 bays required per procedure room / theatre.
- c. The HVSSU will be a controlled environment for the care of adults and children undergoing short duration operative and recovery procedures, including day only, short-stay surgery and endoscopy services.
- d. The HVSSU will share an entry with the perioperative unit, but will require separate admission and discharge areas, recovery spaces and separate nurse staffing.
- e. Beds will be provided within the Extended Short Stay Unit (for overnight patients). This should have direct access from the stage one recovery.

8.2. Model of Care

- a. A HVSSU will be provided for patients requiring day only or short stay surgery. High volume short stay patients who require overnight care will be cared for within the Extended Short Stay Surgical Unit.
- b. The HVSSU will be managed by the Nurse Unit Manager for HVSSU under the governance of the Perioperative Nurse Manager, and in close collaboration with the directors of anaesthesia, surgery and gastroenterology.
- c. Elective surgical patients will have an appropriate pre-admission assessment; this may occur at a pre-admission clinic or by telephone, depending on the patients risk profile. The pre-admission clinic will be located in the outpatient area.
- d. Endoscopies, bronchoscopies, cystoscopies and ERCP's will be performed within the procedure rooms within the HVSSU. Patients will be conveyed to the procedure room on a trolley.
- e. After-hours endoscopy procedures will be conducted in the main theatre complex, with an endoscopy nurse available on-call. Access to appropriate equipment will be required in these theatres (as a separate tower).
- f. Endoscopies may also be performed in the Intensive Care Unit on unstable patients as required.
- g. The anaesthetic service will provide essential anaesthetic support to pre-admission clinics and within the HVSSU, operating theatres and procedure rooms.
- h. All patients requiring stage 1 recovery will receive first stage recovery in the Post Anaesthetic Care Unit within the HVSSU area with separation between Paediatric, Adult and Mental Health ECT patients.
- i. Some patients may be transferred straight to the stage 2 recovery area.
- j. Paediatric patients will receive stage 2 and 3 recovery in the day spaces within the paediatric recovery area in the paediatric Short Stay Inpatient Unit.
- k. A small number of patients will require post-operative transfer to the Intensive Care Unit due to anaesthetic / surgical complications or other unexpected factors. Patients where admission to the Intensive Care Unit or other more intensive care is anticipated will not be booked for the HVSSU.
- l. Day patients will be discharged when they meet pre-determined recovery criteria without routine medical review. Patients will be given all the necessary post procedural care instructions in printed form and telephone numbers for contact in an emergency.

- m. HVSSU Stage 1 recovery spaces will be separate from Operating Theatre Stage 1 recovery spaces as the HVSSU will be a separate unit. Separate recovery areas will be required for Mental Health patients for stage 2 and 3 recovery as well as for paediatric patients (in the Short Stay Paediatric Inpatient Unit).
- n. A separate Extended Day Only Stay Unit will be required to enhance patient flow. This may be located within the Surgical Inpatient area.
- o. The HVSSU will operate in accordance with Australian Council on Health Care Standards, all relevant Ministry of Health standards and guidelines, NSW nursing standards and all standards as outlined by the various Learned Colleges and Professional Organisations.
- p. The HVSSU operations will be consistent with the requirements of the Ministry of Health and the Learned Colleges associated with clinical training.

8.3. Operational Description

8.3.1. Operating hours

- a. The HVSSU will operate Monday to Friday with an extended hours service (with potential for operating in evenings and on Saturdays in the future).
- b. There will be reduced activity after-hours and on weekends.

8.3.2. Access, admission and discharge/transfer

- a. Access to the HVSSU will be required for:
 - i. day patients (trolley, wheelchair, ambulant)
 - ii. general inpatients (bed / trolley access)
 - iii. emergency patients (trolley, bed, wheelchair)
 - iv. staff and visitors
 - v. good services and maintenance.
- b. Access to the HVSSU will be via the perioperative reception and control point. Access will be strictly controlled.
- c. An admissions area will be located in HVSSU that is separate from the perioperative suite admissions area.
- d. Staff access into and throughout the HVSSU will be controlled by a proximity access identification (swipe) card.
- e. All day procedure bookings will be under the control of the waitlist coordinator and admissions team, who coordinate the dates for procedures as well as the date and time for pre-admission clinic and surgical review appointments.
- f. A staff member will collect the patient from the waiting area and patients from the inpatient area will be accompanied by a unit nurse to and from the HVSSU.
- g. There will be a single point of admission for all planned procedures. Presentations will be staggered.
- h. Patient arrival will be registered and a nursing review conducted to ensure that all required preparation is complete and the patient is assessed for their procedure on that day. Where doubt exists, the anaesthetist or surgeon / proceduralist will be advised.
- i. The pre-admission assessment for all day patients will include:
 - i. completion of the admission process, clerical and clinical
 - ii. confirmation of consent
 - iii. anaesthetic review and examination as necessary.
- j. Patients will utilise the waiting area prior to being escorted to the patient holding area to change for their procedure. Elderly or frail persons may require wheelchair or trolley transport.
- k. Patients presenting on a trolley or bed will be taken directly to the holding area.
- l. Family members will be given an estimated of length of time for procedure, and be instructed to return to the waiting room (e.g. through the use of SMS messaging). In limited circumstances a family member may be present in the anaesthetic induction and recovery areas, for example paediatric patients.

8.3.3. Clinical support services

- a. Clinical support services will be shared with the Perioperative Unit

8.3.3.2. Pharmacy services

- a. Routine impresting system will provide the majority of medication to a central supply area within the operating theatre.
- b. Secure pneumatic tube access for the transport of urgent medication.
- c. Future proofing for the implementation of automatic dispensing devices will be required.

8.3.3.3. Pathology services

- a. Secure pneumatic tube access for the transport of pathology specimens will be required in a central location. The majority of samples from the operating room suite will be transferred to the pathology department via the pneumatic tube system.
- b. Some specimens (frozen sections) will be examined onsite by the pathologist in a dedicated area. Planned frozen sections will be co-ordinated to allow pathology staff to be present in the HVSSU to undertake slide review.
- c. Consideration of specimen management and requirements for storage and transport of specimens as well as associated issues of formalin decanting for specimens will be required.
- d. A suitable space for point of care testing area will be required in the HVSSU direct access to a blood fridge will be required.

8.3.3.4. Infection control

- a. Infection control standards will be maintained in accordance with the current NSW Infection Control Policy. The design must consider staff flows to ensure there is no cross over of contamination and clean access.
- b. Patients with a known multi-resistant organism infection will be transferred straight to the operating room and will not wait in a holding bay.
- c. A negative pressure room will be required for some patients undergoing bronchoscopes.

8.3.3.5. Imaging services

- a. Image intensifiers and access to previous images will be required in all theatres.
- b. Medical imaging will be provided as an in-reach service from the Medical Imaging Department.

8.3.4. Non clinical support services

- a. Non-clinical support services will be shared with the Perioperative Unit.

8.3.4.2. Waste management

- a. Waste management services will be performed as per hospital wide processes with the addition of:
 - i. An increase in use of disposable products, including the Ministry of Health move to the use of disposable surgical drapes will require appropriate waste management strategies. The majority of operating theatre and procedure room waste will be incinerated due to body fluid contamination.
 - ii. Separate facilities and equipment will be utilised for cleaning the central sterile stock, operating and procedure rooms and corridor area of the HVSSU.
 - iii. Operating room assistants will be responsible for cleaning between cases. Terminal cleaning will be undertaken by the dedicated theatre cleaners.
 - iv. All contaminated materials will be removed from the operating and procedure rooms via the clean-up rooms. At the end of each case, the used instruments will be rinsed and returned to the supply trolley, together with anaesthetic equipment, for transfer to the Central Sterilising Department via a dedicated route.

8.3.4.3. Linen services

- a. No specific requirements. Linen services will be performed as per hospital wide processes.

8.3.4.4. Supply services

- a. All routine sterilisation of operating room equipment and decontamination of anaesthetic equipment will be carried out by the Central Sterilising Services Department.
- b. Fibre-optic endoscopes (flexible type only) will be cleaned and stored by the Central Sterilising Services Department. Drying cabinets will be required in the HVSSU to optimise patient flow and permit scopes to be available easily after-hours. Nurses will clean scopes after-hours.
- c. Sterile stock will be stored within the sterile stock area. Instrument and sterile linen packs will be collected to agreed operation checklists within the sterile stock area for the daily operating schedule and emergency surgery. An open trolley system will be used. Special consumables will be held in the sterile stock area and added to the collections as required. Some additional special items will be held on pre-stocked trolleys for transfer to the operating room as required.
- d. Loan instrument sets will be received by the Central Sterilising Department for sterilisation prior to transfer to the set-up / sterile stock area in the HVSSU.
- e. A computerised bar coding system will be used for tracking surgical instruments.

8.3.4.5. Security

- a. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms and as required on request from clinical staff.
- b. Staff access into and throughout the Unit will be controlled by a swipe card or similar.

8.4. Relative Location and Unit Configuration

8.4.1. External relationships

- a. Immediate access from the HVSSU to the Central Sterilising Services Department will be required with segregated sterile supply and dirty return functions using clean and dirty hoists in appropriate zones if these departments are horizontally separated. This access to be as centralised as possible within the perioperative zone.
- b. Endoscopy may at times require interventional radiology or operative support so will require direct access to operating theatres and interventional radiology suites.
- c. The HVSSU will require anaesthetic support and as such is best located close to the Anaesthetic Department.
- d. The ability to easily move equipment between main theatres and HVSSU will be required.
- e. Direct access to the Endoscopy procedure rooms from the Emergency Department for urgent endoscopic procedures.
- f. The HVSSU is to be readily accessible to the Extended Short Stay Unit.
- g. HVSSU external relationships will include:
 - i. Central Sterilising Services Department - Immediate access (especially for HVSSU and endoscopy rooms)
 - ii. ICU - Direct access
 - iii. ED - Direct access
 - iv. Extended Short Stay Unit - Ready access
 - v. Outpatient areas - Ready access
 - vi. Clinical measurement unit - Ready access
 - vii. Patient pick-up/drop-off areas - Ready access
 - viii. Biomedical Services – Ready access
 - ix. Medical imaging - Routine access (in-reach service)
 - x. Pharmacy - Routine access

8.4.2. Internal relationships

- a. The HVSSU will be located within the Perioperative Unit, close to other operating theatres.

- b. There will be only one point of entry for planned procedure patients and the public, and separate security controlled entries for authorised staff, goods and supplies.
- c. Immediate access will be required from the HVSSU Post Anaesthetic Care Unit to the stage 2 / 3 recovery area (Day Only area).
- d. Hot lift access to the Perioperative Unit is an option for emergency patients from the Emergency Department and to and from the Intensive Care Unit.

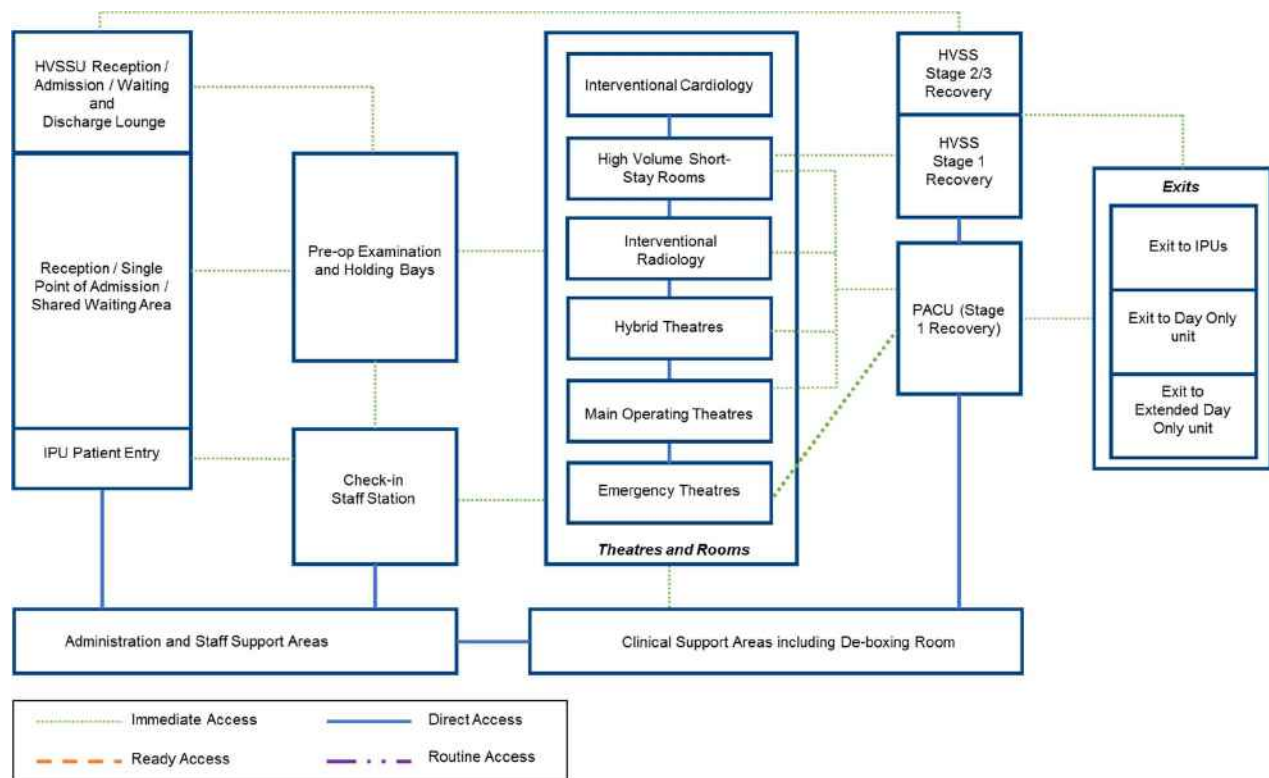


Figure 5 HVSSU internal relationships

8.5. Specific Design Requirements

8.5.1. General

- a. The design should minimise staff travel distance internally.
- b. Natural light is essential in the waiting areas and preferable in the staff room. A pleasant view to the outside is preferable for staff and patient well-being, while preserving patient privacy.
- c. Separation of paediatric and adult patients will be required within the perioperative area. This includes separated waiting areas and recovery spaces.
- d. Operating theatres and equipment (including trolleys) should be bariatric capable and should be able to manage patients up to 350kg. Ceiling hoists should also be mounted in a number of theatres.
- e. An alcove will be required close to Biomedical Services to store an image intensifier.
- f. Consideration should be made for appropriate HEPA filtration requirements for respiratory procedures (e.g. bronchoscopy).

8.5.2. Entry / Waiting / Patient Preparation

- a. A duress call is necessary at the reception area.
- b. Toilets should be available in the unit (up to one per theatre) due to the nature of the procedures being performed. An assisted toilet and shower will be required for patients undergoing a colonoscopy.
- c. Changing facilities will be required including lockers for use by patients, parents, carers and interpreters.
- d. Paediatric patients will have a shared entry/exit to the Perioperative suite. An area that can be separate from adults will be required for Stage 1 recovery. The stage 2 and 3 recovery area will be in the paediatric inpatient Short Stay Unit.
- e. A play area will be provided for paediatric patients.
- f. The patient admission and discharge areas will be visually separated to enable better flow, as well as separation between pre- and post-surgery patients (especially those who are fasting patients pre-surgery). Admission and discharge areas may be collocated to enable a 'closed-loop' from entry to exit for patient flow.
- g. Patients requiring surgery after-hours will be sent to the emergency theatres and will be checked-in at a staff station and then returned to unit post-surgery.
- h. Inpatients coming from units to attend the HVSSU will enter through a back of house entrance so as to not have to traverse through the main theatre complex or public corridors.
- i. The HVSSU will accessible to both inpatients and outpatients and will require appropriate access control for these groups so as to not have to traverse through the main theatre complex.

8.5.3. Operating rooms

- a. Operating rooms should be 55m² in size, this may not be possible if reusing current theatres to refurb. The increase in technology requirement for Digital Hospital needs as well as future increased use of robotic surgery to be considered when deciding the size of the theatres.
- b. Adequate space for consignment stock will be required.
- c. Trolley holding areas should also be considered in the HVSSU as an alternative to anaesthetic bays to improve patient flow through the area.
- d. Appropriate negative pressurisation and fluoroscopy will be required within a procedure room to support the provision of procedures such as bronchoscopy.
- e. The operating rooms must be designed to be supported by shared sterile stock rooms and set-up areas.
- f. All operating rooms will require an anaesthetic induction room and exit bay. Scrub bays will be shared between two operating rooms. Clean-up rooms will be shared between the operating rooms.
- g. Immediate access will be required from the scrub-up bay to the operating room.
- h. An adjustable audio system within each operating theatre will be required to provide 'white noise'.
- i. All operating rooms must be fitted with pendants to accommodate gases, power (uninterruptible power supply), and data. The operating room pendants are to be ceiling mounted, fully manoeuvrable and height adjustable. All theatres should be designed to be able to include a double pendant set up.
- j. All operating rooms must have:
 - i. individual temperature and humidity controls
 - ii. capacity for laser and x-ray
 - iii. digital capacity, incorporating full integration of images between operating rooms and education spaces
 - iv. cabling must be accessible in all control rooms
 - v. connected to an uninterruptible power supply
 - vi. scrub bays must have sensor tap operation
 - vii. staff entry into the operating rooms from the scrub bays must be via automatic opening doors with safety sensors
 - viii. anaesthetic room exit doors to be automatic opening with safety sensors
 - ix. sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

8.5.4. Procedure rooms

- a. The increase in technology requirement for Digital Hospital needs as well as future increased use of robotic surgery to be considered when deciding the size of the theatres.
- b. Adequate space for consignment stock will be required.
- c. Trolley holding areas will be required as an alternative to anaesthetic bays to improve patient flow through the area.
- d. Negative pressurisation and fluoroscopy will be required within a procedure room to support the provision of procedures such as bronchoscopy.
- e. The procedure rooms must be designed to be supported by shared sterile stock rooms and set-up areas.
- f. Scrub bays will be shared between two procedure rooms.
- g. Immediate access will be required from the scrub-up bay to the procedure room.
- h. An adjustable audio system within each operating theatre will be required to provide 'white noise'.
- i. All procedure rooms must be fitted with a single pendant to accommodate gases, power (uninterruptible power supply), and data. Procedure room pendants are to be ceiling mounted, fully manoeuvrable and height adjustable. All procedure rooms should be designed to be able to include a single pendant set up.
- j. All procedure rooms must have:
 - i. individual temperature and humidity controls
 - ii. digital capacity, incorporating full integration of images between operating rooms and education spaces
 - iii. cabling must be accessible in all control rooms
 - iv. connected to an uninterruptible power supply
 - v. scrub bays must have sensor tap operation
 - vi. staff entry into the procedure rooms from the scrub bays must be via automatic opening doors with safety sensors
 - vii. sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

8.5.5. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A central staff station will be required with a small clinical / handover room is to be located directly behind the staff station.
- c. The unit clerk will have a designated work area in the staff station overlooking the entry to the unit and in close proximity to the clinical workroom.
- d. Work spaces will be required for the surgeons, registrars, allied health, students, educators, staff specialists etc. These will be available in a multidisciplinary clinical work room, which will also house the electronic journey board and be used for case management discussion and teaching.
- e. Access to a staff room (i.e. tea room) will be required, preferably within the Unit. These are able to be shared with adjacent units.
- f. Access to staff toilets are to be located in the staff zone within the Unit. These are able to be shared with adjacent units.
- g. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor.
- h. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in a high volume short stay unit during a day time shift:
 - i. Nursing staff are permanently located in the unit with around 30 staff per shift.
 - ii. There are 3 medical staff members allocated per theatre. This includes a registrar, an anaesthetist and a surgeon. A paediatric endoscopist is also present for paediatric cases
 - iii. Allied Health staff visit the unit, as do nursing and medical students.
 - iv. There are also portage staff and administration staff for admissions / discharge.

- i. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan.

8.6. Workforce Issues

- a. The Director of Anaesthetics, Director of Surgery and Director of Gastroenterology will not have offices within the Unit.
- b. Training and upskilling of will be one of the major tasks over the coming years to increase the number of Perioperative Suite staff as well as increase the skill level to deal with higher acuity patients. Staff will be primarily conducted internally within Campbelltown Hospital.
- c. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- d. The HVSSU may be run as an extended hours service and so will have an impact on nursing and medical staff, as well as support staff (e.g. scrub staff). There is currently a lack of qualified staff as there are other nearby facilities competing for the same staff.

8.7. Technology

- a. Integrated operating room technology, which allows the recording and live transmission of operative procedures, will enhance on-campus training opportunities for medical and nursing students and staff. A central control room hub will be provided to monitor theatres. Staff change rooms can be located near to this hub.
- b. Consideration should be made for patient tracking technology (including the use of RFID locators) that can interact with the patient journey board and provide information of the location and status of patients.
- c. A patient waiting information system (e.g. buzzer, text message) should be considered to notify patients and family of the wait times and status.
- d. Sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

8.8. Change Management

- a. There will be an increase in volume and complexity of day-only surgical services.
- b. There will be substantial change management required to develop the Models of care and High Volume pathways to enable the appropriate flow within this newly developed area.
- c. Nurse led discharge criteria will be developed to enable timely throughput.
- d. Early adoption of short stay and high turnover Models of Care and Patient Pathways will be required.

9. PERIOPERATIVE SERVICES

9.1. Scope of Service

- a. The perioperative service will be a Role Delineation level 5 adult service and Role Delineation level 4 service for children under 16 years of age. Children under the age of 5 years will be managed at the discretion of an anaesthetist and surgeon.
- b. The perioperative service facilities to be provided include
 - i. day of surgery pre-operative admissions
 - ii. a High Volume Short Stay Unit for surgeries and procedures having both short procedure and recovery time
 - iii. Operating rooms including:
 - regular operating theatres
 - emergency theatres
 - an Endovascular suite
 - robotic capable theatres
 - hybrid operating theatres.
 - iv. A Post Anaesthetic Care Unit (PACU, Stage 1 recovery)
 - v. Stage 2 and 3 recovery will occur within the Day Only Unit, the Extended Day Only Unit or within an inpatient unit.
 - vi. Stage 2 and 3 recovery needs to be separate from the admission area to separate fasting patients from food services and from recovering patients.
- c. The Perioperative Unit will be self-contained, providing a controlled environment for the care of patients undergoing operative procedures including vascular, low complexity neurology, urology, laser and ENT surgery. Major trauma, complex neurology, transplants and cardiac surgery will not be performed at Campbelltown Hospital.
- d. The planned surgery service will provide day only, short-stay and complex surgery and endoscopy services.
- e. The planned surgery service will be enabled by programmed beds and operating rooms, and clinical pathways with the aim of providing a guaranteed date of surgery for waiting list patients.
- f. The emergency surgery service will cater for any patients who require urgent surgical procedures 24 hours per day. Capacity is provided for emergency caesarean deliveries.
- g. The perioperative services will be supported by both short stay and overnight surgical beds.

9.2. Model of Care

9.2.1. General

- a. A range of surgery models will be provided within the Perioperative Services including high volume short stay, Interventional Services and models for Emergency Operations and Emergency Caesarean Section. The separation of high turnover, routine surgery and emergency surgery will be scheduled to improve patient flow and prevent cancellations and delays. A separate brief is dedicated to High Volume Short Stay and Interventional Radiology.
- b. Low-risk services that do not require anaesthetic support such as basic ophthalmic surgery, endoscopy, cataracts, dental etc. could be moved offsite to the Oran Park primary health centre, a specialised high volume day only facility that would be an integrated health hub (includes imaging, allied health etc.). Equipment to perform these surgeries should still be retained at Campbelltown Hospital to cater for higher-acuity procedures.
- c. Electroconvulsive therapy will be performed in the High Volume Short Stay Unit.
- d. The Perioperative Unit will be managed by the Nurse Manager, with the assistance of the Nurse Unit Managers (one for each area: perioperative, scrubs, anaesthetics, interventional, recovery, High Volume Short Stay Unit etc.) and in close collaboration with the directors of anaesthesia and surgery. Clinical care and day-to-day management will be the responsibility of the perioperative Nurse Unit Managers.

- e. All elective surgical patients will have an appropriate pre-admission assessment; this may occur at a pre-admission clinic or by telephone, depending on the patients risk profile. The pre-admission clinic will be located in the outpatient care area.
- f. Paediatric patients will undergo first stage recovery in the Post Anaesthetic Care Unit in an area separate from Adult patients. Stage 2 and 3 recovery will occur in the Paediatric Short Stay Unit on the paediatric inpatient unit.
- g. Following recovery, adult and paediatric overnight surgical inpatients will be transferred to the appropriate Inpatient Unit.
- h. A small number of patients will require post-operative transfer to the Intensive Care Unit due to anaesthetic / surgical complications or other unexpected factors, as well as on a planned basis.
- i. Direct access for relatives / carers of paediatric patients from the waiting area to the stage 2 and 3 recovery area will be required while maintaining the privacy of patients.
- j. Day patients will be discharged when they meet pre-determined recovery criteria. Patients will be given all the necessary post procedural care instructions and telephone numbers for contact in an emergency.
- k. The Perioperative Unit will operate in accordance with Australian Council on Health Care Standards, ACORN guidelines, WorkCover Design and Handling of Surgical Instrument Transport Cases 2011, Australian Standard AS4187:2014 Reprocessing of reusable medical devices in health service organizations, and NSW nursing standards.
- l. The unit operations will be consistent with the requirements of the Ministry of Health and Learned Colleges associated with clinical training.

9.2.2. Anaesthetic Services

- a. Anaesthetic requirements will increase in response to a wider spectrum of surgical services and a higher volume of surgical and procedural activity.
- b. Appropriate level of anaesthetic support will be required to support bariatric patients and patients undergoing metabolic surgery.
- c. Services including the administration of general anaesthesia will be provided. This will include:
 - i. the main interventional/operative services
 - ii. the High Volume Short Stay Unit
 - iii. obstetrics and gynaecology procedures in the birthing unit in Women's Services
 - iv. electroconvulsive therapy (ECT) treatment in the High Volume Short Stay Unit
 - v. paediatric-specific interventional services for Paediatric Services
 - vi. minor operation/procedures in the Emergency Department
 - vii. Interventional Radiology and Interventional Cardiology Suites
 - viii. Services to the Medical Imaging department as required.
- d. The service will operate an acute pain service.
- e. Pre-admission clinics will be decentralised and provided in the Outpatient Department. Sufficient space will be required for 6 rooms.

9.2.3. Surgical / Procedural Services

- a. Surgical and procedural services at Campbelltown Hospital will provide a range of general and subspecialty services to patients requiring planned and unplanned/emergency surgical and interventional procedures and treatment.
- b. Services will include pre-operative assessment and education, admission, operating and procedure room management, anaesthetics and pain management and post-procedural care.
- c. Campbelltown Hospital will provide mostly level 6 surgical and procedural services with the capability of providing complex major surgical and interventional procedures.
- d. Advances in models of care for managing patients requiring surgical and interventional procedures will increasingly allow for those conditions currently treated through open surgery to be treated via less invasive interventions such as endoscopic and catheter-based interventions (including stenting).

- e. Planned and unplanned patient flows in all procedural areas will be managed separately to minimize delays and reduce cancellations of scheduled procedures.
- f. A Surgical Assessment Unit will provide rapid assessment and management of patients presenting to the Emergency Department or referred from a consultant's rooms with a potential surgical condition.
- g. Facilities for critically ill patients needing bronchoscopies and endoscopies will be provided in the Intensive Care Unit. Semi-urgent scopes can also be performed in ICU to avoid transporting patients.
- h. Facilities for patients requiring urgent endoscopies using ultrathin endoscopes will be provided in the Emergency Department.
- i. A metabolic surgical service will be established at Campbelltown Hospital. This service will commence in 2018/19.
- j. Integrated interventional and procedural services will bring together the required technologies and multidisciplinary expertise to create a collaborative environment that supports the efficient and safe delivery of advanced procedural care.
- k. Access to emerging overlapping technological modalities and future growth and expansion of services will optimise the clinical management of patients with multiple comorbidities and trauma.
- l. The services will provide a 'one stop shop' for interventional procedures requiring a surgical environment, image guidance, anaesthetic support and access to perioperative services.
- m. The integrated interventional and procedural services will be designed to eliminate duplication of similar rooms, equipment and personnel and will require a multifunctional interventional platform capable of supporting:
 - i. open surgery
 - ii. minimally invasive procedures including laparoscopy, endoscopy, bronchoscopy and robotic surgery
 - iii. diagnostic and therapeutic procedures requiring interventional imaging including angiography, angioplasty and endovascular procedures.
- n. High volume, low complex endoscopic, laparoscopic and day surgical procedures will be undertaken in a designated, stand-alone High Volume Short Stay Unit consisting of 4 operating theatres and 4 procedure suites.
- o. A range of interventional and open surgical diagnostic and treatment procedures will be undertaken a variety of discrete units including:
 - i. operating suite
 - ii. interventional / endovascular suite
 - iii. interventional radiology suite
 - iv. cardiac catheterisation laboratories.
- p. The operating suite, interventional / endovascular suite, interventional radiology suite, and cardiac catheterisation laboratories will be located in close proximity to each other
- q. The short stay high volume endoscopy / laparoscopy suite and the day surgery unit will be collocated
- r. All procedural areas will be fully digitalised for ease of access to patient information including electronic records, diagnostic reporting systems e.g. PACS etc.
- s. Intra-operative/intra-procedural videoing of procedures including cameras mounted in scopes etc. will be provided for education, research and quality assurance purposes.

9.3. Operational Description

9.3.1. Operating hours

- a. The Perioperative Unit will be operational 24 hrs a day, 7 days a week all year round.
- b. There will be reduced activity after-hours and on weekends, depending on the model of care.

9.3.2. Access, admission and discharge/transfer

- a. Access to the Perioperative Unit will be required for:
 - i. day patients (trolley, wheelchair, ambulant)

- ii. general inpatients (bed / trolley access)
 - iii. emergency patients (trolley, bed, wheelchair)
 - iv. staff and visitors
 - v. good, services and maintenance
 - vi. general public.
- b. General public access to the Perioperative Unit will be via the perioperative reception and control point. Access will be strictly controlled.
 - c. Elective, planned inpatient and day procedure bookings will be under the control of the waitlist coordinator and admissions team, who coordinate the dates for procedures as well as the date and time for pre-admission clinic and surgical review appointments.
 - d. All bookings for non-elective (emergency cases and inpatients) will be as per the guidelines and time frames for booking emergency theatres and emergency access.
 - e. A staff member will collect the patient from the inpatient unit and the patient will be accompanied by a unit nurse to and from the Perioperative Unit. The clinical staff from the inpatient unit will be involved in the clinical handover of patients in the holding area.
 - f. There will be a single point of admission for all planned procedures. Presentations will be staggered.
 - g. Day patients will access the Perioperative Unit via the perioperative reception and control point. Patients will be booked and admitted through the perioperative reception.
 - h. Paediatric day patients will be admitted through and undertake pre-surgical preparation within the Paediatric Inpatient Unit.
 - i. Patient arrival will be registered and a nursing review conducted to ensure that all required preparation is complete and the patient is assessed for their procedure on that day. Where doubt exists, the anaesthetist or surgeon / proceduralist will be advised.
 - j. The pre-admission assessment for all day patients will include:
 - i. completion of the admission process, clerical and clinical
 - ii. confirmation of consent
 - iii. anaesthetic review and examination as necessary
 - iv. Policies as determined by the Ministry of Health.
 - k. Patients will utilise the waiting area prior to being escorted to the patient holding area to change for their procedure. Elderly or frail persons may require wheelchair or trolley transport.
 - l. Patients presenting on a trolley will be taken directly to the holding area.
 - m. Family members will be given an estimated of length of time for procedure, and be instructed to return to the waiting room (e.g. through the use of SMS messaging). In limited circumstances a family member may be present in the anaesthetic induction and recovery areas, for example paediatric patients and partners of women giving birth by caesarean.

9.3.3. Clinical Support Services

9.3.3.1. Pharmacy services

- a. Sufficient space for anaesthetics trolleys in operating theatres will be required.
- b. Routine impresting system will provide the majority of medication to a central supply area within the operating theatre.
- c. Secure pneumatic tube access for the transport of urgent medication.
- d. Future proofing for the implementation of automatic dispensing devices will be required.

9.3.3.2. Pathology services

- a. Secure pneumatic tube access for the transport of pathology specimens will be required in a central location. The majority of samples from the operating room suite will be transferred to the pathology department via the pneumatic tube system.
- b. Consideration of specimen management and requirements for storage and transport of specimens as well as associated issues of formalin decanting for specimens will be required.
- c. A suitable space for a blood fridge and a point of care testing area will be required in the perioperative suite.

9.3.3.3. Infection control

- a. Infection control standards will be maintained in accordance with the current NSW Infection Control Policy. The design must consider staff flows to ensure there is no cross over of contamination and clean access.
- b. Patients with a known multi-resistant organism (MRO) infection will be transferred straight to the operating room and will not wait in a holding bay.
- c. Guidelines, procedures and patient flow processes will be developed and monitored to control the different levels of sterility required within the different types of procedures such as interventional radiology and operating rooms.

9.3.3.4. Imaging services

- a. Image intensifiers and access to previous images will be required in all theatres.
- b. Medical imaging will be provided as an in-reach service from the Medical Imaging Department.

9.3.4. Non-Clinical Support Services

9.3.4.1. Biomedical services

- a. An area for Biomedical services to repair and maintain equipment will be required in the Perioperative Unit, if the two departments are not located on the same floor.

9.3.4.2. Waste management

- a. Waste services will be performed as per hospital wide processes with the addition of:
 - i. An increase in use of disposable products, including the Ministry of Health move to disposable surgical drapes, will require appropriate waste management strategies. The majority of operating theatre waste will be incinerated due to body fluid contamination.
 - ii. Separate facilities and equipment will be utilised for cleaning the central sterile stock, operating rooms and corridor area of the Perioperative Unit.
 - iii. Operating room assistants will be responsible for cleaning between cases. Terminal cleaning will be undertaken by the dedicated theatre cleaners.
 - iv. All contaminated materials will be removed from the operating rooms via the clean-up rooms. At the end of each case, the used instruments will be rinsed and returned to the supply trolley, together with anaesthetic equipment, for transfer to the Central Sterilising Department via a dedicated route.

9.3.4.3. Supply services

- a. Sterile consumables will be ordered by the Perioperative Unit. Sterile stock will be stored within the sterile stock area of the Perioperative Unit. Instrument and sterile linen packs will be collected to agreed operation checklists within the sterile stock area for the daily operating schedule and emergency surgery. An open trolley system will be used. Special consumables will also be held in the sterile stock area and added to the collections as required. Some additional special items will be held on pre-stocked trolleys for transfer to the operating room as required. Sufficient storage space to enable clear workflows and comply with Work Health Safety (WHS) guidelines will be required.
- b. Loan instrument sets will be received by the Central Sterilising Department for sterilisation prior to transfer to the set-up / sterile stock area in the Perioperative Unit.
- c. A computerised bar coding system will be used for tracking surgical instruments.
- d. Thought should be given to providing a de-boxed delivery of supplies to the Perioperative Unit. Certain instruments and consignment equipment may still require de-boxing in the Unit.

9.3.4.4. Security

- a. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms and as required on request from clinical staff.
- b. Staff access into and throughout the Perioperative Unit will be controlled by a proximity access identification (swipe) card.

9.4. Relative Location and Unit Configuration

9.4.1. External Relationships

- a. The Perioperative Unit is to be directly accessible (horizontal or vertically) from other critical care services such as ED, Maternity and ICU that require urgent access to the operating room facilities.
- b. Immediate access from the Perioperative Unit to the Central Sterilising Department will be required with segregated sterile supply and dirty return functions using clean and dirty hoists in appropriate zones if these departments are horizontally separated. This access to be as centralised as possible within the operating room zone.
- c. The Perioperative Unit is to be readily accessible to the Extended Short Stay Unit (an extended day only area for stays up to 72 hours).

9.4.1.2. Perioperative Unit external relationships

- i. Central Sterilising department - Immediate access (especially for High Volume Short Stay Unit and endoscopy rooms)
- ii. ED - Direct access
- iii. ICU - Direct access
- iv. Birth suites - Direct access
- v. SCN - Ready access
- vi. Extended Short Stay Unit - Ready access
- vii. Surgical inpatient unit - Ready access
- viii. Paediatric inpatient unit - Ready access
- ix. Women's inpatient unit - Ready access
- x. Mental Health inpatient unit - Routine access (for the transfer of patients requiring ECT)
- xi. Outpatient areas - Ready access
- xii. Helipad - Ready access
- xiii. Patient pick-up/drop-off areas - Ready access.
- xiv. Medical imaging - Routine access (in-reach service).
- xv. Pharmacy - Routine access
- xvi. Biomedical Services – Ready access
- xvii. Mortuary - Routine access.

9.4.2. Internal Relationships

- a. There will be only one point of entry for planned procedure patients and the public, and separate security controlled entries for authorised staff, goods and supplies.
- b. The hybrid and emergency theatres will require collocation and will have close proximity to ED and ICU (similar to the design of Liverpool Hospital perioperative suites).
- c. Collocation of the recovery areas and the operating rooms will enable significant efficiency gains in the delivery of planned procedures. Patients will also benefit from a more streamlined and conveniently configured service.
- d. Immediate access will be required from the emergency theatres to Post Anaesthetic Care Unit to the stage 2 / 3 recovery area.
- e. Hot lift access to the Perioperative Unit is an option for emergency patients from the Emergency Department and to and from the Intensive Care Unit.

- f. The Perioperative Unit is organised into the following zones and functions:
- i. pre-operative surgical admission including two interview rooms
 - ii. patient reception and waiting, identification
 - iii. patient holding
 - iv. induction of anaesthesia
 - v. operative procedures
 - vi. recovery (Stages 1, 2 and 3) with separate areas for paediatric patients
 - vii. sterile stock holding and set-up
 - viii. ancillary support including equipment and consumables storage
 - ix. central staff area (for handover / theatre bookings etc.)
 - x. staff support and teaching spaces.
 - xi. de-boxing room.

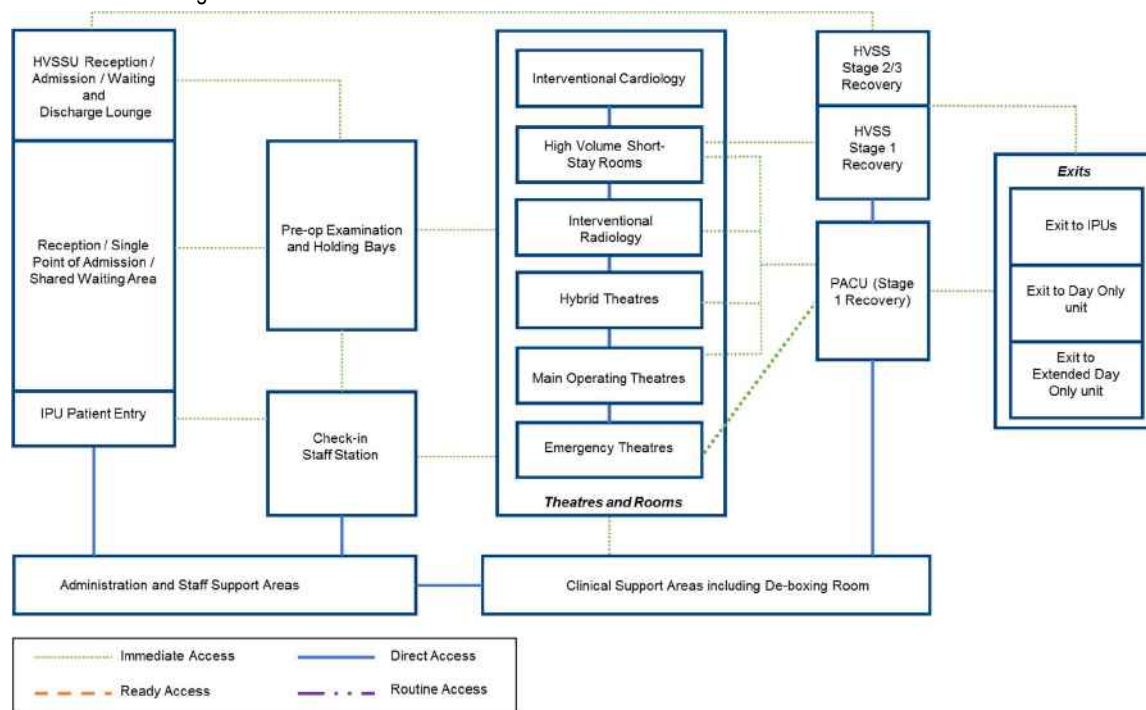


Figure 6 Perioperative Unit internal relationships

9.5. Specific Design Requirements

9.5.1. General

- a. The design should minimise staff travel distance internally.
- b. Natural light is essential in the waiting areas and preferable in the staff room. A pleasant view to the outside is preferable for staff and patient well-being, while preserving patient privacy.
- c. Pneumatic tube connectivity to pathology and pharmacy will be required.
- d. Separation of paediatric and adult patients will be required within the perioperative area. This includes separate waiting areas, and recovery spaces.
- e. Operating theatres and equipment (including trolleys) should be bariatric capable and should be able to manage patients up to 350kg. 1 theatre in each of emergency, main operating and hybrid theatres should be designed with structural support to allow a ceiling hoist for future proofing.

- f. An alcove will be required to store an image intensifier.
- g. Two larger recovery bays will be required for skin-to-skin contact for post-caesarean mothers and babies. There will be sufficient space for an additional parent, portable baby bath as well as shelving.

9.5.2. Entry / Waiting / Patient Preparation

- a. A duress call will be required at the reception area.
- b. An assisted toilet and shower will be required for patients undergoing a colonoscopy.
- c. Changing facilities will be required including lockers for use by patients, parents, carers and interpreters.
- d. One negative pressure isolation room (incl. anteroom) and one Class S isolation room will be required in the pre-op area with associated ensuites.
- e. Paediatric patients will have a shared entry / exit to the Perioperative suite. Paediatric patient require a segregated area within stage 1 recovery. Paediatric stage 2 and 3 recovery areas will be in the paediatric short stay inpatient unit.
- f. A play area will be provided in the paediatric waiting areas...
- g. The patient admission and discharge areas will be directly adjacent however designed with separation to enable better flow, as well as separation between pre- and post-surgery patients (especially those who are fasting patients pre-surgery).
- h. Patients requiring surgery after-hours will be sent to the emergency theatres and will be checked-in at a staff station and then returned to unit post-surgery.
- i. Inpatients coming from units to attend the High Volume Short Stay Unit and interventional suites will enter through a back of house entrance so as to not have to traverse through the main theatre complex.
- j. The interventional suites will accessible to both inpatients and outpatients and will require appropriate access control for these groups so as to not have to traverse through the main theatre complex.

9.5.3. Operating Rooms

- a. Large operating rooms will be and be capable for robotic surgery and integrated imaging. The increase in technology requirement for Digital Hospital needs to be considered when deciding the size of the theatres.
- b. Adequate space for consignment stock in the operating suites will be required.
- c. The anaesthetic service will be catered for by the inclusion of anaesthetic bays and storage areas for equipment. Anaesthetic bays should have telemetric capability to monitor patients.
- d. Appropriate negative pressurisation and fluoroscopy will be required within an operating room to support the provision of procedures such as bronchoscopy.
- e. The operating rooms must be designed to be supported by shared sterile stock rooms and set-up areas.
- f. All operating rooms will require an anaesthetic induction room, scrub-up and exit bay. Clean-up rooms will be shared between the operating rooms.
- g. Immediate access will be required from the scrub-up bay to the operating room.
- h. An adjustable audio system within each operating theatre will be required to provide 'white noise'.
- i. All operating rooms must be fitted with a minimum of 2 pendants to accommodate gases, power (uninterruptible power supply), and data. The operating room pendants are to be ceiling mounted, fully manoeuvrable and height adjustable. All theatres should be designed to be able to include a double pendant set up.
- j. All operating rooms must have:
 - i. individual temperature and humidity controls
 - ii. capacity for laser and x-ray
 - iii. digital capacity, incorporating full integration of images between operating rooms and education spaces
 - iv. cabling must be accessible in all control rooms
 - v. connected to an uninterruptible power supply
 - vi. scrub bays must have sensor tap operation

- vii. staff entry into the operating rooms from the scrub bays must be via automatic opening doors with safety sensors
- viii. anaesthetic room exit doors to be automatic opening with safety sensors
- ix. Computer access for specific software (Surginet, Powerchart and Pacs) will require at least 3 computer points in each theatre.

9.5.4. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A central staff station will be required with a small clinical / handover room to be located directly behind the Staff Station.
- c. The unit clerk will have a designated work area in the central staff station overlooking the entry to the unit and in close proximity to the clinical workroom.
- d. Workstations (hot desks) will be required for the surgeons, registrars, allied health, students, clinical nurse educators, staff specialists etc. These will be available in a multidisciplinary clinical work room, which will also house the electronic journey board and be used for case management discussion and teaching.
- e. A tutorial room will be required.
- f. Access to a staff room (i.e. tea room) will be required, and are able to be shared with adjacent units.
- g. Access to staff toilets are to be located in the staff zone within the Unit.
- h. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor. These may be shared with adjacent units.
- i. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Perioperative Suite during a day time shift:
 - i. Currently nursing staff are permanently located in the unit with approximately 40 staff per shift.
 - ii. There are 35 medical staff members, with 5 allocated per theatre. This includes a registrar, an anaesthetist, a surgeon and two assistants.
 - iii. Allied Health staff visit the unit with around 2 staff members in the area (primarily radiographers).
 - iv. Around 10 nursing students and 15 medical students are also present in the Unit.
 - v. There are 4 porterage staff per shift and 3 administration staff for admissions / discharge.
 - vi. The Nurse Manager will manage the unit with NUMs for each area (perioperative, scrubs, anaesthetics, interventional, recovery).
 - vii. There are currently 2 clinical nurse educators and consideration is being made for a nurse practitioner.

9.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of Maternity staff as well as increase the skill level to deal with higher acuity patients. Staff will be primarily conducted internally within Campbelltown Hospital.
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.

9.7. Technology

- a. Integrated operating room technology, which allows the recording and live transmission of operative procedures, will enhance on-campus training opportunities for medical and nursing students and staff. A central control room hub will be provided to monitor theatres. Staff change rooms can be located near to this hub.
- b. Consideration should be made for patient tracking technology (including the use of RFID locators) that can interact with the patient journey board and provide information of the location and status of patients.
- c. A patient waiting information system (e.g. buzzer, text message) should be considered to notify patients and family of the wait times and status.

- d. Sufficient computer access for specific software (Surginet, Powerchart and Pacs) will require at least 3 computer points in each theatre.

9.8. Change Management

- a. There will be an increase in volume and complexity of surgical services.
- b. New, large and hybrid operating theatres will require new ways of working and training for staff.
- c. Substantial change will be required to address the increased volume and complexity of services that have been outlined in the future models of care, by the NSW Surgical task force Surgery Futures as outlined below. This will include enhanced governance and organisational structures. Increased education and training and specific recruitment and retention strategies.
- d. The future models of care will be characterised by:
 - i. Enhanced training and education for registrars, nurses and junior medical officers / medical students
 - ii. Provision of a fully comprehensive onco-plastic breast service across SWSLHD, including specialist in hospital nursing for support & early post-operative discharge, improved coordination between GPs and discharge nurses for early post op discharge and community nursing support
 - iii. Improved integrated model of care between specialties such as plastics and oncology
 - iv. Increased day surgery procedures and utilisation of community nursing/GP's to facilitate early discharge initiatives.
 - v. Identifying and developing models for a comprehensive stand-alone Eye Centre providing clinical and consultation space, within either a hospital or community setting or in public/private partnership
 - vi. Identifying and developing models for hand surgery to ensure timely acute care interventional procedures and hand therapy (occupational therapy and physiotherapy)
 - vii. The current collaborative model of care for orthogeriatrics will be strengthened.
 - viii. All models will be designed around evidence based best practice.
- e. The NSW Surgical Services Taskforce released in January 2011 Surgery Futures, A Plan for Greater Sydney. The recommended directions for future development of surgical services include development of:
 - i. high volume short stay surgery units
 - ii. centres for ophthalmic surgery
 - iii. specialty centres with appropriate networks
 - iv. hip and knee joint centres
 - v. streaming of planned and emergency services
 - vi. new investment in surgery targeted to population growth areas.
- f. Surgery Futures recommendations with respect to the development of enhanced networked specialty services include:
 - i. High Volume Short Stay surgical centre
 - ii. Stand-alone or virtual stand-alone endoscopy units
 - iii. Fractured neck of femur
 - iv. Head and Neck Surgery
 - v. Paediatric Surgery – planned procedures if there is endorsement of its development as a regional paediatric unit
 - vi. Elective Spinal Neurosurgery
 - vii. Ophthalmology (eye centre)
 - viii. Dental Surgery
 - ix. Cardiothoracic Surgery
 - x. Urology
 - xi. Cancer Surgery
 - xii. Vascular surgery
 - xiii. Bariatric Surgery.
- g. Surgical & Procedural Care in South West Sydney recommendations with respect to the development and provision of surgical and procedural services at Campbelltown Hospital by 2021 include:

- i. Interventional cardiology including cardiac catheterisation
- ii. Vascular surgery
- iii. Spinal surgery
- iv. Thoracic surgery
- v. Planned orthopaedic joint replacement surgery (longer term)
- vi. Plastic surgery
- vii. Minor hand surgery
- viii. Bariatric and benign oesophageal surgery
- ix. Enhanced urology and
- x. Paediatric surgery
- xi. Endocrine surgery
- xii. Develop multidisciplinary hepatitis services at Campbelltown Hospital.
- xiii. Satellite services for routine ophthalmic surgery (e.g. cataract), endoscopies and flexible cystoscopies could be provided from a community setting.
- xiv. Fracture clinics provided from a community setting.

10. INTERVENTIONAL CARDIOLOGY

10.1. Scope of Service

- a. Interventional cardiology services will operate at Role Delineation level 6 for adult service.
- b. Paediatric patients will not receive interventional cardiology services at Campbelltown Hospital. Similar equipment is used for adult and paediatric patients so this service can be expanded in the future to include paediatric patients.
- c. The interventional cardiology suites will include:
 - i. procedure rooms with control rooms for interventional cardiology
 - ii. recovery spaces dedicated for cardiology patients
- d. The interventional cardiology suites will be a controlled environment for the care of patients undergoing interventional cardiology procedures.
- e. The Interventional Cardiology Suites could be housed within the perioperative services area and ideally collocated with Interventional Radiology Suite to enable future sharing of technologies.
- f. There is an option for Interventional Cardiology to be collocated with the Cardiology Inpatient Unit if collocation with the perioperative suite is not viable.

10.2. Model of Care

- a. The Interventional Cardiology suites will provide planned procedures, mostly on a day stay basis. Interventional Cardiology suites will also provide procedures for emergency patients or inpatients requiring urgent interventions
- b. All elective patients will have an appropriate pre-admission assessment; this may occur at a pre-admission clinic or by telephone, depending on the patients risk profile. The pre-admission clinic will be located in the ambulatory care area.
- c. The anaesthetic service will provide essential anaesthetic support to pre-admission clinics and within the Interventional Cardiology suites.
- d. All patients requiring stage one recovery will receive first stage recovery under appropriately trained staff. Some patients may be transferred straight to stage 2 recovery area.
- e. A small number of patients will require post-operative transfer to the Intensive Care Unit or the Acute Cardiac Unit due to anaesthetic / surgical complications or other unexpected factors.
- f. Direct access for relatives / carers of paediatric patients from the waiting area to the stage 2 and 3 recovery will be required while maintaining the privacy of patients.
- g. Day patients will be discharged when they meet pre-determined recovery criteria without medical review. Patients will be given all the necessary post procedural care instructions and contact information in an emergency.
- h. Role delineation level 5 cardiothoracic surgical support will be available at Campbelltown to support interventional cardiology services.
- i. The Interventional Cardiology unit will operate in accordance with Australian Council on Health Care Standards, all relevant Ministry of Health standards and guidelines, NSW nursing standards and standards as outlined by the various Learned Colleges and Professional Organisations.

10.3. Operational Description

10.3.1. Operating Hours

- a. The Interventional Cardiology services will be open and staffed 7 days per week, 24 hours per day, all year round.

10.3.2. Access, Admission and Discharge / Transfer

- a. Access to the Interventional Cardiology suites will be required for:
 - i. day patients (trolley, wheelchair, ambulant)

- ii. general inpatients (bed / trolley access)
 - iii. emergency patients (trolley, bed, wheelchair)
 - iv. staff and visitors
 - v. good, services and maintenance
 - vi. general public.
- b. Access to the Interventional Cardiology suites will be via the perioperative reception and control point. Access will be strictly controlled.
 - c. Staff access into and throughout the Interventional Cardiology suites will be controlled by a proximity access identification (swipe) card.
 - d. All day procedure bookings will be under the control of the waitlist coordinator and admissions team, who coordinate the dates for procedures as well as the date and time for pre-admission clinic and surgical review appointments.
 - e. A staff member will collect the patient from the waiting area and patients from the inpatient area will be accompanied by a unit nurse to and from the interventional cardiology suites.
 - f. There will be a single point of admission for all planned procedures. Presentations will be staggered.
 - g. Patient arrival will be registered and a nursing review conducted to ensure that all required preparation is complete and the patient is assessed for their procedure on that day. Where doubt exists, the anaesthetist or surgeon / proceduralist will be advised.
 - h. The pre-admission assessment for all day patients will include:
 - i. completion of the admission process, clerical and clinical
 - ii. confirmation of consent
 - iii. anaesthetic review and examination as necessary.
 - i. Patients will utilise the waiting area prior to being escorted to the patient holding area to change for their procedure. Elderly or frail persons may require wheelchair or trolley transport.
 - j. Patients presenting on a trolley or bed will be taken directly to the holding area.
 - k. Family members will be given an estimated of length of time for procedure, and be instructed to return to the waiting room (e.g. through the use of SMS messaging). In limited circumstances a family member may be present in the anaesthetic induction and recovery areas, for example paediatric patients.

10.3.3. Clinical Support Services

- a. Clinical support services will be shared with the Perioperative Unit.

10.3.3.2. Pharmacy services

- a. Routine impresting system will provide the majority of medication to a central supply area within the perioperative unit.
- b. Secure pneumatic tube access will be required for the transport of urgent medication.
- c. Future proofing for the implementation of Automatic Dispensing devices will considered.

10.3.3.3. Pathology services

- a. Secure pneumatic tube access for the transport of pathology specimens will be required in a central location. The majority of samples from the Interventional Cardiology suite will be transferred to the pathology department via the pneumatic tube system.
- b. A blood fridge will be shared with the perioperative theatres and a point of care testing area will be required in the interventional cardiology suites.

10.3.3.4. Infection control

- a. Infection control standards will be maintained in accordance with the current NSW Infection Control Policy. The design must consider staff flows to ensure there is no cross over of contamination and clean access.

- b. Patients with a known multi-resistant organism infection will be transferred straight to the operating room and will not wait in a holding bay.

10.3.3.5. Imaging services

- a. Access to previous images will be required in all suites

10.3.4. Non-Clinical Support Services

- a. Non clinical support services will be shared with the Perioperative Unit.

10.3.4.2. Waste management

- a. Waste services will be performed as per hospital wide processes with the addition of:
 - i. An increase in use of disposable products will require appropriate waste management strategies.
 - ii. Separate facilities and equipment will be utilised for cleaning the central sterile stock, procedure rooms and corridor area of the interventional suites.
 - iii. Operating room assistants will be responsible for cleaning between cases. Terminal cleaning will be undertaken by dedicated cleaning team.
 - iv. All contaminated materials will be removed from the procedure suites. At the end of each case, the used instruments will be rinsed and returned to the supply trolley, together with anaesthetic equipment, for transfer to the Central Sterilising Department via a dedicated route.

10.3.4.3. Supply services

- a. Sterile stock will be stored within the sterile stock area. Instrument and sterile linen packs will be collected to agreed operation checklists within the sterile stock area for the daily operating schedule and emergency procedures. An open trolley system will be used. Special consumables will also be held in the sterile stock area and added to the collections as required. Some additional special items will be held on pre-stocked trolleys for transfer to the operating room as required.
- b. Loan instrument sets will be received by the Central Sterilising Department for sterilisation prior to transfer to the set-up / sterile stock area in the interventional suites.
- c. A computerised bar coding system is used for tracking surgical instruments.

10.3.4.4. Security

- a. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms and as required on request from clinical staff.
- b. Staff access into and throughout the Unit will be controlled by a proximity access identification (swipe) card.

10.4. Relative Location and Unit Configuration

10.4.1. External relationships

- a. Adjacency between all cardiology services (clinical measurement, diagnostic, interventional, and inpatient) is preferred.
- b. Direct access from the Interventional Cardiology suites to the Central Sterilising Department will be required with segregated sterile supply and dirty return functions using clean and dirty hoists in appropriate zones if these departments are horizontally separated. This access to be as centralised as possible within the perioperative zone.
- c. Interventional Cardiology services may from time to time require transferring of patients to a higher level of care at a tertiary facility for cardiothoracic surgery access to retrieval services will be required.
- d. The Interventional Cardiology suites will require anaesthetic support and as such a location close to the Anaesthetic Department is preferred.

10.4.1.2. Interventional cardiology suites external relationships

- i. Central Sterilising department - Immediate access

- ii. ICU - Direct access
- iii. ED - Direct access
- iv. Retrieval Services – Direct Access
- v. Main operating theatres - Ready access
- vi. Cardiac Diagnostic Unit - Ready access
- vii. Cardiac inpatient unit - Ready access (to acute cardiac observation beds)
- viii. Clinical Measurement Unit – Ready access
- ix. Patient pick-up/drop-off areas - Ready access
- x. Biomedical Service – Ready access.
- xi. Outpatient areas - Ready access
- xii. Medical imaging - Routine access (in-reach service).
- xiii. Pharmacy - Routine access
- xiv. Mortuary - Routine access

10.4.2. Internal relationships

- a. Interventional Cardiology suites will be located within the Perioperative Unit, with close proximity to operating theatres in order to share resources and have appropriate anaesthetic and surgical support.
- b. There will be only one point of entry for planned procedure patients and the public, and separate security controlled entries for authorised staff, goods and supplies.
- c. Collocation of the recovery areas and the operating rooms will enable significant efficiency gains in the delivery of planned procedures. Patients will also benefit from a more streamlined and conveniently configured service.
- d. Hot lift access to the Perioperative Unit is an option for emergency patients from the Emergency Department and to and from the Intensive Care Unit.

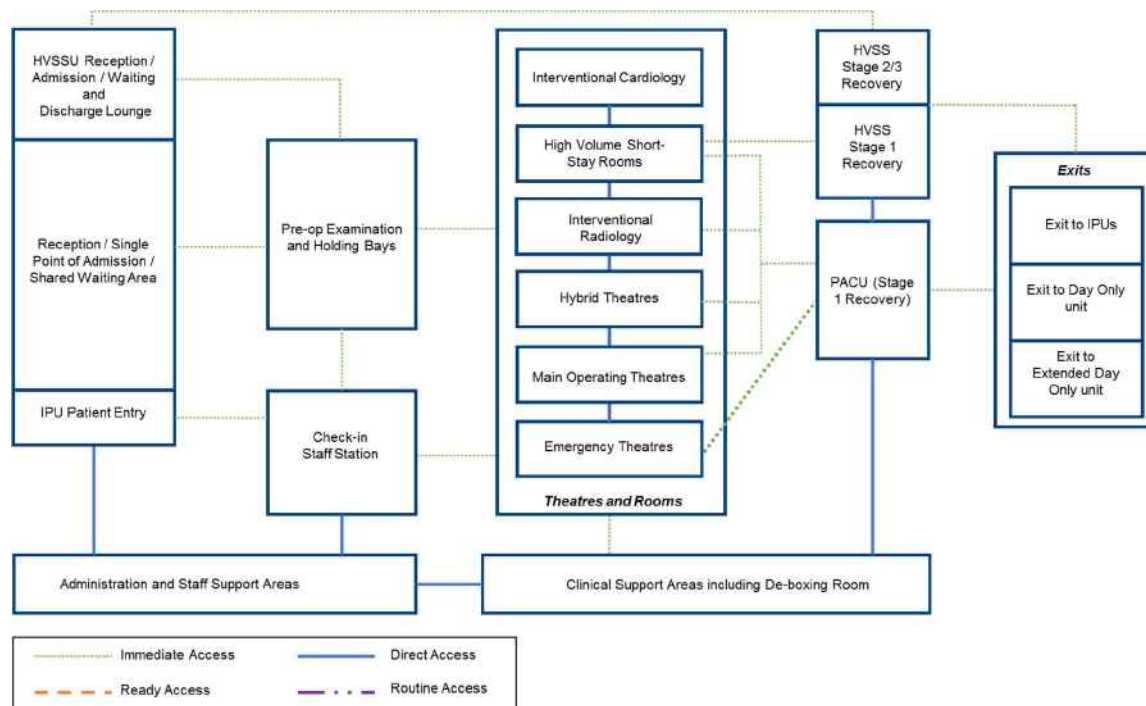


Figure 7 Interventional Cardiology suites relationships

10.5. Specific Design Requirements

10.5.1. General

- a. The design should minimise staff travel distance internally.
- b. Natural light is essential in the waiting areas and preferable in the staff room. A pleasant view to the outside is preferable for staff and patient well-being, while preserving patient privacy.
- c. Procedure Suites and equipment (including trolleys) should be bariatric capable and should be able to manage patients up to 350kg.
- d. Recovery areas will be collocated with main theatres recovery units and operationally dedicated to cardiology patients. This will allow safe and efficient management of cardiology patients while maintaining the future capacity to manage flexibility in requirements for recovery spaces.

10.5.2. Entry / Waiting / Patient Preparation

- a. A duress call is necessary at the reception area.
- b. Changing facilities will be required including lockers for use by patients, parents, carers and interpreters.
- c. One negative pressure isolation room (incl. anteroom) and one Class S isolation room will be required in the pre-op area with associated ensuites.

10.5.3. Procedure rooms

- a. Interventional Cardiology procedure rooms will have a control room between two rooms.
- b. The procedure rooms must be designed to be supported by shared sterile stock rooms and set-up areas.
- c. Scrub bays and clean up rooms will be shared between two procedure rooms.
- d. Immediate access will be required from the scrub-up bay to the procedure room.
- e. All procedure rooms must be fitted with one pendant to accommodate gases, power (uninterruptible power supply), and data. The operating room pendants are to be ceiling mounted, fully manoeuvrable and height adjustable .
- f. All procedure rooms must have:
 - i. individual temperature and humidity controls
 - ii. capacity for laser and x-ray
 - iii. digital capacity, incorporating full integration of images between operating rooms and education spaces
 - iv. cabling must be accessible in all control rooms
 - v. connected to an uninterruptible power supply
 - vi. scrub bays must have sensor tap operation
 - vii. staff entry into the procedure rooms from the scrub bays must be via automatic opening doors with safety sensors
 - viii. sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

10.5.4. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A central staff station will be required with a small clinical / handover room is to be located directly behind.
- c. The unit clerk will have a designated work area in the Staff Station overlooking the entry to the unit and in close proximity to the clinical workroom.
- d. Work spaces will be required for the surgeons, registrars, allied health, students, educators, staff specialists etc. These will be available in a multidisciplinary clinical work room, which will also house the electronic journey board and be used for case management discussion and teaching.

- e. Access to a staff room (i.e. tea room) will be required and may be shared with other units.
- f. Access to staff toilets are to be located in the staff zone within the Unit. These may be shared across units,
- g. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor. As this will not be a fully sterile area, change rooms do not need to be the same as those for the operating theatres.
- h. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Interventional Cardiology suite during a day time shift:
 - i. Nursing staff are permanently located in the unit with around 3 staff per shift.
 - ii. There are approximately 10 people per theatre. This includes an anaesthetist, a surgeon, an anaesthetic nurse and students.
 - iii. Allied Health staff visit the unit with around 1 staff member in the area (a radiographer).
 - iv. There are also some portage staff per shift and administration staff for admissions / discharge.
- i. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

10.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of Cardiology staff as well as increase the skill level to deal with higher acuity patients. Training and upskilling of staff will be primarily conducted internally within Campbelltown Hospital.
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- c. There is currently a lack of qualified staff as there are other nearby facilities competing for the same staff.

10.7. Technology

- a. Integrated operating room technology, which allows the recording and live transmission of operative procedures, will enhance on-campus training opportunities for medical and nursing students and staff. A central control room hub will be provided to monitor theatres. Staff change rooms can be located near to this hub.
- b. Consideration should be made for patient tracking technology (including the use of RFID locators) that can interact with the patient journey board and provide information of the location and status of patients.
- c. A patient waiting information system (e.g. buzzer, text message) should be considered to notify patients and family of the wait times and status.
- d. Sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

10.8. Change Management

- a. This is a developing area for Campbelltown with increased volume and complexity of patients. This will require a substantial change management program to develop the Cardiology capability of the Campbelltown staff.
- b. There is also a need to develop patient flow models that reflect the increase in outpatient services, community services and in home care remote monitoring of patients.

11. INTERVENTIONAL RADIOLOGY

11.1. Scope of Service

- a. Interventional radiology services will operate at Role Delineation level 6 for adult service.
- b. Paediatric patients will not receive interventional radiology services at Campbelltown Hospital as only Role Delineation level 4 paediatric surgery support is available). Similar equipment is used for adult and paediatric patients so this service can be expanded in the future to include paediatric patients.
- c. The Interventional Radiology suites will include
 - i. Interventional Radiology procedure rooms with CT and mobile C-arm ultrasound capability
 - ii. Interventional Radiology angiography suites
 - iii. recovery spaces (shared with the main operating theatre complex and High Volume Short Stay Unit including:
 - Post Anaesthetic Care Unit (Stage 1)
 - A Stage 2 and 3 recovery area within the day only unit.
- d. Consideration should be made for another room that is gantry MRI capable for future expansion.
- e. The interventional radiology suites will be a controlled environment for the care of patients undergoing interventional radiology procedures.
- f. The interventional radiology suites will share an entry with the perioperative unit, and will share admission and discharge areas with High Volume Short Stay Unit, but will require separate nurse staffing.

11.2. Model of Care

- a. The interventional radiology suites will provide planned procedures mostly on a day stay basis.
- b. Interventional radiology suites will also provide essential procedures to patients who are inpatients, admitted through emergency department, who require urgent intervention from endoscopy, and who are transferred from other facilities
- c. The interventional radiology suites will be managed by the Nurse Unit Managers and in close collaboration with the director of Interventional Radiology.
- d. Elective patients will have an appropriate pre-admission assessment; this may occur at a pre-admission clinic or by telephone, depending on the patients risk profile. The pre-admission clinic will be located in the ambulatory care area.
- e. The anaesthetic service will provide essential anaesthetic support to pre-admission clinics and within the Interventional Radiology Suites.
- f. All patients requiring stage one recovery will receive first stage recovery in the Post Anaesthetic Care Unit with separation between Paediatric and Adult patients.
- g. Some patients may be transferred straight to stage 2 recovery area.
- h. Paediatric patients will receive stage 2 and 3 recovery in the short stay unit day spaces within the paediatric inpatient unit.
- i. A small number of patients will require post-operative transfer to the Intensive Care Unit due to anaesthetic / surgical complications or other unexpected factors.
- j. Direct access for relatives / carers of paediatric patients from the waiting area to the stage 2 and 3 recovery will be required while maintaining the privacy of patients.
- k. Day patients will be discharged when they meet pre-determined recovery criteria. Patients will be given all the necessary post procedural care instructions in printed form and telephone numbers for contact in an emergency.
- l. The use of Medical Resonance Imaging within in the Interventional suites will continue to increase (rather than CT scanning). A gantry MRI capable room will be considered for future expansion planning.

- m. The Interventional Radiology suites will operate in accordance with Australian Council on Health Care Standards, all relevant Ministry of Health standards and guidelines, NSW nursing standards and all standards as outlined by the various Learned Colleges and Professional Organisations.

11.3. Operational Description

11.3.1. Operating Hours

- a. The interventional radiology services will be open and staffed 7 days per week, 24 hours per day, all year round.

11.3.2. Access, Admission and Discharge / Transfer

- a. Access to the interventional radiology suites will be required for:
 - i. day patients (trolley, wheelchair, ambulant)
 - ii. general inpatients (bed / trolley access)
 - iii. emergency patients (trolley, bed, wheelchair)
 - iv. staff and visitors
 - v. good, services and maintenance.
- b. Access to the interventional suites will be via the perioperative reception and control point. Access will be strictly controlled. Inpatients will be directed through the perioperative admission area, while outpatients will be directed through the High Volume Short Stay Unit admission area.
- c. Staff access into and throughout the interventional radiology suites will be controlled by a proximity access identification (swipe) card.
- d. All day procedure bookings will be under the control of the waitlist coordinator and admissions team, who coordinate the dates for procedures as well as the date and time for pre-admission clinic and review appointments.
- e. A staff member will collect the patient from the waiting area and patients from the inpatient area will be accompanied by a unit nurse to and from the interventional radiology suites.
- f. There will be a single point of admission for all planned procedures. Presentations will be staggered.
- g. Patient arrival will be registered and a nursing review conducted to ensure that all required preparation is complete and the patient is assessed for their procedure on that day. Where doubt exists, the anaesthetist or surgeon / proceduralist will be advised.
- h. The pre-admission assessment for all day patients will include:
 - i. completion of the admission process, clerical and clinical
 - ii. confirmation of consent
 - iii. anaesthetic review and examination as necessary.
- i. Patients will utilise the waiting area prior to being escorted to the patient holding area to change for their procedure. Elderly or frail persons may require wheelchair or trolley transport.
- j. Patients presenting on a trolley or bed will be taken directly to the holding area.
- k. Family members will be given an estimated of length of time for procedure, and be instructed to return to the waiting room (e.g. through the use of SMS messaging). In limited circumstances a family member may be present in the anaesthetic induction and recovery areas, for example paediatric patients.

11.3.3. Clinical Support Services

- a. Clinical support services will be shared with the Perioperative Unit.

11.3.3.2. Pharmacy Services

- a. Routine impresting system will provide the majority of medication to a central supply area within the operating theatre.
- b. Secure pneumatic tube access for the transport of urgent medication.
- c. Future proofing for the implementation of Automatic Dispensing devices will be required.

11.3.3.3. Pathology Services

- a. Secure pneumatic tube access for the transport of pathology specimens will be required in a central location. The majority of samples from the operating room suite will be transferred to the pathology department via the pneumatic tube system.

11.3.3.4. Infection control

- a. Infection control standards will be maintained in accordance with the current NSW Infection Control Policy. The design must consider staff flows to ensure there is no cross over of contamination and clean access.
- b. Patients with a known multi-resistant organism infection will be transferred straight to the procedure room and will not wait in a holding bay.

11.3.4. Non-Clinical Support Services

- a. Non-clinical support services will be shared with the Perioperative Unit.

11.3.4.2. Supply services

- a. All routine sterilisation of procedure room equipment and decontamination of anaesthetic equipment will be carried out by the Central Sterilising Department.
- b. Sterile stock will be stored within the sterile stock area. Instrument and sterile linen packs will be collected to agreed operation checklists within the sterile stock area for the daily operating schedule and emergency surgery. An open trolley system will be used. Special consumables will also be held in the sterile stock area and added to the collections as required.
- c. A computerised bar coding system is used for tracking surgical instruments.

11.3.4.3. Security

- a. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms and as required on request from clinical staff.
- b. Staff access into and throughout the Unit will be controlled by a proximity access identification (swipe) card.

11.4. Relative Location and Unit Configuration

11.4.1. External Relationships

- a. The interventional radiology suites will be directly accessible (horizontal or vertically) from other critical care services such as the Emergency Department and Intensive Care Unit that require urgent access to the procedure room facilities.
- b. Immediate access from the interventional radiology suites to the Central Sterilising Department will be required with segregated sterile supply and dirty return functions using clean and dirty hoists in appropriate zones if these departments are horizontally separated. This access to be as centralised as possible within the perioperative zone.
- c. Interventional Radiology may from time to time require surgical support so will require direct access to operating theatres.
- d. The Interventional radiology suites will require anaesthetic support and as such are best located close to the Anaesthetic Department.

11.4.1.2. Interventional radiology suites external relationships

- i. Central Sterilising department - Immediate access
- ii. ICU - Direct access
- iii. ED - Direct access
- iv. Main operating theatres - Ready access
- v. Inpatient units - Ready access
- vi. Patient pick-up/drop-off areas - Ready access

- vii. Biomedical Service – Ready access
- viii. Outpatient areas - Ready access
- ix. Medical imaging - Routine access (in-reach service)
- x. Pharmacy - Routine access.

11.4.2. Internal Relationships

- a. Interventional Radiology suites will be located within the Perioperative Unit, with close proximity to operating theatres in order to share resources and have appropriate anaesthetic and surgical support.
- b. There will be only one point of entry for planned procedure patients and the public, and separate security controlled entries for authorised staff, goods and supplies.
- c. Collocation of the recovery areas and the operating rooms will enable significant efficiency gains in the delivery of planned procedures. Patients will also benefit from a more streamlined and conveniently configured service.

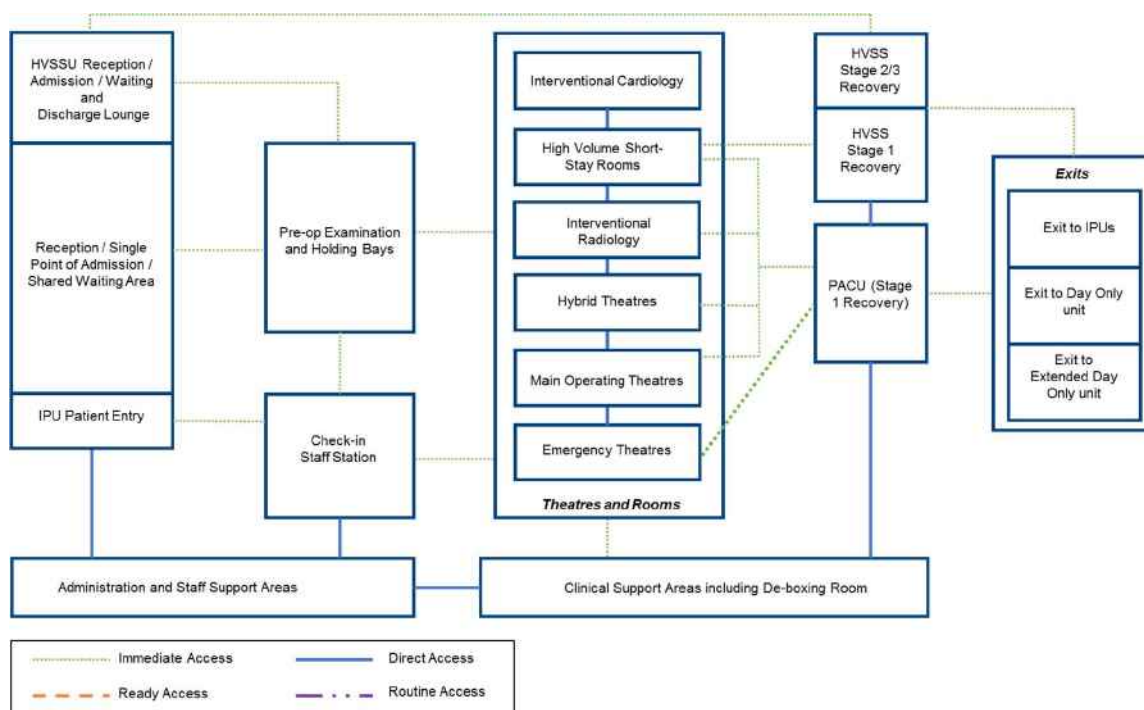


Figure 8 Interventional radiology suites relationships

11.5. Specific Design Requirements

11.5.1. General

- a. The design should minimise staff travel distance internally.
- b. Natural light is essential in the waiting areas and preferable in the staff room. A pleasant view to the outside is preferable for staff and patient well-being, while preserving patient privacy.
- c. Separation of paediatric and adult patients will be required within the procedure area this may be operationally managed using appropriate scheduling.
- d. Procedure rooms and equipment (including trolleys) should be bariatric capable and should be able to manage patients up to 350kg.

11.5.2. Entry / Waiting / Patient Preparation

- a. A duress call is necessary at the reception area.
- b. Changing facilities will be required including lockers for use by patients, parents, carers and interpreters.

11.5.3. Procedure Rooms

- a. Operating rooms will be capable of integrated imaging. There will be a control room between two rooms.
- b. Consideration should be made for future use of specialised gantry MRI (as well as CT) for interventional radiology. This would have specific floor space and floor load requirements.
- c. Adequate space for consignment stock will be required.
- d. Trolley holding areas should also be considered as an alternative to anaesthetic bays to improve patient flow through the area.
- e. Scrub bays and clean up rooms will be shared between two procedure rooms.
- f. Immediate access will be required from the scrub-up bay to the procedure room.
- g. An audio system within each operating theatre will be required to provide 'white noise'.
- h. All procedure rooms must be fitted with pendants to accommodate gases, power (uninterruptible power supply), and data. The pendants are to be ceiling mounted, fully manoeuvrable and height adjustable. All procedure rooms should be designed to be able to include a single pendant set up.
- i. All procedure rooms must have:
 - i. individual temperature and humidity controls
 - ii. capacity for laser and x-ray
 - iii. digital capacity, incorporating full integration of images between operating rooms and education spaces
 - iv. cabling must be accessible in all control rooms
 - v. connected to an uninterruptible power supply
 - vi. scrub bays must have sensor tap operation
 - vii. staff entry into the procedure rooms from the scrub bays must be via automatic opening doors with safety sensors
 - viii. anaesthetic room exit doors to be automatic opening with safety sensors
 - ix. sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

11.5.4. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A central staff station will be required with a small clinical / handover room is to be located directly behind the Staff Station.
- c. The unit clerk will have a designated work area in the Staff Station overlooking the entry to the unit and in close proximity to the clinical workroom.
- d. Work spaces will be required for the surgeons, registrars, allied health, students, educators, staff specialists etc. These will be available in a multidisciplinary clinical work room, which will also house the electronic journey board and be used for case management discussion and teaching.
- e. Access to a staff room (i.e. tea room) will be required, preferably within the Unit. Access to staff toilets are to be located in the staff zone within the Unit. These may be shared with adjacent units.
- f. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor.
- g. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Interventional Radiology suite during a day time shift:
 - i. Nursing staff are permanently located in the unit with around 3 staff per shift.
 - ii. There are approximately 10 people per theatre. This includes an anaesthetist, a surgeon, an anaesthetic nurse and students.

- iii. Allied Health staff visit the unit with around 1 staff member in the area (a radiographer).
- iv. There are also some portage staff per shift and administration staff for admissions/discharge.
- h. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

11.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of Radiology staff as well as increase the skill level to deal with higher acuity patients. Staff will be primarily conducted internally within Campbelltown Hospital
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- c. There is currently a lack of qualified staff as there are other nearby facilities competing for the same staff.

11.7. Technology

- a. The integrity of the lead lining of operating rooms must be considered when selecting ICT solutions. This may require the use desktop computers rather than Computers on Wheels.
- b. Integrated operating room technology, which allows the recording and live transmission of operative procedures, will enhance on-campus training opportunities for medical and nursing students and staff. A central control room hub will be provided to monitor theatres. Staff change rooms can be located near to this hub.
- c. Consideration should be made for patient tracking technology (including the use of RFID locators) that can interact with the patient journey board and provide information of the location and status of patients.
- d. A patient waiting information system (e.g. buzzer, text message) should be considered to notify patients and family of the wait times and status.
- e. Sufficient computer access for specific software (Surginet, Powerchart and PACS) will require at least 3 computer points in each theatre.

11.8. Change Management

- a. Interventional Radiology is a rapidly growing areas of clinical care. Substantial development of this service including staff education, will be required to develop this service.
- b. The incorporation of the Interventional radiology suites within the perioperative services will required a review of the Governance structures.
- c. Education and clinical risk management of infection prevention procedures will be implemented for the Interventional Radiology team working within the perioperative suite.
- d. The ongoing development of procedures undertaken radiologically will require specific training and development and clear governance and quality and safety processes to ensure appropriate procedures are being performed by appropriately trained staff.

12. CANCER SERVICES

12.1. Scope of Service

- a. The Cancer Therapy Centre at Campbelltown Hospital will provide a comprehensive range of patient-centred multidisciplinary inpatient, ambulatory and community based services for adult and paediatric patients with diagnosed or potential malignancies, and non-malignant haematological conditions in collaboration with medical and surgical specialties.
- b. Integrated cancer services will be provided at Role Delineation level 6 and networked within the LHD and the Sydney Children's Hospital Networks to meet the Clinical Services Plan requirements to 2026/27.
- c. Adult inpatient services will be provided for patients 16 years and over.
 - i. Acute inpatient services will include:
 - Medical Oncology
 - Haematology
 - Radiation Oncology
 - Palliative Care.
 - ii. The functional requirements for adult inpatient cancer services are described in the Inpatient Medicine chapter of the brief.
- d. Paediatric cancer services are described in the Paediatrics and Ambulatory / Outpatient chapters of the Functional Design Brief. Intravenous therapy will occur in the Paediatric Unit, while paediatric radiation therapy will occur within the Cancer Therapy Centre.
- e. The Cancer Therapy Centre will provide ambulatory diagnostic, treatment, supportive and palliative care services.
 - i. The scope of the service will include:
 - Outpatient Clinics
 - Chemotherapy Suite
 - Assessment Unit
 - Satellite Pharmacy
 - Radiation Therapy
 - Clinical Trials
 - Supportive care and wellness programs.
- f. Medical oncology services will be delivered in collaboration with medical and surgical specialties to provide for the diagnosis, treatment and support for people with cancer or suspected cancer. Services will include multimodality therapy, treatment preparation, pharmacy services, patient counselling, support and education.
- g. Haematology services for people with haematological malignancies affecting the blood, bone marrow or lymphatic system will include diagnosis, urgent assessment, treatment and supportive therapies and programs.
- h. Radiation oncology services will operate as a networked service model with Liverpool Hospital. Services will include radiation therapy, treatment simulation, planning and review, medical physics, information management, and patient counselling, support and education.
- i. Specialist palliative care services will be provided as an integrated comprehensive service incorporating both hospital-based and community-based services. Palliative care services will provide a consultative, liaison service to both cancer and non-cancer inpatients and ambulatory patients.

12.2. Model of Care

12.2.1. General

- a. Cancer services will be provided via a multidisciplinary team framework within tumour specific streams, with a model of care and design to enhance patient-centred care and interdisciplinary collaboration.

- b. The integrated service model will operate within the principle of patients receiving therapy and investigations as close to home as possible where appropriate as determined by the multidisciplinary treatment team. Onsite care capability will be provided for patients with high and moderate volume cancer types including cases breast, lung, colorectal and urological, including prostate. Surgical care for patients with low volume cancers and those requiring highly specialised services will be provided via networked arrangements with the LHD. There will be an increase in the use of patient self-assessment and management as part of this process, using advances in electronic and information technology.
- c. Services will be coordinated to provide a patient-centred model of care with streamlined treatment protocols. Links with other medical specialties and community service providers will be further developed to enhance the model of care. Surgical services for breast, colorectal, urological and lung cancers will be expanded. Chronic pain services will be provided within a multidisciplinary environment with input from a range of different clinical specialties.
- d. A new on-site haematology service will include inpatient capacity and an ambulatory chemotherapy service. Outpatient services for patients with non-malignant haematological conditions will be provided in the Day Medical Unit in the main ambulatory care area of the hospital.
- e. End of life planning and widespread use of Advanced Care Directives will be embedded in the models of care.
- f. Programs for promoting a wellness philosophy for survivors and carers will be integrated into the model of care.
- g. Integrated allied health services will be provided including occupational therapy, diversional therapy, speech pathology, stomal therapy, wound care, clinical genetics, pharmacy, dietetics, physiotherapy, exercise physiology, social work and psychology.
- h. Patients will have access to a Cold Cap Therapy and a Wig Library.
- i. An integrated cancer patient management system (Mosaiq) will be used as the comprehensive electronic medical record containing scanned documentation, links to other health databases, prescription of radiation and chemotherapy and drug treatments.
- j. Clinical research opportunities will be enhanced with the provision of wet and dry research laboratories operated by the Western Sydney University. This will include but not be limited to clinical trials (including Phase I, II and III trials), non-trial clinically related research and clinical aspects of translational research.
- k. Volunteers will provide a variety of patient support services including supply of beverages, wig library, way finding, meet and greet and escorting of well patients throughout the department.

12.2.2. Outpatient Clinics

- a. Medical oncology, radiation oncology, haematology and palliative care and allied health outpatient clinics will be provided from facilities incorporating design features and operational processes to support patient-centred care and interdisciplinary collaboration.
- b. Multidisciplinary outpatient clinics with access to videoconferencing facilities will be provided for all tumour streams, e.g. lung, colorectal, gynaecological, breast cancers.
- c. A range of other clinics will be provided including late effects clinics, multidisciplinary pain clinics, wound management, sexual dysfunction clinic, genetics, palliative care clinics and supportive care programs.

12.2.3. Chemotherapy Suite

- a. The Chemotherapy Suite will provide facilities for the acute assessment, diagnosis and treatment of cancers and malignant haematological conditions, in partnership with Ambulatory Care and the Oran Park Integrated Health Hub.
- b. Services will include chemotherapy and other systemic anti-cancer treatments. A range of supportive care services including psycho-oncology and ambulatory palliative care services will be provided.
- c. The Chemotherapy Suite will include:
 - i. Negative pressure isolation rooms
 - ii. The ideal future configuration will be pods of 10 chairs including 6 isolation rooms, two of which will have bariatric capability
 - iii. A resuscitation area with capacity for 2 beds and 1 chair that can be used for the rapid assessment and treatment of unstable or deteriorating patients in the unit awaiting transfer to an inpatient unit.
 - iv. One larger bay for a resuscitation area for the rapid assessment and treatment of unstable or deteriorating patients

- d. Extended operating hours will facilitate increased access to ambulatory services and timely initiation of treatment.

12.2.4. Assessment Unit

- a. The Assessment Unit will provide rapid access to assessment, management and support for patients undergoing active treatment that require urgent review for symptom control, allowing patients to bypass the Emergency Department.
- b. Oncology, haematology, radiotherapy and palliative care patients will be assessed and treated in the Assessment Unit.
- c. Services will include pain management, biopsies, diagnostic procedures, ascitic taps and a rapid assessment clinic.
- d. Referrals to the Unit may be via:
 - i. Self-referral
 - ii. Treating clinical team
 - iii. General Practitioner or community service provider.
- e. The Assessment Unit will include:
 - i. A number of chairs and 2 single rooms
 - ii. Sub wait area
 - iii. Immediate access to the Chemotherapy Suite
 - iv. Immediate access for radiation therapy patients.

12.2.5. Radiation Oncology

- a. Radiation therapy may be used for definitive or curative cancer treatment and is also used as a palliative treatment with the aim of local disease control or symptom relief. The treatment may be delivered on its own, or in combination with other forms of treatment, including chemotherapy, hormones and surgery. Radiation therapy will be most commonly performed as an outpatient service.
- b. Radiation oncology services will include radiation therapy, treatment simulation, planning and review, patient counselling, support and education.
- c. Positron Emission Technology/Computed Tomography (PET / CT) and Positron Emission Technology/Magnetic Resonance Imaging (PET / MRI) will be used for diagnostic, staging and treatment planning purposes, in collaboration with the Nuclear Medicine Service.
- d. Treatment modalities will include:
 - i. External Beam Radiation Therapy (EBRT) - using linear accelerators
 - ii. Orthovoltage radiation - superficial radiation for the treatment of skin lesions.
- e. The Radiation Therapy area will include:
 - i. 3 linear accelerators and 1 shelled space (for future expansion)
 - ii. 1 orthovoltage machine
 - iii. A simulation room with MRI and CT for use in radiation treatment planning.
 - iv. A recovery space with capability to provide care for patients following procedural sedation e.g. patients with a disability
 - v. Minor procedure / holding area - 'Nurse Radiation Bay'
 - vi. Patient waiting area - trolley bay
 - vii. Consult rooms in proximity to the treatment areas.
- f. The model of care will include good preparation and reassurance provided by specialist radiation therapists, social workers and occupational therapists for all patients, and a reduction in sedation requirements for young children. The Anaesthetics Service will provide anaesthetic support services for patients requiring procedural sedation or general anaesthesia. Stage 1 and stage 2 recovery will occur within a designated the recovery area within the unit.
- g. Extended operating hours will be provided to support patient-centred care model and enhance service efficiency.
- h. Future service requirements will include MRI simulation, MRI linear accelerators and may include access to Proton Therapy services.

12.3. Operational Description

12.3.1. Operating Hours

- a. The Cancer Therapy Centre will have the following operating hours:
 - i. Outpatient Clinics: 8:00am - 8:00pm, Mon-Fri
 - ii. Chemotherapy Suite: 8:00am - 8:00pm, Mon-Fri and 8:00am - 11:00am, Sat
 - Limited service will be provided on public holidays as determined by operational processes in the District.
 - iii. Cancer Assessment Centre: 8:00am - 8:00pm, Mon-Fri
 - iv. Radiation Therapy: 8:00am - 8:00pm, Mon-Fri
 - On call arrangements will be provided for emergency after-hours treatment
 - v. Specimen Collection Centre: 7:30am - 17:00pm Mon - Fri, and potentially Saturday mornings.
 - vi. Satellite Pharmacy: 8:00am - 8:00pm, Mon-Fri and 8:00am - 11:00am, Sat.

12.3.2. Access, Admission and Discharge / Transfer

- a. A centralised cancer services scheduling and admission process will provide a patient-centred approach to managing the high volume of planned services.
- b. Patients undergoing treatment will have access to designated parking within close proximity to the Cancer Therapy Centre. Parking arrangements for frequent users of the Centre will be considered by the LHD.
- c. There will be a direct phone number for patient enquiries, staffed by administrative staff with guidelines to triage enquiries between 8:00am - 8:00pm. After-hours advice will be provided by an on call service.
- d. Patients will be triaged upon referral, with a care coordination model designed to facilitate rapid access to the most appropriate clinical services.
- e. Patient flow and wayfinding will be supported by electronic navigation systems (barcode registration, electronic queuing system), administrative and clinical staff.

12.3.3. Clinical Support Services

12.3.3.1. Pharmacy services

- a. A Satellite Pharmacy will provide medication reconciliation, dispensing, sterile cytotoxic compounding, medication counselling, drug information and clinical trials services during hours of operation. An after-hours on call service will be provided.
- b. Clinical pharmacists will be an active part of the multidisciplinary team working across all areas of the Cancer Therapy Centre.
- c. Within the Chemotherapy Suite 'unit stock' medications, IV fluids and sterile supplies will be stored in the clean utility room close to the patient areas.
- d. Operating hours will support extended hours chemotherapy services provided in the Cancer Therapy Centre.

12.3.3.2. Pathology services

- a. A pneumatic tube system will operate, with stations located in the Satellite Pharmacy, Specimen Collection Clinic, and Chemotherapy Suite for the transport of pathology specimens, documents and pharmaceutical items.
- b. A Specimen Collection Centre will be located within proximity to the Cancer Therapy Centre to support same day reporting of pathology results, ease of access for patients and enhanced clinical care.
- c. Point of care testing will be available to enable rapid access to full blood count and electrolyte results to inform treatment planning.

12.3.4. Non-Clinical Support Services

12.3.4.1. Security

- a. The Cancer Therapy Centre will be secure at all times, with additional considerations required to accommodate the extended operating hours of the Centre.

12.3.4.2. Food services

- a. Special arrangements will be required to support extended operating hours of the service, including availability of food after-hours, refrigeration and storage facilities.

12.3.4.3. Waste management

- a. Cytotoxic waste and cytotoxic sharps will be bagged and contained in a purple colour coding bin, in accordance with protocols for the management of cytotoxic substances, and held within a secure disposal room for collection.

12.4. Relative Location and Unit Configuration

12.4.1. Functional Relationships

- a. The Cancer Therapy Centre will have the following key external functional relationships:
 - i. Patient car park/ drop-off – immediate access for the movement of patients, carers and visitors
 - ii. ED – ready access for the movement of patients, staff and equipment
 - iii. Cancer/Haematology/Palliative Care IPU - ready access for the movement of patients and staff
 - iv. Ambulatory Care Unit - ready access for the movement of patients and staff
 - v. Medical Imaging Department – ready access for the movement of patients and staff
 - vi. Perioperative and Interventional Suite - ready access for the movement of patients and staff
 - vii. Pathology - direct access via mechanical circulation for the transportation of specimens and blood products
 - viii. Discharge Lounge – routine access
 - ix. MET team - Intensive Care Unit – infrequent but direct access
- b. The Cancer Therapy Centre will have the following key internal functional relationships.

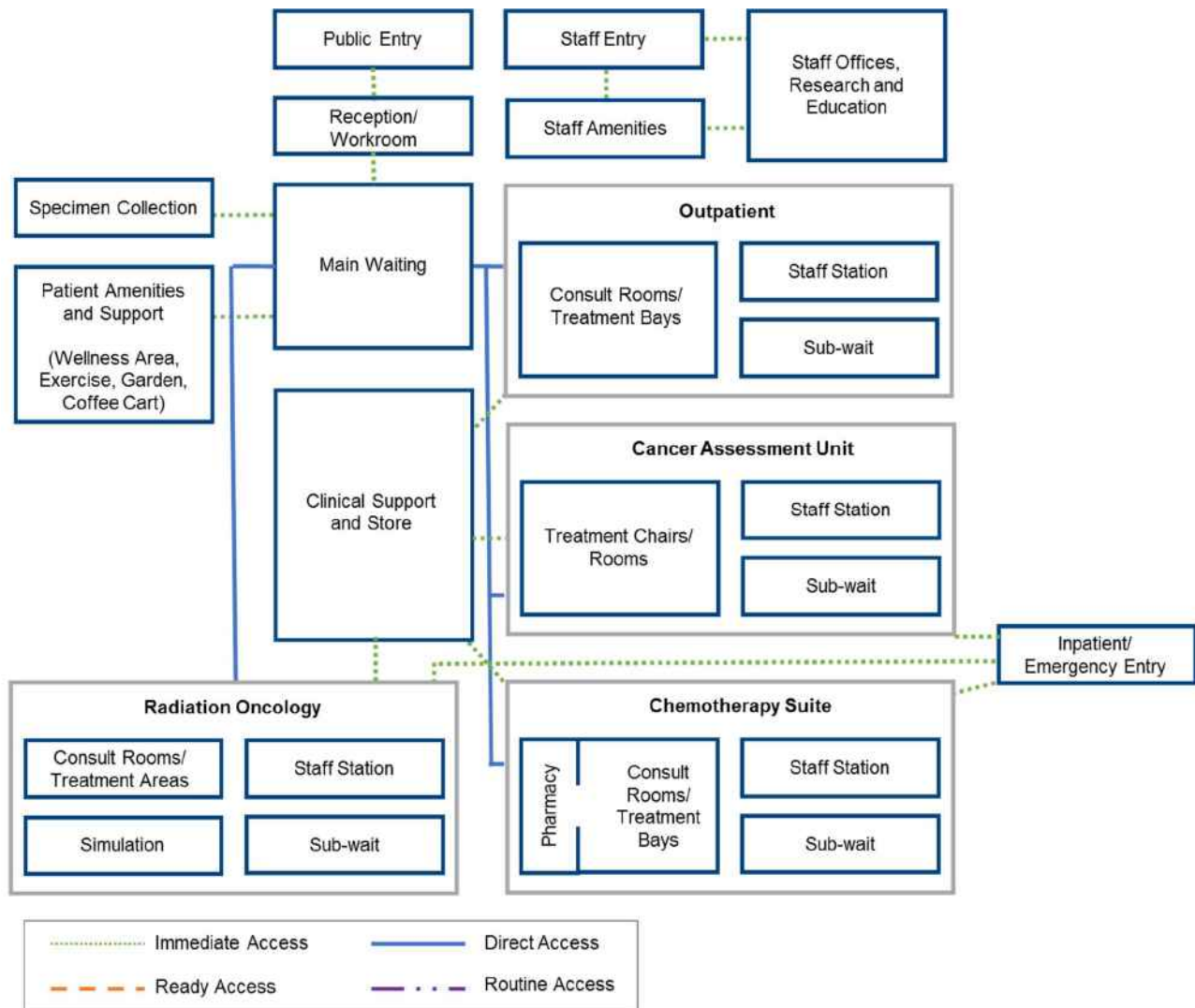


Figure 9 Cancer Therapy Centre internal relationships

12.5. Specific Design Requirements

12.5.1. General

- The Cancer Therapy Centre must be designed to incorporate patient focussed areas and staff only areas, with appropriate separation of patient, staff and visitor flows.
- Design will require age appropriate clinical and waiting areas for adolescents and young adults.
- The design must provide a welcoming environment to all patients, with access to outdoor areas and appropriate spaces for patient privacy and socialisation.
- The Cancer Therapy Centre will be configured to facilitate safe, efficient and effective operation.
- The main reception and waiting area will be visible from the entrance to the Cancer Therapy Centre. The main waiting area will be a combined waiting area for the whole Cancer Therapy Centre, with sub-waits throughout the Cancer Therapy Centre. The ability to overlook and access external courtyards (with protection from the elements) from waiting areas is an important adjunct to therapy.

- f. The design will ensure that radiation safety requirements are met. Radiation shielding will be provided as required including the bunkers, simulation rooms and physics laboratory.
- g. With the exception of linear accelerator rooms, access to natural light will be maximised in all patient areas in the Cancer Therapy Centre, particularly in treatment areas where patients can stay for a comparatively long time.
- h. Bariatric patients will have access to designated facilities in the Assessment Unit, Chemotherapy Suite and Outpatient Clinics.
- i. The design of the satellite pharmacy will incorporate requirements for a cytotoxic compounding suite.
- j. Accessible patient toilets are to be located around the perimeter of the unit, one of which should include shower.

12.5.2. Patient Treatment Areas

12.5.2.1. General

- a. Treatment bays will provide privacy, with an appropriate environment for patient socialisation during treatment, and care delivery.
- b. All patient treatment bays, chairs and rooms will have access to medical gases, patient entertainment systems and distraction devices.
- c. The design will facilitate line of sight from the staff station to the sub-wait areas.
- d. The clinical trials office will have convenient access to the treatment areas.
- e. Consultation rooms will be collocated with treatment areas across the Cancer Therapy Centre.
- f. The isolation rooms will be located near the treatment bays with direct access to the staff station.
- g. The resuscitation trolley bay will be easily accessible from the treatment area.
- h. The pantry will be used for patients in the treatment areas and will be sufficiently close for this purpose.
- i. The height weight bay will be accessible to the waiting area.
- j. The pharmacy will have direct access to the chemotherapy suite and main waiting area.
- k. The specimen collection room will be accessible to all patients and located adjacent to the waiting area.
- l. The staff setup area will have close access to the satellite pharmacy workroom and outpatients.
- m. Chemotherapy suite will include a beverage bay with an ice machine
- n. Interview rooms for patient consultation will be located near the waiting area, to enable meeting with patients without traversing the unit to reach an interview room.

12.5.2.2. Radiation oncology planning

- a. Simulation rooms used for treatment planning include fully functioning MRI and CT and must be collocated with control rooms. The simulation control rooms must have direct visibility and audio connection to patients in the simulation rooms.
- b. Mould workshops and the fitting room must be grouped and located with direct access, by internal circulation, to the radiation planning areas, linear accelerators and simulators.
- c. The radiation planning areas must have direct access to simulation areas.
- d. An anaesthetic recovery area will be required between the simulation and the radiation therapy areas.

12.5.2.3. Radiation oncology treatment

- a. Linear accelerators must be collocated, for management efficiency, with control rooms.
- b. Physics and dosimetry laboratories will be required.
- c. Bunkers must be collocated with change rooms and sub-waiting area to maximise efficient patient flows.
- d. A treatment/holding area will be provided for minor procedures and observation. Space for 4 beds, 4 chairs, staff station and ready access to medication room will be required.

- e. An anaesthetic bay with paediatric and adolescent design considerations will be required for the delivery of paediatric radiation therapy.
- f. A separate holding / trolley area will be required to pre and post treatment.

12.5.3. Storage

- a. Capacity for the storage of a small stock of consumables and currently used equipment close to the point of use is to be incorporated into the design. Ideally this would be a mobile solution.
- b. Storage with power outlets for charging will accommodate medical equipment which will be used regularly within e.g. intravenous pumps and other infusion devices.
- c. All the equipment and consumable store rooms require flexible open spaces with mobile shelving to maximise storage options, and charging facilities.
- d. Storage requirements for cold cap therapy equipment.
- e. Storage requirements for medical gas cylinders and compressed air.
- f. Storage for treatment aids including patient immobilisation devices will be required within or in close proximity to the linear accelerators.
- g. Physics equipment storage facilities with a wide door will be required in close proximity to linear accelerators.
- h. Physics records storage space will be required within the unit.

12.5.4. Patient and Visitor Amenities

- a. A range of amenities for patients and their carers will be located throughout the centre e.g. waiting areas, public toilet facilities, including access and baby change facilities, outdoors areas.
- b. A Wellness area will provide a functional space for supportive care and survivorship programs, gym based exercise programs and other wellness activities.

12.5.5. Staff Amenities

- a. A separate staff tea room, lockers, shower and toilet facilities will be provided within the staff area.
- b. Access to an outdoor area is highly desirable.

12.5.6. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. Clinical trials staff and support space will be accommodated within the centre. Clinical trials staff will require access to interview / meeting space adjacent to the treatment and clinic areas for the recruitment and follow-up of patients.
- c. The combined clinic/MDT room will be used extensively by staff throughout the day and will be positioned centrally in the Cancer Therapy Centre.
- d. Volunteers will have access to a workroom and property lockers for storage of personal belonging while on duty.
- e. A staff establishment may include:
 - i. Medical specialists
 - ii. Junior medical staff
 - iii. Nursing Unit Manager
 - iv. Nursing staff
 - v. Allied health staff
 - vi. Radiation therapists
 - vii. Medical physicists
 - viii. Physics registrars
 - ix. Technicians

- x. IT staff
- xi. Clinical and non-clinical support
- xii. Community service providers
- xiii. Volunteers
- xiv. Clinical trials
- xv. Students.

12.6. Workforce Issues

- a. Establishment of new services including haematology services - staff recruitment, education and training for all professional disciplines.
- b. Implications of professional aunit conditions on extended operating hours e.g. pharmacy, radiation therapy, others.
- c. Implications of professional aunit conditions on office and workstation requirements.

12.7. Technology

- a. Telehealth capability - to enable contemporary clinical care a enhance teaching, education and research.
- b. Platform to integrate cancer patient management system (Mosaiq) with other ICT systems within the LHD facilities and community services.
- c. Treatment spaces and clinical work spaces will require ICT connectivity to support point of care clinical documentation and results review.
- d. Patients and carers will have access to WiFi throughout the centre including areas such as waiting / lounge and patient treatment areas.
- e. Voice recognition dictation software (integrate with Mosaiq) will be available in all consult rooms and clinical office areas.
- f. Telehealth facilities will be provided in each outpatient pod and in the meeting rooms to facilitate the provision of consultation services, and education and training with outreach facilities, affiliated medical practitioners, affiliated universities etc.

12.8. Change Management

- a. Parking management system for frequent service users.
- b. Implications of professional aunit conditions on extended operating hours e.g. pharmacy, radiation therapy, others.
- c. Implications of professional aunit conditions on office and workstation requirements.

13. NUCLEAR MEDICINE

13.1. Scope of Service

- a. The Nuclear Medicine Service will provide a comprehensive range of planned and unplanned diagnostic and therapeutic studies for adult and paediatric inpatients and outpatients. Level 6 nuclear medicine services will be delivered onsite and networked with Liverpool Hospital and the Sydney Children's Hospital Network to meet the Clinical Services Plan requirements at 2026/27.
- b. Service will be provided with discreet zones to support the following modalities:
 - i. Gamma cameras, including SPECT/CT units
 - ii. Bone mineral densitometry units
 - iii. Positron emission tomography units (PET/CT and/or PET/MRI)
 - iv. Radio-pharmacy
 - v. Radionucleotidetherapy
 - vi. Hot Laboratory
- c. Services delivered using the Cyclotron, including Lutetium-177 peptide therapy for neuroendocrine tumours, will be provided at Liverpool Hospital.
- d. Proposed 2026/27 infrastructure requirements are as follows:

Modality	2026/27
PET/CT	1
PET/MRI	1
SPECT/CT	2
Stress Testing Facility	1
Bone Mineral Densitometry	1
Therapy Rooms	2
In vivo and in vitro imaging and diagnostic	1

13.2. Model of Care

- a. The Nuclear Medicine Unit will be a discrete unit with the PET scanner collocated with other nuclear medicine services. Other medical imaging services will be located in the Main Medical Imaging Department, Satellite Emergency Department and Interventional Suite.
- b. Most patients having PET studies will be treated as outpatients, while the proportion of those having nuclear medicine studies is anticipated to be evenly split between inpatients and outpatients.
- c. Nuclear medicine services will include both therapeutic and diagnostic procedures.
- d. General anaesthesia or procedural sedation may be required for paediatric patients - model of care and location of recovery area to be determined
- e. All modalities will be supported by SWSLHD Picture Archiving and Communication System (PACS) and Radiology Information System (RIS), with images and reports being available on electronic medical record (eMR). The MOSAIQ care management system will be used in clinical management, teaching and research.

13.3. Operational Description

13.3.1. Operating hours

- a. The Nuclear Medicine suite will operate 08:00 to 17:00, Monday to Friday with provision for operating hours and days to extend. An on-call after-hours service for clinically urgent studies will be available 24 hours, every day of each year.

13.3.2. Access, admission and discharge/transfer

- a. Appointments will be made via a central booking system in order to coordinate supply of radiation substances. Emergency referrals will receive priority access.
- b. Patients
 - i. Inpatients may be transferred to the Nuclear Medicine Department and enter directly to the sub-waiting, uptake bays or injection rooms of the patient preparation area. Following uptake or injection, patients may be required to leave the unit/return to their IPU for a period of time or wait in the hot waiting area within the department.
 - ii. Outpatients will initially enter via the Nuclear Medicine Department reception area. This waiting area will be used as a pre-scan waiting area for some nuclear medical procedures. Patients will be directed from here to the patient preparation areas to receive pre-scan radiopharmaceuticals. Following uptake or injection, patients may be required to leave the unit for a period of time or wait in the hot waiting area within the department.
 - iii. Nuclear medicine patients who require multiple attendances for the same procedure on the same (or multiple) days will be encouraged to leave the department between attendances and access public areas of the hospital. These patients will return directly to the sub-waiting area for the Nuclear Medicine Department via reception as directed by staff.
 - iv. Some paediatric patients may require cannulation prior to administration of their radiopharmaceutical, therefore some staff require paediatric cannulation skills.
 - v. Patients attending for a PET/CT scan will:
 - Present to the central reception area and complete administrative processes
 - Be directed to the pre-scan waiting area
 - Change in the change cubicle or uptake room (if available)
 - Optionally be examined, measured, weighed and consented in the consult/exam room
 - Have a cannulae inserted and be injected with the radio-pharmaceutical in the uptake room
 - Patients may use the toilet before the scan procedure
 - Be scanned in the PET/CT room
 - Wait in the post scan wait area before or after changing back into their own clothes
 - Leave the department.
- c. Staff
 - i. Staff will enter the Nuclear Medicine Department directly into a staff only area with direct access to the staff amenities and adjacent to the clinical offices.
- d. Visitors
 - i. Visitors will be restricted to waiting areas and will be prevented from entering clinically sensitive areas of the Nuclear Medicine Department.
 - ii. Parents or carers of paediatric patients will be able to enter clinical areas under staff supervision, if required.

13.3.3. Clinical support services

13.3.3.1. Pharmacy services

- a. Medications will be stored in accordance with NSW Health and statutory requirements. Drugs that require cold storage and dangerous drugs (schedule 8 and 4D) will be stored in accordance with the NSW Poisons and Therapeutic Goods Regulation.
- b. Pharmacy services will be provided in accordance with hospital wide processes.

13.3.3.2. Pathology services

- a. Blood specimens and samples will be delivered to pathology via the pneumatic tube system.
- b. Pathology services will be provided in accordance with hospital wide processes.

13.3.3.3. Imaging services

- a. If the departments are collocated, the reception area may be shared with Medical Imaging with separate flows and line of sight.

13.3.4. Non clinical support services**13.3.4.1. Food services**

- a. Patients previously required to fast or remain in the Nuclear Medicine Department for long periods will be provided with food and beverages.

13.3.4.2. Pathology

- a. Pathology services will be provided in accordance with hospital wide processes.

13.3.4.3. Waste management

- a. General waste management services will be provided in accordance with hospital wide processes.
- b. Radioactive waste management processes will comply with Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) standards.
- c. Radioactive waste will be stored in appropriately shielded devices within the Hot Lab until such time as the level of radioactivity falls below the level required by statutory authorities. Waste may be required to be stored for up to seven weeks in the radioactive waste holding area.
- d. Following storage, transportation of radioactive waste material will be to a waste storage area external to, but within a short distance from, the Nuclear Medicine Department to minimize the exposure to staff and visitors.
- e. Levels of barrier protection, including controlled access and lockdown capability will be required for areas where radioactive waste materials are stored.

13.3.4.4. Linen services

- a. Linen services will be provided in accordance with hospital wide processes.
- b. Contaminated linen may be stored in appropriately shielded areas (hot lab) of the Nuclear Medicine suite prior to being removed to be laundered.

13.3.4.5. Supply services

- a. Supply services will be provided in accordance with hospital wide processes.
- b. Some radiopharmaceuticals will be delivered directly to the Nuclear Medicine suite by courier from external suppliers. Deliveries of such materials will require secure controlled access for couriers at all times, including out of hours drop-off deliveries to the hot lab.
- c. Gas cylinders will be delivered and collected by wardspersons from the centralised medical gas storage facility onsite.

13.4. Relative Location and Unit Configuration**13.4.1. Functional relationships**

- a. The Nuclear Medicine Department will have the following key functional zones:
 - i. Entry/Reception
 - ii. Waiting areas, both dosed (hot) and undosed (cold)
 - iii. Nuclear Medicine scanning rooms
 - iv. PET scanning and uptake rooms
 - Patient holding/recovery area
 - v. Clinical support areas
 - vi. Staff areas, including support, teaching and research amenities

- b. The Nuclear Medicine Department will have the following principal external functional relationships:
- The Medical Imaging Department and Nuclear Medicine Department will ideally be located with horizontal adjacency.
 - Inpatient units – ready access
 - Cancer Treatment Centre – routine access
 - Ambulatory care and Outpatient areas – routine access
- c. The Nuclear Medicine Department will have the following internal functional relationships;

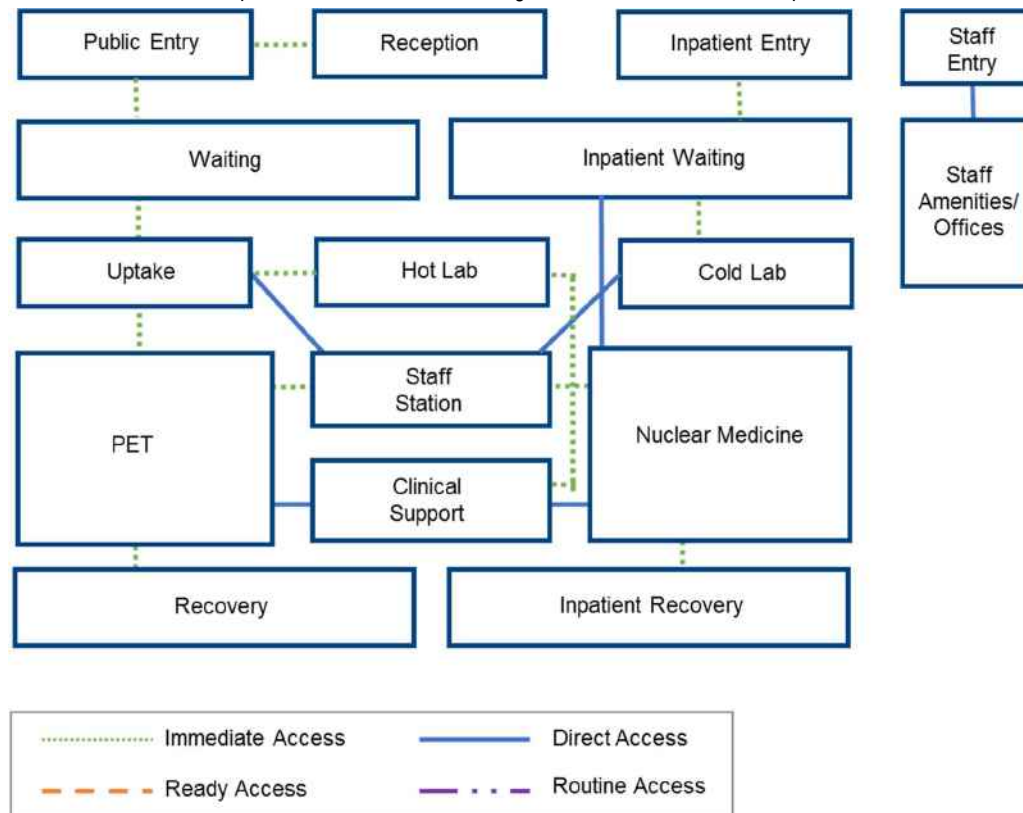


Figure 10 Nuclear Medicine internal relationships

13.5. Specific Design Requirements

13.5.1. General

- The design must comply with all relevant Laws, including the Radiation Safety Act 1999 (Qld) and Australian Radiation Protection and Nuclear Safety Agency standards (2008).
- The floors and walls of hot lab areas must be constructed of a material that is easily decontaminated, with no gaps or crevices. Vents and traps for radioactive gases must be provided.
- Procedure rooms must have illuminated room in-use and, where relevant, radiation warning signs to all entry points.
- Radiation shielding must be provided to ensure safe clinical operations and certified by a specialist and suitably credentialed radiation consultants.
- SPECT and PET/CT rooms must be capable of supporting gantry/ceiling mounted diagnostic equipment.
- Toilets to be utilised by patients must have appropriately shielded drainage
- Lighting must be dimmable in all procedural rooms.

- h. All procedural rooms must be designed with the ability provide an environment with no sensory stimulus i.e. black out capability.
- i. Room design will minimise patient manoeuvring between patient chair/trolley and imaging equipment. For example long, rectangular rooms allow staff to wheel a trolley straight up to the machine for imaging, and back out when completed with no additional turns and manoeuvres.
- j. The Nuclear Medicine Department must be designed to facilitate the maintenance and replacement of architecturally significant medical imaging equipment throughout its anticipated life without disrupting the building integrity. This should be reflected in the location and accessibility of the rooms housing this equipment, including appropriate structural reinforcement along proposed routes of equipment travel.
- k. Both the Nuclear Medicine service and the PET service are prescribed as controlled radiation areas. The PET area will be a discrete zone within the Nuclear Medicine Unit.
- l. For patients undergoing nuclear medicine studies, waiting areas and flows should allow separation of dosed ('hot') and un-dosed ('cold') patients
- m. Levels of barrier protection, including controlled access and lockdown capability will be required for areas where radioactive supplies and waste materials are stored.
- n. Each zone must have secure access and standard safety warnings so that patients can only access these areas under escort from a staff member.
- o. A single public entry point to the Unit will be required. Separate access will be provided for staff, patient transfers and the supply and movement of supplies and waste.
- p. There will separate entries for the general public / outpatients and for patients on beds / trolleys.
- q. Reception must be able to see entry and waiting areas.
- r. Easy access to patient drop-off zones and parking in close proximity will be required to minimise service delays.
- s. Blanket warmers and diversional design considerations will be required in this area to assist in patient comfort and distraction.
- t. High resolution cameras will be required in hot rooms as a strategy to minimise staff physical supervisions and exposure to radioactive materials.

13.5.2. Patient treatment areas

- a. Control rooms
 - i. Cabling must be accessible in all control rooms.
 - ii. If the design includes shared control rooms between procedural rooms, it must include solutions that control noise.
 - iii. The control room must allow visualisation of, and communication with, the patient whilst the operator is in a seated position. High resolution and colour CCTV must be provided if there is no direct visibility of the patient.
 - iv. Radiation protection measures including lead glass or other lead shielding to meet regulations must be provided.
- b. SPECT/CT and gamma camera rooms
 - i. Imaging rooms must be sized and proportioned to suit the equipment to be installed and provide a safe working environment to allow the effective movement of staff and patients.
 - ii. The gamma camera rooms must accommodate the relevant imaging equipment.
 - iii. The SPECT/CT rooms must be located with direct access to the control room and ready access to the equipment room, patient waiting areas, preparation and utility areas.
 - iv. Imaging rooms must include:
 - Adequate ventilation and air conditioning for equipment functioning;
 - Visibility between camera room and control room with closed circuit television (CCTV) and intercom provided in the both rooms
 - Floor reinforcement according to manufacturer's specifications; and
 - Ceiling artwork in accordance with guidelines.
- c. BMD room

- i. The BMD room must be large enough to accommodate the diagnostic equipment and permit entry, exit and manoeuvring of bariatric patient trolleys.
- d. PET/CT room
 - i. The PET/CT camera room must be located with ready access to patient waiting and holding areas and a collocated anaesthetic room, as well as uptake rooms.
 - ii. The PET/CT room must provide an appropriate environment for paediatric patients, including include ceiling artwork, distraction features and entertainment systems.
 - iii. Access to a separate post scan waiting and recovery area must be provided for 'hot' patients to wait after their scan for images to be checked and to be offered a light meal (after they have been fasting).
 - iv. There should be separate holding areas in the 'hot' zone for inpatients and outpatients.
 - v. The radio pharmacy hot laboratories must be appropriately shielded for the management of radioactive isotopes.
 - vi. The PET/CT suite must be located with direct access to the control room and ready access to the equipment room, patient waiting areas, preparation and utility areas.
 - vii. Patients must have access to toilet facilities between the uptake room and the scanning room.
 - viii. Room requirements include:
 - Up to 10 shielded single rooms - patients stay approximately 1 hour in uptake area
 - Structural capacity to take the loads of the scanner and ancillary equipment, according to manufacturer's specifications. Equipment loads may exceed 3000kg;
 - Visibility between camera room and control room
 - Ancillary equipment includes water/air chillers and transformers, as per the area schedule
 - Uninterrupted power supply including storage space requirements for batteries.
 - A CCTV and hands free intercom and telephone communication facility between scan room and control area, staff station and uptake rooms, with feeds to nursing staff and technologists.
 - Radiation therapy planning lasers
 - Ready access to dirty utility
- e. Hot lab
 - i. A suite of rooms must be provided for the aseptic preparation of radioactive material, with a separate clean room for the aseptic preparation of bio-hazardous radioactive material, to be used in imaging procedures. This area must comply with all Accreditation requirements. The lab must be collocated with the dosing and scanning rooms.
 - ii. Ventilated cabinets must include separate ducting for the removal of radioactive waste to prevent contamination of other areas of the Facility.
 - iii. The generator/radio store must include reinforced benches to support heavy equipment in excess of 500kg.
- f. Holding / recovery area
 - i. A holding/recovery area will be required for stage 1 recovery post the administration of conscious sedation
- g. Technegas room - lung scans
 - i. A radioactive gas exhaust system must be provided to extract potentially radioactive air from this room to outside the Facility to meet the manufacturer's requirements.
- h. Viewing and reporting room
 - i. All images must be able to be viewed electronically.
 - ii. Reading will be at dedicated reporting stations incorporating PACS/RIS. The design of reporting areas must be conducive to productivity, comfort and efficiency.
 - iii. Each reporting station must have four viewing monitors, a computer for patient and radiological information systems with dictating equipment.
 - iv. The design must include paediatric friendly facilities within each modality.

13.5.3. Public and patient amenities

- a. A reception and general waiting area will be available, with access to vending machines and public telephones.
- b. Public toilet facilities should be readily available, but need not be inside the unit.

- c. Patients will have access to a beverage bay to facilitate post-fasting recovery.

13.5.4. Storage

- a. Requirements may include:
 - i. Equipment bays for mobile items such as wheelchairs, beds/trolleys and lifters
 - ii. Equipment bay for mobile Technegas unit and argon cylinders that are wheeled to the patient's bedside during treatment.
 - iii. Imaging table or machines
 - iv. General storage for smaller equipment items
 - v. Clinical consumables and some medications
 - vi. Personal Protective Equipment
 - vii. Office supplies

13.5.5. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. The department will include meeting rooms to support staff activities, education and research. Access to a small meeting room and a large, flexible space to hold up to 50 staff. The large space can be shared, and both spaces should allow ease of projecting and sharing images, as well as teleconferencing and videoconferencing facilities.
- c. The staff establishment may include: (approx FTE based in unit + number in unit per shift + visiting TBC)
 - i. Medical specialists qualified in nuclear medicine - 4
 - ii. Junior medical staff - 2
 - iii. Medical physicists - 2
 - iv. Nuclear medicine technologists/scientists - 10
 - v. Radiopharmaceutical scientists - 3
 - vi. Nursing staff - 3
 - vii. Administration staff - 5
 - viii. Patient transport assistants - 1
- d. The Unit will participate in clinical trials and require appropriate treatment spaces and staff facilities.
- e. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

13.5.6. Staff amenities

- a. A staff room, toilets, showers and lockers will be provided. Lockers will be located in a secure staff area.
- b. These may be shared with adjacent units.

13.6. Workforce Requirements

- a. Recruitment and network arrangements with the LHD
- b. Education and training requirements associated with the establishment of a new service

13.7. Information Technology

- a. An electronic kiosk will be available to allow patients to self-check in and then receive notification (eg. Buzzer, SMS) when the treatment area is available.
- b. The Medical Imaging and Nuclear Medicine Departments have additional IT infrastructure requirements to support the integration of PACS/RIS and MOSAIQ platforms with hospital IT systems for clinical, education and research purposes.

- c. High resolution video monitoring in single uptake rooms will be required

13.8. Change Management

- a. The establishment of Nuclear Medicine service at Campbelltown Hospital - implementation plan and operational processes to be developed.
- b. Strong connectivity and communication links to the existing unit at Liverpool hospital will be required.
- c. PET/ MRI
- d. New inpatient service for 'Radioactive Iodine 131' - radiation shielding, after-hours technician support requirements

14. MEDICAL IMAGING

14.1. Scope of Service

- a. The Medical Imaging Service will provide a comprehensive range of planned and unplanned diagnostic and therapeutic studies for inpatients and outpatients. Medical imaging services will be available 24 hours per day, 7 days per week for emergency patients. Services will be delivered at Role Delineation level 6 and provide capability to meet the Clinical Services Plan requirements to 2026/27.
- b. Interventional Radiology services will be provided onsite and networked with Liverpool Hospital and the Sydney Children's Hospital Network. An Interventional Radiology Suite will be located in the Interventional Procedural Suite. Functional requirements for this service are documented in the Interventional Services chapter of the Functional Design Brief.
- c. The following medical imaging modalities will operate:
 - i. General radiography - fixed and mobile units
 - ii. Ultrasound
 - iii. Computed Tomography (CT)
 - iv. Magnetic Resonance Imaging (MRI)
 - v. Fluoroscopy
 - vi. Maxillofacial Radiography - Orthopantogram (OPG)
 - vii. Image Intensification
 - viii. Mammography
 - ix. Interventional radiology - diagnostic and therapeutic procedures
- d. An Ultrasound Suite will provide 24 hour ultrasound service including, general, vascular and emergency gynaecology ultrasound.
- e. All modalities will be supported by SWSLHD Picture Archiving and Communication System (PACS) and Radiology Information System (RIS), with images and reports being available on electronic medical record (eMR). A real-time consultant reporting model will include after-hours access.

14.2. Model of Care

14.2.1. General

- a. Integrated Medical Imaging services will operate via a distributed model of care, with services provided in the following locations:
 - i. Main Medical Imaging Department - services for Inpatient Units and Ambulatory Care/Outpatients
 - ii. Satellite Emergency Medical Imaging Department - services for Emergency Department and after-hours services for the hospital
 - iii. Interventional/Procedural Suites - operative, procedural and intervention services, unstable intensive care patients and paediatric patients requiring general anaesthesia for medical imaging procedures
 - iv. Mobile Imaging in inpatient units
 - v. Outpatient, ambulatory area - If proximity to main imaging department is not possible
- b. High resolution, digital mobile x-ray units will be provided for use in inpatient units. These mobile x-ray units will be stored securely in close proximity to the inpatient units to enhance clinical care and minimise the movement of the machines when required.
- c. Digital mobile x-ray units and an ultrasound machine will be located in Intensive Care Unit. A CT unit will be located in close proximity to the ICU.
- d. Image intensifiers will be available in the Operating Suite and the procedure room near resus in ED.
- e. Mobile ultrasound machines will be located in the Women's Health area.

- f. General anaesthesia or procedural sedation may be required for small children to undertake specific studies, most commonly MRI. Sedation/anaesthesia will be administered in the scanning room by the visiting anaesthetic team. Paediatric patients will be transferred to the recovery area within the department which will be designed to allow adult/paediatric separation.
- g. 6 Recovery bays will be required for the post-anaesthetic recovery of patients

14.2.2. Medical imaging equipment locations

Table 4 Medical Imaging Equipment Locations

Modality	2017	2026/27	Location TBC
Fixed general radiography	■	■	
OPG	■	■	
Cone Beam CT	■	■	
Ultrasound	■	■	
CT	■	■	
MRI	■	■	
Mammography	■	■	
Fixed Fluoroscopy	■	■	
Mobile X-ray machines	■	■	
Mobile Image Intensifier	■	■	

14.3. Operational Description

14.3.1. Operating hours

- a. The operating hours of the Medical Imaging Service will be 24 hours a day, 7 days a week for inpatients and emergency patients.
 - i. Main Medical Imaging Department - 8:00 AM - 8:00 PM
 - ii. Satellite Emergency Imaging Department - 24 hours

14.3.2. Access, admission and discharge/transfer

- a. Patients
 - i. Inpatients may be directed to the main waiting area if appropriate. Inpatients may arrive on foot, in a wheelchair, a trolley or a hospital bed.
 - ii. Inpatients may be escorted by clinical staff from their inpatient unit.
 - iii. Inpatients may enter the Medical Imaging Department directly into the sub-waiting areas for a specific modality or directly into a procedure/scanning room dependent on their individual needs and the urgency of the procedure.
 - iv. Outpatients will enter the Medical Imaging Department via a separate reception area which may be shared with Nuclear Medicine if adjacent and be directed to the relevant modality's sub-waiting area at the appropriate time
- b. Staff
 - i. Staff will enter the Medical Imaging Department directly into a staff-only area with direct access to the staff amenities and adjacent to the office area.
- c. Visitors

- i. Visitors will be restricted to waiting areas, including sub-waiting areas, and will be prevented from entering clinically sensitive areas of the Medical Imaging Department.
 - ii. Parents or carers of paediatric patients will be able to enter clinical areas under staff supervision, if required.
- d. Admission
- i. Medical Imaging services will be provided via a centralised booking system for inpatients and outpatients, with priority given to emergency presentations when necessary.

14.4. Relative Location and Unit Configuration

14.4.1. Functional relationships

- a. The Medical Imaging Service will have the following prioritised key external functional relationships:
 - i. ED – immediate access for the movement of patients and staff.
 - ii. Outpatients and Ambulatory Care Areas - direct access for the movement of patients and staff.
 - iii. Inpatient units including Assessment Units –direct access for the transfer of patients and staff.
 - iv. Interventional and Procedural suite - ready access for the movement of patients and staff.
 - v. Intensive Care – ready access restricted circulation for the movement of patients and staff.
 - vi. Acute Cardiac Unit - ready access for the movement of patients and staff.
 - vii. Transit unit – routine access for the movement of patients and staff
- b. If possible, the Medical Imaging department and Nuclear Medicine Department will be collocated, however both departments will be able to function independently.
- c. Internally, fluoroscopy, CT and MRI are preferred to be collocated due to shared radiographer and nursing staffing flows.
- d. The Medical Imaging Department will have the following key internal relationships

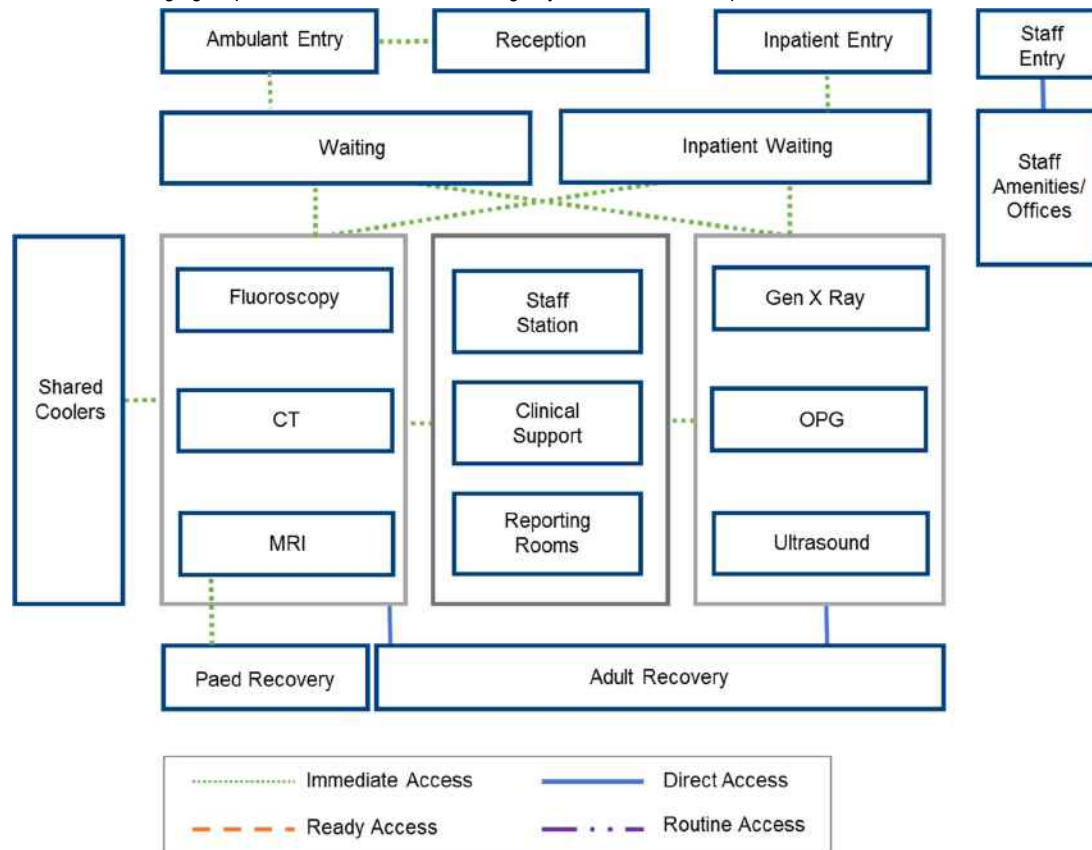


Figure 11 Medical Imaging internal relationships

14.5. Specific Design Requirements

14.5.1. General

- a. Design will incorporate appropriate shielding and specifications as per equipment requirements.
- b. The layout must provide separation of patient areas and staff areas for privacy and confidentiality reasons.
- c. Staff entry will be separate to public entry and not traverse the reception and waiting area.
- d. Separate entries will be provided for inpatients and outpatients. There will be holding bays for adult and paediatric patients from inpatient areas and the Emergency Department.
- e. Separate flows and waiting spaces will be required for adult and paediatric patients with staffing having good line of sight of all waiting areas.
- f. Paediatric sensitive furnishings and design will be incorporated in paediatric areas.
- g. To facilitate efficient and effective operation, the modalities within the Medical Imaging Department should be collocated.
- h. Room design will minimise patient manoeuvring between patient chair/trolley and imaging equipment. For example long, rectangular rooms allow staff to wheel a trolley straight up to the machine for imaging, and back out when completed with no additional turns and manoeuvres.
- i. All procedure rooms must have illuminated room in-use signs and radiation warning signs to all entry points.
- j. Mobile equipment bays must be distributed throughout the Medical Imaging Department.
- k. Resuscitation trolley bays must be located with the patient holding area unit near the staff station.
- l. The Medical Imaging Department must be designed to facilitate the maintenance and replacement of architecturally significant medical imaging equipment throughout its anticipated life without disrupting the building integrity. This should be reflected in the location and accessibility of the rooms housing this equipment, including appropriate structural reinforcement along proposed routes of equipment travel

14.5.2. Patient treatment areas

- a. Patient areas
 - i. The patient holding area must be segregated into two separate areas to allow separation and recovery of sedated patients.
 - ii. The nursing staff must be able to observe all patients easily from a central workstation with views to all patient holding bays, with sufficient work space for documentation.
 - iii. The main waiting area for all ambulant outpatients waiting for x-rays and scans must be allow direct observation from reception.
 - iv. Separate sub-waiting areas for medically ambulant patients must be located with general x-ray and fluoroscopy, CT and MRI
 - v. Ultrasound will share a sub waiting area with an adjacent modality.
 - vi. All scanning areas must have child friendly décor and audio visual equipment to provide distraction during examinations.
- b. Control rooms
 - i. Cabling must be accessible in all control rooms.
 - ii. If the design includes shared control rooms between imaging rooms, it must include solutions that control noise.
 - iii. Control rooms must be associated with their relevant modality, and must be located on the short axis of the room with direct viewing of the scan/camera room. Lead glass must be provided as per the manufacturer's shielding requirements.
- c. General X-ray and fluoroscopy rooms
 - i. Imaging rooms must be proportioned to suit the equipment to be installed, provide a safe working environment and allow the effective movement of staff and patients.

- ii. The fluoroscopy (screening room) must be in close proximity to patient toilets and change facilities.
- d. MRI and CT rooms
 - i. There is an absolute requirement with respect of the five gauss (0.5mT) exclusion zone in all three dimensions around the MRI scan room which must be observed as a manufacturer and statutory requirement. Design will include floor markings to indicate zones.
 - ii. Radiation shielding must be provided as per manufacturer's requirements.
 - iii. Floor reinforcement according to manufacturer's specifications must be provided.
 - iv. At least one MRI scanner in Medical Imaging Department must be 3 Tesla as a minimum requirement.
 - v. MRI scan rooms must include magnetic field shielding from other equipment.
 - vi. Special venting for gases with appropriate monitoring and alarms as per applicable regulations and manufacturers requirements must be provided.
 - vii. Ceiling mounted shadowless lighting must be provided in CT and MRI, with dimmable lighting provided in all examination rooms.
 - viii. One wall of each MRI magnet room must be an external wall or adjacent to appropriate circulation space for magnet installation and removal.
- e. Computer room
 - i. The computer rooms must be located adjacent to the relevant CT or MRI scanning rooms and will require adequate ventilation and air conditioning for the computer equipment.
 - ii. All satellite imaging areas must be designed in accordance with the requirements for the Medical Imaging Department set out in the Functional Design Brief.
 - iii. The design must include paediatric friendly design elements within each modality.

14.5.3. Patient and visitor amenities

- a. There should be ready access to public toilets, including accessible toilets, in proximity to the Medical Imaging Department. Public toilet facilities will be required with ready access to the ultrasound area.
- b. A child play area and parenting facilities may be included.

14.5.4. Storage

- a. Storage will be required for bulk stock and sterile stock
- b. Mobile equipment bays will be required throughout the Department.
- c. The fluoroscopy room will be as close as possible to storage for frequently used Allied Health equipment.
- d. Resuscitation trolley bays will be included in the patient holding and recovery area.

14.5.5. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A meeting / tutorial room with telehealth, videoconferencing, image/screen sharing, image viewing capacity for up to 60 staff will be required. Connectivity with other sites such as Liverpool is ideal. This area may also be multifunctional, shared with Nuclear Medicine and ED and preferably able to be split into smaller spaces.
- c. Education, teaching and staff spaces may be integrated with ED and Nuclear Imaging
- d. An additional large education room and small meeting / interview room in or near the unit will be required.
- e. Current staffing groups work physically separately within the department - i.e. Medical staff, nurses, radiographers, sonographers etc. Proposed design includes a collaborative, joint work space for all staff.
- f. Separate radiology reporting office space will be required in proximity with the treatment modalities.
- g. The Medical Imaging staff establishment may include:
 - i. Medical specialists qualified in Radiological Medicine - 12
 - ii. Junior medical staff - 12

- iii. Radiographers - 60
 - iv. Sonographers - 8
 - v. Nursing staff - TBC
 - vi. Navigator - 1
 - vii. IT staff - TBC
 - viii. Administration staff - TBC
 - ix. Environmental services staff - TBC
 - x. Patient transport assistants / orderlies - service model TBC
- h. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

14.5.6. Teaching, education and research

- a. Staff and student teaching and research will be undertaken in the Unit.
- b. Access to an education space will be required. The space may be flexible in size, and should allow teleconferencing and video conferencing facilities.
- c. The Unit will participate in clinical trials and require appropriate treatment spaces and staff facilities

14.5.7. Staff amenities

- a. A staff room, change rooms, lockers and toilets will be required

14.6. Workforce Issues

- a. Increased volume and complexity of medical imaging - adult / paediatric. Particular consideration to 24/7 staffing of mRI and Ultrasound.
- b. Specialist trained paediatric medical imaging staff, including paediatric cannulation skills

14.7. Information Technology

- a. The Medical Imaging Department will require a large server and communications room and cooling separate to the individual machine requirements
- b. Integrated, collaborative hospital-wide IT systems that are able to easily communicate between each other will increase efficiency and improve communication and diagnosis between departments.
- c. Connectivity to other sites within SWSLHD will be required to meet networked service requirements, and promote collaboration and innovation.
- d. Education in the Medical Imaging Department relies heavily on the ability to view and easily share images. Capability to easily show, share and project images from phones, computers and hospital systems should be integrated into as many workstations and education spaces as possible.

14.8. Change Management

- a. Increased volume and complexity of medical imaging - adult / paediatric.
- b. In contrast to the current centralised working model, a satellite imaging location will impact operational, workforce and maintenance/back-up plans.
- c. Current staffing groups work physically separately within the department - i.e. Nurses, radiographers, sonographers etc. Proposed design includes a collaborative, joint work space for all staff.
- d. Continuity of service planning if current location is to be refurbished

MENTAL HEALTH SERVICES

15. MENTAL HEALTH OVERALL SERVICES

15.1. Scope of Service

- a. To provide specialised mental health services at level 5 role delineation for:
 - i. Children and adolescents
 - ii. Young people
 - iii. Adults
 - iv. Older persons - new unit
- b. Catchment areas - Campbelltown, Camden, Wollondilly and Wingecarribee Local Government Areas (LGAs).

15.2. Model of Care

- a. Mental Health services at Campbelltown Hospital will be provided as part of a district-wide integrated, multidisciplinary Mental Health Service that includes inpatient, ambulatory and community based services.
- b. Services will be:
 - i. Guided by Living Well: A Strategic Plan for Mental Health in NSW 2015-2024, SWSLHD Mental Health Strategic Plan 2015-2024, and National Mental Health Service Planning Framework.
 - ii. Delivered in partnership with patients and carers, SWSLHD services, Tharawal Aboriginal Corporation and primary healthcare service providers.
 - iii. Delivered through a recovery-oriented model of care that promotes trauma informed care and practice. The core principles of trauma informed care are safety, trustworthiness, choice, collaboration and empowerment.
 - iv. Delivered through a collaborative care model with ED, Toxicology, Drug and Alcohol and Mental Health services.
- c. The units will provide a safe and therapeutic environment for recovery.
- d. Specialty units:
 - i. Psychiatric Emergency Care Centre
 - ii. Adult Services
 - Mental Health Intensive Care Unit
 - Adult Acute Separated Gender Observation Unit
 - Youth Inpatient Unit
 - iii. Child and Adolescent Inpatient Unit
 - iv. Older Persons Acute Unit
 - v. Civil Secure Rehabilitation Unit (separate funding and clinical planning)
- e. Electroconvulsive Therapy (ECT) will be performed in the procedural suite with support from Anaesthetics and Recovery services.
- f. A consultation/liaison service will be provided to the general hospital and the ED. Workspaces for the Mental Health Consultation Liaison service will be required within the shared mental health staff work areas.
- g. The assertive community team (16 hours a day, 6 days a week) sends patients to the ED and provides support in the community to facilitate discharge.
- h. The MHS provides consultation and liaison services for all Campbelltown inpatient units. Depending on the clinical assessment, transfer to a MHS inpatient unit may be required from the general hospital units. There will be patients who require special consideration in relation to their admission due to characteristics aside from their diagnosis. These may include:
 - i. Bariatric patients,
 - ii. People with an intellectual disability,

- iii. Those at risk of falls,
 - iv. Females with a history of sexual abuse,
 - v. Patients with substance abuse problems, and
 - vi. Patients requiring standard isolation (class S) for infection control requirements.
- i. For mental health units that are collocated within one building, one integrated reception and waiting area is proposed for all mental health services, in close proximity to the units. If collocation is not achieved for any unit, a separate dedicated reception and waiting area will be required for that unit.
 - j. A multipurpose area near the integrated reception will be available to support the patients' transition back to community by:
 - i. including a mental health trust and cashiers office
 - ii. facilitating the discharge process
 - iii. accommodating meetings and interviews between patients, carers, and representatives from government and non-government agencies
 - iv. facilitating service delivery by providing a space for integration of operational management work spaces
 - k. Shared staff spaces and amenities including tribunal, meeting and education and staff rooms are also proposed to be shared between adjacent units on the same floor. If collocation is not achieved for any unit, a separate dedicated staff area will be required.
 - l. The shared tribunal room should be multipurpose, easily and safely accessible by staff and consumers, and ideally collocated with the Mental Health Intensive Care Unit.
 - m. Low counters are proposed across the units to be located near staff work rooms. These small counters will be used to encourage direct patient-staff interaction and communication.
 - n. All units will require secure and discrete access to patient transfer for high acuity transfer patients who may potentially be chemically sedated.
 - o. All mental health models of care will aim to reduce the use of seclusion rooms. An alternative space for de-escalation will be provided at each unit to encourage voluntary patient retreat from high stimulus environments to a lower stimulus environment. Therefore the de-escalation space should invite feelings of space and calm, be furnished with soft furnishings and preferably include outdoor courtyard while remaining visible to staff.

15.3. Support Services

Pharmacy

- a. All medications will be stored in a dedicated medication room. Medications will be dispensed to patients from within this room. On occasions when the room is on use, nursing staff will distribute medications to patients individually.

Oxygen and Suction

- a. Oxygen and suction will only be used in medical emergencies. Oxygen and suction will be stored on the emergency trolley only.

Allied Health

- a. Therapies will be provided within the activities spaces and within consult rooms. The provision of therapy within the patient bedroom will be minimised. Other allied health professionals will visit the unit as required.

Safety and Security

- a. Safety and security of staff, patients and visitors is of the highest priority and must be considered in every aspect of planning for mental health inpatient and ambulatory care units.
- b. Reference must be made to NSW Health PD2013_050 – Work Health and Safety: Better Practice Procedures, Protecting people and Property: NSW Health Policy and Standards for Security Risk Management in NSW Agencies (June 2013), current individual Australasian Mental Health Unit Facility Guidelines and Part C – Design for Access, Mobility, OHS and Security.

- c. There are multiple facets to the design which must be addressed in order to minimise the risk of self-harm and to provide a safe and secure internal and external environment for all patients, carers/visitors and staff.
- d. All staff will be trained in aggression management strategies appropriate to their position.
- e. Security personnel will respond to critical incidents within the unit automatically on activation of duress alarms and as required on request from clinical staff.

16. ADULT INPATIENT MENTAL HEALTH SERVICES

16.1. Adult, Adult Gender Specific, and Youth Inpatient Services

16.1.1. Scope Of Service

- a. The acute adult and youth inpatient services cater for people aged 18-64 years.
- b. The adult acute inpatient services will be provided in three separate units - a general adult unit, an adult acute separated gender observation unit, and an acute youth unit. Each unit will be zoned into smaller pods.

16.1.2. Model Of Care

- a. The model of care will require an integrated multidisciplinary response to symptoms arising from an acute exacerbation of mental illness.
- b. People may present on either a voluntary or involuntary basis with symptoms associated with a broad range of mental illnesses.
- c. Patients with comorbid disorders, especially substance abuse, will require the involvement of the Drug Health Service in the treatment and ongoing care planning.
- d. Clinical assessments on admission will determine the appropriate accommodation required – admission may be made to the general adult unit, youth unit or the gender-separated observation unit.
- e. Patients accommodated in the gender separated observation unit will present with higher acuity than those in the general mixed gender unit. This unit will focus on providing services for more vulnerable patients. Gender separation will be required as high rates of sexual disinhibition are more likely in vulnerable patients due to the manifestation of their illness.
- f. The gender separated unit will provide a higher level of individual care and monitoring and increased levels of intervention for the management of significantly behaviourally disturbed patients. Lengths of stay in this unit are generally between 2 and 10 days.
- g. Lengths of stay in the general adult mental health unit are estimated at an average of 16 days.
- h. Lengths of stay in the youth mental health unit are generally between 10 - 20 days. The majority of major mental illnesses first manifest in people of this age group. This can be a frightening time for families and young people, particularly those who present with a first episode.
- i. The units will facilitate the continuity of care within a case management framework. Liaisons between inpatient and community or other services will be available from pre-admission to discharge planning to address the specific needs of the culturally and linguistically diverse communities in the MHS catchment, including Aboriginal communities.
- j. Each treatment plan is individualised and therapeutically based. The effectiveness of the treatment plan is reviewed regularly by the multidisciplinary team and is inclusive of carers and family where possible. Active participation of the patient in therapeutic group programs is also a critical element during the stabilisation process.
- k. Access to common activity areas and outdoor space is an important aspect of the delivery of mental health care. There is a will provide interactive space, while maintaining a person's right to privacy and dignity and allows for gender separation.
- l. Structured activities are considered essential in the provision of a therapeutic environment. Patients will be encouraged to participate in a range of group and individual programs offered. Nursing staff provide continuity of the treatment plan as well as the required level of care, observation and supervision. Sensitivity and understanding of the patients' needs underpin their involvement in the treatment plan.
- m. Care is provided outside the patient's bedroom. Socialisation, normalisation and participation in group and individualised programs are encouraged. Groups are conducted daily and facilitated by nursing and allied health professionals including occupational therapists, social worker, psychologists and diversional therapists.
- n. Group sessions are age and gender appropriate and may include:
 - i. Interpersonal skills development,
 - ii. Psycho-education,

- iii. Cognitive behaviour therapy and rehabilitation,
 - iv. Dialectical behaviour therapy,
 - v. Skill development to support functional capacity,
 - vi. Development of coping strategies,
 - vii. Financial and budgeting skills,
 - viii. A range of diversional therapies including art, craft and music therapy,
 - ix. Physical health care and exercise,
 - x. Relaxation techniques, and
 - xi. Vocational preparation.
- o. Meaningful activities play a key role in the treatment plan as a means to reducing agitation, providing diversions and fostering positive healthy outlets for self-expression. Therapies of this nature are provided through access to:
- i. Secured outdoor courtyards,
 - ii. Activity space,
 - iii. Exercise equipment, and
 - iv. Quiet rooms.
- p. Active, therapeutic interaction with patients assists in ongoing assessment and is preferable comparing to passive or custodial management styles.
- q. Pharmacological therapy is a routine intervention in mental health and forms the basis of symptom management. It can include the prescribing, introduction and or withdrawal of medications or illicit substances in addition to reviewing the impacts of side effects to the individual's general physical health.
- r. A clozapine clinic takes place weekly in the outpatient department. In addition to medical review, patients require routine pathology and dispensing of highly specialised medication from hospital pharmacy. These patients are generally stable and not acutely unwell.
- s. Electroconvulsive therapy is available for patients who have mood or psychotic disorders that are acutely life threatening and/or who are non-responsive to or unable to tolerate alternative physical therapies. ECT will be performed in the Perioperative Unit in partnership with anaesthetics and recovery services.
- t. Consultation and communication will occur with other service providers prior to discharge to the community to ensure that a comprehensive discharge plan is developed and communicated. Communication and consultation with the patient and carer are central to this process.
- u. Referral to appropriate community-based services or the GP will be made depending on individual need, and a comprehensive discharge summary will be provided. Patients will be provided with discharge medication and their valuables and belongings will be retrieved.

16.1.3. Operational description

16.1.3.1. Operating hours

- a. The inpatient units will operate 24 hours a day, every day of each year.

16.1.3.2. Access, admission and discharge/transfer

- a. Access to the unit may be via the ED, another inpatient unit based on assessment, or directly from community-based services through the clinical care coordinating team. Patients may also be transferred in from the Mental Health Intensive Care Unit.
- b. The acute adult inpatient units will provide care for patients generally aged 18-64. The units will have flexibility to offer accommodation and treatment programs targeting the specific phase of illness (early onset illness, 18-30; established illness with symptomatic relapse or treatment resistance, 25-64).
- c. Admissions will be accepted on a 24-hour basis, seven days a week. Patients arriving from the ED should be transferred along a discreet route from the ED to the Unit. Most patients will arrive on the units with an assessment and initial management plan developed in the ED, community or by the referring consultant. Upon arrival, all patients will be reviewed by a medical officer to confirm the initial treatment plan and required level of nursing observation.

- d. Nursing admission processes will be completed and the patient will be orientated to the unit environment. There will be an emphasis on family/carer involvement in the admission and orientation processes wherever possible.
- e. Male and female patients will be separated through the segregated zones in single patient rooms.
- f. The will provide opportunities for physical separation between different levels of behavioural disturbance is important to maximise recovery. This is particularly relevant for the gender separated unit as some patients many have difficulty controlling destructive behaviours due to impaired impulse control.
- g. A comprehensive review (including risks identified on admission) by the multidisciplinary team will occur prior to the transfer of care to the community or other facilities. A discharge plan will be developed in consultation with the patient and their primary carer and with agencies involved in providing relevant services upon discharge.
- h. The multipurpose room will support the care planning and discharge process by providing privacy, dignity and space for patients and families. The room can be used for pre-discharge discussion, discussion of the discharge plan, videoconferencing, and arranging transport and support for patients. The room will require capacity for up to 25 people with an inviting environment.
- i. A large reception space with lounge area will be available for patients to wait for transport and families following discharge.
- j. Discharge medication can be provided by retail pharmacy within the hospital.

16.1.3.3. Clinical support services

Allied health services

- a. Occupational Therapy, Clinical Psychology, Social Work, Peer Worker, Diversional Therapy, and Family and Carer Support staff will be based in the unit. Therapies will be provided within the activities spaces, the ADL kitchen, Laundry and within consult rooms. The provision of therapy within the patient bedroom will be minimised. Other allied health professionals, pharmacy and patient advocates will visit the unit as required.

16.1.3.4. Non clinical support services

Food services

- a. A dispensing system with servery will supply meals to the Mental Health inpatient units. Food access and management is an important part of recovery and transition back to home. Food selections and dispensing should be provided flexibly to empower the patient to make choices themselves. flexibilities will be required

Safety and security

- a. An appropriately designed low stimulus quiet room will be provided in each pod to manage patient and staff safety when required.

Education, training and research

- a. Staff and students will have access to hot desk space (up to 6 spaces) in a multidisciplinary clinical work room. This room will also house the electronic journey board and be used for case management discussion and teaching.

16.1.4. Relative location and unit configuration

16.1.4.1. External relationships

- a. The adult acute inpatient services should be located in close proximity to the other mental health services.
- b. The acute adult inpatient units will have the following key external functional relationships:
 - i. ED and PECC - ready access for the transfer of patients
 - ii. Secure and private entry zone – less frequent but immediate access via restricted circulation for the transfer of patients arriving by emergency or health vehicles
 - iii. MET – ready access and response time
 - iv. Perioperative and procedural suite - routine access for the transfer of patients, staff and equipment
 - v. Pharmacy - routine access for the transportation of medications and staff

- vi. Pathology - routine access for the transportation of specimens and staff
- vii. Security - ready access for the movement of security staff
- viii. Food services - routine access for the transfer of staff and food and meal trolleys
- ix. Back of house services - routine access for the movement of staff, supplies, equipment and waste items

16.1.4.2. Internal relationships

- a. Key internal functional relationships for the adult acute inpatient units are indicated as follows:

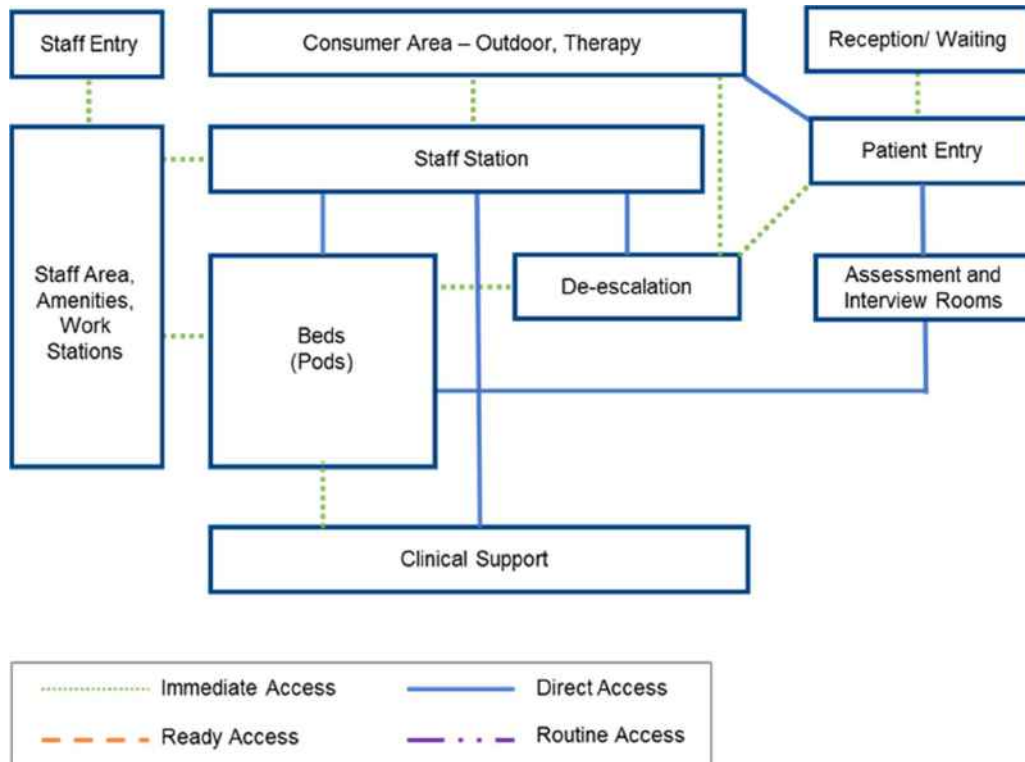


Figure 1 Mental Health Adult Inpatient internal relationships

16.1.5. Specific Design Requirements

16.1.5.1. General

- a. A person centred design model that supports therapeutic environments should be adopted where staff have access to write up space in discreet locations while still able to maintain good visual connection to patients.
- b. Each unit will have separate areas for patient lounge, recreation and dining areas as well as access to a secure outdoor area where suitable activities are undertaken. The space should have the capacity to be separated if there is a disturbance in one area. These areas must offer a relaxed, homelike, and supportive environment.
- c. Lounge and dining areas will be provided for use by patients during the day and in the evening.
- d. The dining areas will require a self-serve ADL kitchen where patients can prepare breakfast, beverages and snacks. These facilities will also be used by family members visiting the unit when not being used for therapy. The kitchen will include adjustable height benching and cupboards, cook top, microwave, wall oven, toaster, refrigerator, boiling water unit and ice machine. A shutter will be required to the kitchenette area. Rectangular dining tables for four people are preferred as they allow easy wheelchair access and don't require food service staff to reach over patients from behind.
- e. Patients will have access to television, audio equipment and a computer kiosk in the lounge areas. Seating is to be designed to accommodate individual activities and small groups including patients and visitors.

- f. Patients in the general and gender separated observation units will have access to separate courtyards, directly accessible from the lounge/dining areas, providing a secure external environment with part shaded and part open space. Consideration is to be given to the inclusion of raised garden beds and a barbeque area for each unit. Power outlets will be available for potential electric barbeque, pizza oven, and outdoor technologies.
- g. Patients may participate in a physical activity therapy program. The gym area should be visible from the lounge/dining/ activity areas of the unit so that patients can see others actively participating in the program and be motivated by their progress.
- h. All patients on the units will participate in a physical activity therapy program requiring at minimum of one session in the gym per day, seven days a week. An outdoor multipurpose sport area that can be shared by both units with separation managed through the scheduling of activities. The area should be visible from the lounge/dining/ activity areas of the unit so that patients can see others actively participating in the program and be motivated by their progress. In addition to scheduled therapy sessions, patients will be encouraged to use the area for independent exercise. The sport/gym area is to accommodate up to six patients at any time.
- i. Access to toilets will be required adjacent to the lounge, dining and gym areas so that patients do not have to return to their bedrooms.
- j. Appropriate number of private visitor rooms/spaces will be provided so family discussion and interaction can occur without disturbances from other patients or activities.
- k. A multifunctional room between reception and patient areas can be shared by adult and adolescent units for interviews (e.g., with centre link, legal representatives) and consultations. This will require a one way mirror.
- l. Each unit will also require a dedicated interview room with mirror.
- m. One sensory room should be provided in each unit.
- n. Each unit will have laundry space and facilities available for patients to use.
- o. The Adolescent Unit will require specific design considerations for the separation of patients into two groups dependant on length of stay. The two groups may share de-escalation spaces and interview rooms, however the group with shorter length of stay will require:
 - i. A dedicated soft de-escalation space
 - ii. A potential staff de-escalation space within the unit
 The group with longer length of stay will require:
 - iii. A dedicated gym and kitchen area
 - iv. A dedicated soft de-escalation space
 - v. Patient lounge/dining
- p. The adolescent unit will ideally have collocations with the adolescent unit and the paediatric CL service located in inpatient paediatrics.

16.1.5.2. Staff

- a. Staff access to and within the inpatient units will be controlled by proximity access card.
- b. Staff oversight of and visibility from the lounge and dining areas during the day will be paramount for patient safety and support.
- c. The unit clerk will have a designated work area in the staff station overlooking the entry to the unit and in close proximity to the clinical workroom.

16.1.5.3. Visitors

- a. Public access to inpatient accommodation will be via a staff station located at the entrance of the unit.
- b. Entry to patient and staff areas will be strictly controlled.
- c. Family and carer involvement in care delivery will be strongly encouraged. The lounge, dining and courtyard spaces will be sized to accommodate visiting family and carers. Family members will have access to a public toilets and coffee and tea making facilities within the unit.

16.1.5.4. Mental Health Review Tribunal/Magistrate Hearings

- a. A large multi-purpose meeting room will be utilised for Tribunal Hearings on a sessional basis. Some Hearings may be conducted using videoconferencing facilities.

16.1.6. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. Staff will work as a multidisciplinary team and may include:
 - i. Psychiatrists
 - ii. Registrars
 - iii. nursing staff
 - iv. psychologists
 - v. allied health staff
 - vi. administrative and clerical staff
 - vii. housekeeping, maintenance and catering staff
 - viii. security and other emergency response personnel
 - ix. peer workers
- c. In each unit, there will be an estimated:
 - i. 5 nursing staff (staff to patient ratio 1:4), up to 4 AINs, up to 8 students, one NUM, one CNE and at least 1 CNC;
 - ii. medical staff including 3 registers, 2 consultants, 1 JMO, and 3-4 students;
 - iii. allied health staff including 2 social workers, 1 OT, 1 DT, and 1 psychologist; and
 - iv. 6 visiting staff including exercise therapist, dietitian and physiotherapist

16.2. Mental Health Intensive Care Unit (MHICU)

16.2.1. Scope of Service

- a. The Mental Health Intensive Care (MHICU) unit will operate at a role delineation of level 5 service.
- b. The unit will have single room accommodation for patients of either gender who have additional vulnerabilities and present with:
 - i. High levels of risk for aggression including both current and previous history;
 - ii. Extremely poor impulse control;
 - iii. Risk of absconding where this would carry a significant degree of risk to the patient and/or others; and/or
 - iv. A mental condition that is unstable and the individual is unable to be admitted to a less restrictive environment for care.
- c. It will be a short stay unit (2-10 days) or until such time as the patient's condition has stabilised and the risk of harm abated.
- d. The unit will accept referrals from the communities in the SWSLHD.
- e. The unit will be designed to provide a high level of observation in a secure environment.
- f. Patients may be transferred to an appropriate inpatient unit, community care, or home with appropriate community services.

16.2.2. Model of Care

- a. The MHICU environment provides a higher level of individual care, monitoring and intervention for patients. Patients accommodated in the MHICU will present with higher acuity than those in the general acute mental health inpatient units.
- b. The MHICU will focus on providing services for a smaller clinical cohort of more vulnerable patients within the service who will require higher levels of observation.
- c. Assessment is an ongoing process and may occur over several days as information is gathered from multiple sources.

- d. Pharmacological therapy can include the prescribing, introduction and/or withdrawal of medications or illicit substances, and reviewing the impacts of side effects to the individuals' general physical health.
- e. The treatment plan is individualised and therapeutically based. The effectiveness of the treatment plan is reviewed regularly by the multidisciplinary team and is inclusive of carers and family where possible. Active participation of the patient in therapeutic group programs is also a critical element during the stabilisation process.
- f. Ongoing monitoring by the multidisciplinary team will occur throughout the continuum of care. The will provide interactive space and sensory supportive areas while maintaining a person's right to privacy, dignity and gender separation is emphasised.
- g. Meaningful activities play a key role in the treatment plan as a means to reducing agitation, providing diversions and fostering positive healthy outlets for self-expression. Therapies of this nature are provided through access to secured outdoor courtyards, activity space, exercise equipment, and quiet rooms.
- h. Allied health professionals and nursing staff play an important role in patient assessment, formulation and delivery of individualised therapeutic interventions.
- i. Sensitivity and understanding of the patients' needs underpins their involvement in the patient's engagement of the treatment plan.
- j. Regular formalised multidisciplinary assessments and reviews are undertaken to assess progress and determine readiness for transfer of care. Patients may participate in the Mental Health Review Tribunal.
- k. A de-escalation room with outdoor access will be available.

16.2.3. Operational Description

16.2.3.1. Operating hours

- a. The MHICU will operate 24 hours a day, every day of each year.

16.2.3.2. Access, admission and discharge/transfer

- a. Access to the MHICU may be planned or unplanned by transfer or direct referral via the ED.
- b. Admission is made in the context of a management plan which identifies the patient's primary diagnosis and clinical needs.
- c. Admission to the MHICU occurs during the course of an acute admission and interruption to patient's therapeutic program should be minimised.
- d. Arrival is via a discreet, secure and controlled entry way that provides protection for patients who are significantly unwell. The entry, if on ground level may also be used by emergency vehicles, will lead to an assessment and treatment zone that will have direct access to the MHICU.
- e. Discharges will occur directly from the MHICU to the patient's place of residence or through transfer to a less acute inpatient unit.

16.2.3.3. Clinical support services

Allied health services

- a. Occupational Therapy, Clinical Psychology, Social Work, Peer Worker and Family and Carer Support staff will be based in the MHICU.

16.2.3.4. Non clinical support services

Education, training and research

- a. Staff and students will have access to hot desk space (up to 6 spaces) in a multidisciplinary clinical work room. This room will also house the electronic journey board and be used for case management discussion and teaching.

16.2.4. Relative Location and Unit Configuration

16.2.4.1. External relationships

- a. The MHICU should be located in close proximity to the other mental health inpatient services.
- b. The MHICU will have the following key external functional relationships:
 - i. ED and PECC - ready access for the transfer of patients
 - ii. Secure entry zone – immediate access via restricted circulation for the transfer of patients arriving by emergency vehicles
 - iii. Adult acute– direct access for the movement of staff and patients
 - iv. Perioperative and procedural suite - easy access for the transfer of patients, staff and equipment
 - v. Pharmacy - easy access for the transportation of medications and staff
 - vi. Pathology - easy access for the transportation of specimens and staff
 - vii. Security - ready access for the movement of security staff
 - viii. Food services - easy access for the transfer of staff and food and meal trolleys
 - ix. Back of house services - easy access for the movement of staff, supplies, equipment and waste items

16.2.4.2. Internal relationships

- a. Key internal functional relationships for the MHICU are indicated as follows:

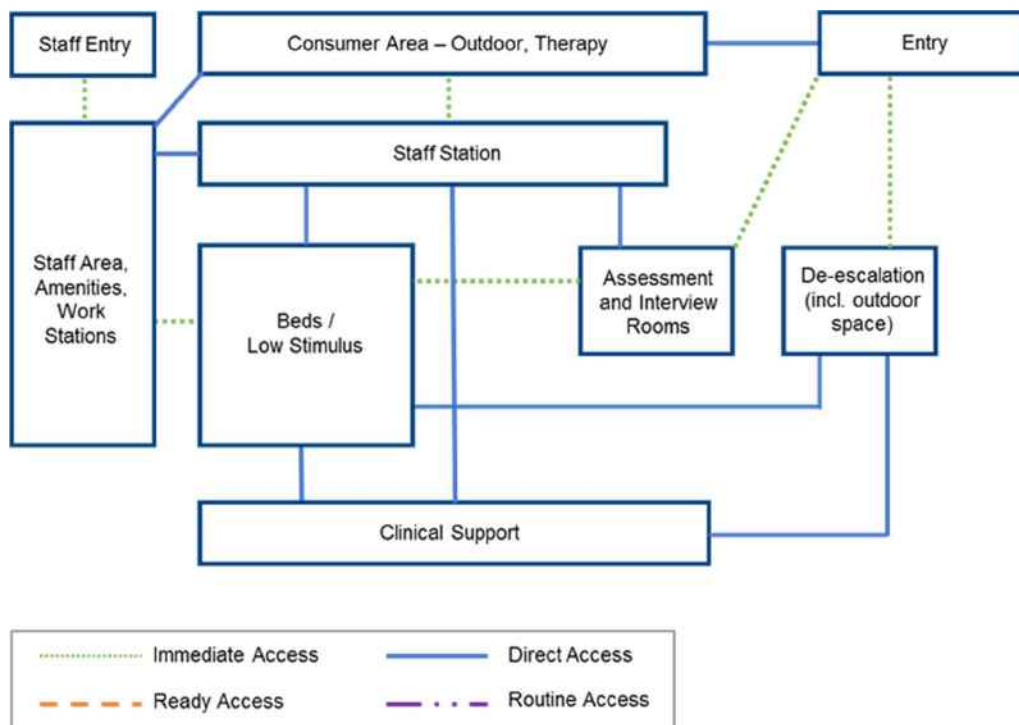


Figure 2 MHICU internal relationships

16.2.5. Specific Design Requirements

16.2.5.1. General

- a. The unit's facilities will include separate dining, lounge, activity, gymnasium and quiet areas. It is essential that the patient areas provide a balance between a closely supervised, secure area and one with a spacious, domestic appearance. To achieve this, the design of the unit will be flexible to accommodate changing populations.
- b. There are multiple facets to the design that must be addressed in order to minimise the risk of self-harm and to provide a safe and secure internal and external environment for all patients, carers/visitors and staff.

- c. Use of seclusion is regulated by the NSW Ministry of Health's 2007 Policy Directive PD 2007_54 – Seclusion Practices in Psychiatric Facilities. A de-escalation suite will be located away from the patient area but closely located to the staff station and secure entrance.
- d. A centrally located staff station will provide a discreet observation area for activity, living area and bedrooms areas.
- e. A safe and therapeutic environment will enable the patient to return to the community with appropriate support.
- f. Spaces will be available for the administration of medication and psychological and social interventions for managing symptoms and for the education of patients, family and carers about the illness and recovery.

16.2.5.2. Staff

- a. Good observation from staff is essential. Access into the MHICU will be through an airlock system. Staff, from other areas, providing emergency security assistance will be able to access the staff station without going through the patient areas.
- b. Staff access to and within the inpatient unit will be controlled by proximity access card.
- c. Staff oversight of and visibility from the lounge and dining areas during the day will be paramount for patient safety and support.
- d. The unit clerk will have a designated work area in the Staff Station oversighting the entry to the unit and in close proximity to the clinical workroom.

16.2.5.3. Visitors

- a. A visitors' lounge will be located within the main entrance to the unit as visitors will not visit within the mental health intensive care unit. A large family/consultation room is to be located adjacent to the visitors lounge with direct access to the patient area.
- b. Entry to patient and staff areas will be strictly controlled.
- c. Family and carer involvement in care delivery will be strongly encouraged. The lounge, dining and courtyard spaces will be sized to accommodate visiting family and carers.

16.2.5.4. Mental Health Review Tribunal/Magistrate Hearings

- a. A large multi-purpose meeting room will be utilised for Tribunal Hearings on a sessional basis. Some Hearings may be conducted using videoconferencing facilities.

16.2.6. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. A high staff-to-patient ration is a feature of MHICU.
- c. Staff will work as a multidisciplinary team and may include:
 - i. Psychiatrists
 - ii. Registrars
 - iii. nursing staff
 - iv. psychologists
 - v. allied health staff
 - vi. administrative and clerical staff
 - vii. housekeeping, maintenance and catering staff
 - viii. security and other emergency response personnel
 - ix. peer workers
- d. There will be an estimated:
 - i. 10 nursing staff (staff to patient ration 1:1), 1 NUM, 1 CNE, 1 CNC, and up to 4 students;
 - ii. medical staff including 1 consultant, 1 registrar, 1 JMO, and 2 medical students;

- iii. allied health staff including 1 OT, 1 social worker, and 1 DT; and
- iv. 6-10 visiting staff.

16.3. Technology

- a. Across the acute adult inpatient services, a range of information technology will be made available including Wi-Fi, gaming consoles, audio-visual, speakers, video conferencing, electronic health record, and point of care devices, patient call systems, lighting control systems, and medication dispensing systems. Gaming consoles will also be made available to the general adult and youth inpatient units.
- b. A technology hub provides adequate access and space for patients and staff in each unit.

16.4. Change Management

- a. The following change management issues are identified through consultations across the acute adult inpatient services:
 - i. Engagement of staff, patients, and carers in the development of the models of care; identify champions to lead change management;
 - ii. Upskilling and training of staff in the new models of care, e.g. the MHICU, gender separated;
 - iii. Recruitment of staff for specific units ;
 - iv. Education and training courses in trauma informed care and family models of care;
 - v. Executive sponsorship and leadership to empower staff and provide ongoing communication;
 - vi. Clinical redesign methodology training;
 - vii. Patient flow and development of stronger relationships with other departments such as the ED, imaging, and pharmacy.

17. CHILD AND ADOLESCENT MENTAL HEALTH UNIT

17.1. Scope of Service

- a. The Child and Adolescent Mental Health Service (CAMHS) is a unit comprising of two discrete inpatient services (described as pods).
- b. One pod is to be an adolescent crisis short stay service (as described in the draft SWSLHD Adolescent Crisis Short Stay MHU Model of Care November 2017 and herewith referred to as ACSSP) and the other is to be an acute adolescent pod (as described in the draft SWSLHD Acute Adolescent MHU MOC November 2017 and herewith referred to as AAP).
- c. All CAMHS beds will provide care for adolescents 12-17 years of age. Children under the age of 12 requiring inpatient mental health care will be admitted to the paediatric unit with mental health in-reach provided.
- d. Family involvement is considered integral to the provision of care to young people. This includes participation of family and carers from admission to care planning and discharge planning, as well as including participation in whole of family based counselling, psycho-education and parenting programs. Three beds in each pod will have the capacity to accommodate a parent or carer to reside with the patient during admission or when necessary.
- e. In addition each pod will have a larger room that is designed to facilitate wheelchair access and movement.
- f. CAMHS has a state-wide function for NSW and accepts adolescents from outside the state when required.
- g. Patients under 17 may be admitted to the Youth Unit/PECC for reasons of safety or if it is clinically, developmentally appropriate. In such cases staff from the CAMHS will be available to consult in their care.
- h. The Child and Adolescent Assertive Outreach Team and the Child and Adolescent Mental Health Consultation Liaison team will provide services at Campbelltown Hospital. The establishment of these two teams is critical to ensure holistic care and safeguard continuity of care for all children and adolescents presenting to Campbelltown Hospital with mental health problems. Tele-psychiatry is an integral part of these services.

17.2. Model of Care

- a. The CAMHS inpatient unit will provide short to medium term inpatient care, inclusive of assessment and treatment services for adolescents who experience severe or brief episodes of mental illness and cannot be adequately treated in a less restrictive environment. The proposed length of stay for the ACSSP is no more than 7 days and the proposed average length of stay for the AAP is about 21 days.
- b. The unit will require the capacity to manage and contain high acuity admissions, as well as providing a range of therapeutic programmes and interventions.
- c. Treatment will include individual, family and group based interventions that focus on reducing symptom's, increasing patient safety, and improving emotional regulation, coping skills, reality-testing, distress tolerance, social skills, and family functioning. The aim of the inpatient stay is to initiate these treatments and support the patient to then generalise these new behaviours at home and in school on discharge.
- d. The environment will be required to balance the adolescent developmental needs for privacy, activity, creativity and best practice least restrictive approach with the prerequisite to observe and provide safe containment for adolescents with complex presentations inclusive of psychosis, elevated moods along with self-harm, suicidal and aggressive impulses. These requirements rest on the premise that adolescents will less likely to act out behaviourally, more likely to engage in treatment and to begin recovery if the immediate environment is not overtly restrictive, custodial or institutional.
- e. Mental health care for adolescents must be:
 - i. designed and resourced to protect them;
 - ii. provided using the least restrictive alternatives, considering their safety and that of others;
 - iii. closest to usual supports wherever possible;
 - iv. adolescent-centred;
 - v. family-friendly;
 - vi. culturally appropriate;
 - vii. sensitive to emotional, cognitive and social developmental stages;

- viii. attuned to the impact of therapeutic and other interpersonal relationships;
 - ix. informed by available evidence;
 - x. receptive to the views of patients and consumers including children, adolescents, families/carers and other referrers;
 - xi. considered in the wider social and environmental context; and
 - xii. mindful of the past, grounded in the present and directed towards the future.
- f. CAMHS teams should have the capacity to address comorbidities and use interventions informed by available evidence. CAMHS teams provide specialist mental health interventions for adolescents with mental health problems and their families.
 - g. Interventions may include separate or a combination/sequence of individual, family, group, pharmacological, and systems interventions, separately.
 - h. Both pods will have a number of rooms in which a parent/ carer can stay on the unit with the admitted adolescent where clinically indicated. This is to ensure support for the adolescent in their recovery, help with assessment and understanding of parent child interactions and equip parents/ carers with strategies they can continue to use on discharge from the unit.
 - i. Each pod will have at least one room that allows access and movement for a patient in a wheel chair
 - j. Adolescents at times may be transferred from one pod to the other based on clinical need.
 - k. This unit, will be supported by the CAAOT located in the ambulatory part of Campbelltown hospital. CAAOT will provide in-reach to adolescents admitted to either pod as required in order to facilitate prompt discharge back to the community. This team provides short term (up to four sessions) follow-up for adolescents discharged from ACSSP and those adolescents referred to it by the Community Mental Health Emergency Team (CoMHET). This team will have the capability to undertake outreach into the community to follow-up those adolescents who may not be able to make it to the ambulatory clinic for follow-ups. The CAAOT ensures continuity of care for children and adolescents admitted to Campbelltown Hospital for mental health concerns.
 - l. The infant/Child and Adolescent Consultation Liaison mental health service (iCAMHS CL service) is to be located in the paediatric section of the hospital. This team will provide mental health assessment and intervention to all children and adolescents admitted to the paediatric units, or elsewhere within Campbelltown Hospital. The service also provides care to children under the age of 12 years admitted to the paediatric unit with mental health concerns, and to the Women's Health Inpatient Unit for ante or pre-natal women with mental health or attachment concerns. In addition, they will be available to support the paediatric and mental health teams in the ED for children and adolescents presenting with mental health problems. The iCAMHS CL service is able to oversee the provision of appropriate care to families, children and adolescents attending Campbelltown Hospital with any mental health difficulties, developmental disabilities and behavioural difficulties regardless of the original reason for their presentation.
 - m. A day program may be a component of the adolescent mental health service to provide specialist programs and outpatient services for young people who need treatment but who do not require overnight admission. However, the day program will not be collocated within this inpatient unit. It is better located in the ambulatory section of the hospital. In the current configuration, the establishment of the day program is not critical to the success of the model of care.

17.3. Operational Description

17.3.1. Operating Hours

The inpatient unit (both pods) is to operate 24 hours a day, every day of each year.

Each pod will have their own daily routine and structure for inpatients which includes wake up at about 7AM, breakfast by 8AM, group programs from 9AM till lunchtime, groups continue from 12.30PM to 4PM and free time thereafter available for family visits. Interspersed are assessments, individual sessions, reviews, family sessions and others meetings as needed.

17.3.2. Access, Admission and Discharge/Transfer

- a. Patients can be referred from one of the following:
 - i. ED
 - ii. Paediatric units either directly or via the C&A CL service

- iii. PECCs and adult mental health units
 - iv. CAAOT
 - v. Community mental health teams either directly or via the CAAOT
 - vi. Other hospitals.
- b. Direct admission from the ED will require medical clearance of any presenting medical problems (e.g. self-poisoning).
 - c. Direct planned admissions to the unit will require nurse unit manager or nurse-in-charge involvement together with the clinical director or delegate in the early stages to assist in determining bed availability and the suitability (on clinical grounds) of that presentation for an admission to the unit.
 - d. A known (planned) admission from the community or transfer from another hospital may be admitted directly to the unit.
 - e. Out-of-hours admissions will be done through the health professional in charge in consultation with the child and adolescent psychiatrist on call with reference to the nurse manager or clinical director if necessary.
 - f. In some instances, after careful consideration, the unit will also admit adolescents from the paediatric unit with developmental disability and mental health/severe behavioural disorders who, owing to their level of aggression, cannot be appropriately managed in the general paediatric unit. These will most likely be referred by the C&A CL service.
 - g. Patients arriving from the ED will be transferred along a discreet route to the appropriate entrance for the unit.
 - h. There will be one family assessment conducted at admission and weekly family meetings with the multidisciplinary team until discharge.
 - i. Family members are encouraged to spend time with the adolescent on the unit. There is to be provision for family members to be admitted with the adolescent where indicated, particularly in admissions that were not in the context of family conflict.
 - j. Clinical multidisciplinary meetings occur twice weekly with all disciplines attending to adjust care plans to reflect the needs and progress of patients.
 - k. It is essential for adolescent inpatients to access or maintain educational pathways on the unit. It is imperative that the unit has a designated learning centre space that can cater for two classrooms in the acute adolescent pod.
 - l. All adolescents on discharge from inpatient care will be followed up by one of the following services, the nearest iCAMHS community service, CAAOT, or CoMHET.
 - m. A comprehensive review by the multidisciplinary team and legal entity occurs prior to returning the patient to community life with appropriate supports.

17.3.3. Clinical Support Services

17.3.3.1. Pharmacy Services

- a. Ideally the adolescent will not be required to enter the medication room in order for medications to be dispensed, this reduces the risk that a young person may take or attempt to take and ingest medications from the room.

17.3.3.2. Allied Health Services

- a. Peer worker(s), clinical psychologist(s), social worker(s), occupational therapist(s), art therapist(s), diversional therapist, teaching staff and family and carer support staff will be based in the unit. Therapies will be provided within the activities spaces, the kitchen, laundry, and consult rooms. The provision therapy in the patient bedroom will be minimised. Other allied health professionals such as speech pathologist, pharmacist and patient advocates will visit the unit as required.
- b. The kitchen space needs to be able to incorporate small group activities and food preparation.

17.3.4. Non Clinical Support Services

17.3.4.1. Food Services

- a. Food access and management is an important part of recovery and transition back to home. Food selections and dispensing should be provided flexibly to empower the patient to make choices themselves.

17.4. Relative Location and Unit Configuration

17.4.1. External Relationships

- a. The unit will be located within close proximity to other mental health units as staff respond to each units' duress situations.
- b. The unit also has to be in close proximity to the hospital to facilitate prompt medical management including MET calls and paediatric reviews.
- c. The unit will have the following key external functional relationships in a prioritised order:
 - i. Mental Health Inpatient Units (particularly Acute Youth)
 - ii. ED - ready access for the transfer of patients
 - iii. Paediatric inpatient services and paediatric ambulatory care services – ready access for the transfer of patients and consultations, and Paediatric CL Service
 - iv. Private and secure entry zone – direct access via restricted circulation for the transfer of patients from outside the hospital
 - v. The child and adolescent assertive out-reach team especially as they provide support to the adolescent crisis pod.
 - vi. Pharmacy - routine access for the transportation of medications and staff
 - vii. Pathology - routine access for the transportation of specimens and staff
 - viii. Food services - routine access for the transfer of staff and food and meal trolleys
 - ix. Security - ready access for the movement of security staff
 - x. Perioperative and interventional suite - routine access for the transfer of patients, staff and equipment, including ECT
 - xi. Back of house services - routine access for the movement of staff, supplies, equipment and waste items

17.4.2. Internal Relationships

- a. Key internal functional relationships for the CAHMS are indicated as follows:

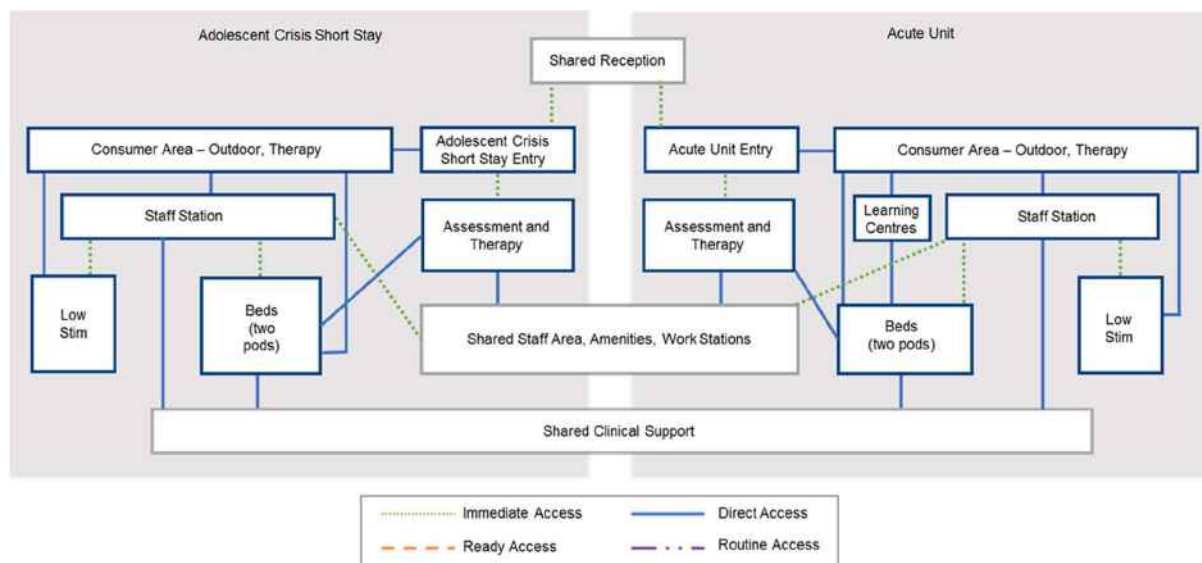


Figure 3 CAMHS internal relationships

17.5. Specific Design Requirements

- a. Family friendly, culturally appropriate space is a priority, with space allowing for privacy in the waiting area.
- b. Patients will have access to a common area that is multifunctional and not a thoroughfare.

- c. Learning centres – the AAP will need two rooms with access to at least five computers each in addition to appropriate space for storing teaching equipment. There will be enough space in each room for at least five patients, a teacher, a learning support officer and two nursing staff to be present during school times. The teachers will need access to office space alongside the rest of the multidisciplinary team; and all the computer ports should be able to access the DET network. Patients can also access their school website via the internet. Ideally this will be located near the front of the unit to facilitate access by Paediatric Inpatient Unit.
- d. Space for group sessions comprising up to 20 people that are age and gender appropriate. These sessions may include:
 - i. Interpersonal skills development;
 - ii. Psycho-education for both adolescents and their parents/carers either together or separately;
 - iii. Cognitive behaviour therapy;
 - iv. Dialectical behaviour therapy;
 - v. A range of diversional therapies including art and craft and music therapy;
 - vi. Physical health care and exercise;
 - vii. Relaxation techniques; and
 - viii. Education
- e. A sensory room in each pod will be provided, equipped with:
 - i. Natural lighting/window with blinds,
 - ii. Dimmer switches on lights,
 - iii. Extra power points,
 - iv. Adequate ventilation,
 - v. Locked cupboards,
 - vi. Shelving,
 - vii. Carpet,
 - viii. Mural on two walls,
 - ix. Furniture e.g. beanbags, glider rocker, small table,
 - x. Range of sensory equipment,
 - xi. Fidget toys,
 - xii. Digital audio visual wireless equipment, and
 - xiii. Art and craft supplies.
- f. A de-escalation space will be available when needed. The space will be low stimulus, sound proof, safe, with an ensuite and access to outdoor space, located away from the bedrooms and common areas.
- g. Other specific design requirements include:
 - i. An interactive kitchen and equipment that supports patients' integration into the workforce, communities, and home environment;
 - ii. A de-escalation space that is low stimulus, sound proof, safe, with an ensuite and access to outdoor space, located away from the bedrooms and common areas;
 - iii. Opportunities for patients to personalise their bedrooms and decorate areas in the general space;
 - iv. Outdoor options for a BBQ or pizza oven;
 - v. Vegetable garden/garden area for skills development and relaxation;
 - vi. Activity room that contains wet and dry areas for various group and individual activities;
 - vii. Storage rooms for personal belongings;
 - viii. Laundry space and facilities for washing and drying;
 - ix. A number of rooms in each pod allow overnight accommodations for families;
 - x. A two-way mirror in one of the therapy rooms to provide capacity for teaching, supervision, and observation.
- h. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

17.6. Workforce Issues

- a. Provision of the full range of interventions requires multidisciplinary expertise from a range of professions including:
 - i. Psychiatrists and psychiatry basic and advanced registrars;
 - ii. Clinical psychologists;
 - iii. nurses from relevant subspecialties;
 - iv. allied health professionals;
 - v. Pharmacists;
 - vi. Peer workers;
 - vii. community/cultural mental health workers;
 - viii. educational staff;
 - ix. administrative staff;
 - x. trainees in these disciplines; and
 - xi. access to expertise in, dietetics, physiotherapy, speech therapy, health promotion, drug and alcohol, paediatrics, general practice and other related specialties.
- b. In groups, day programs and inpatient services, supervision requirements for adolescents are also high. As a result, the staff-to-patient ratio for CAMHS is higher than that of the general mental health services. Nursing staff are permanently located in the unit with around 7 staff per shift, with a ratio of 1 nurse to 2.5 patients on average.
- c. In the AAP, there will be two clinical psychologists, two social workers, one diversional therapist, one occupational therapist, and one neuropsychologist. There will also be four students, two educational staff, two registrars and one consultant.
- d. In the ACSSP, there will be one clinical psychologist, two social workers, and one diversional therapist. There will also be two students, two educational staff, two registrars, and one consultant.
- e. Other staff will be shared between the two pods, including an exercise physiologist, a family therapist, and an art therapist.

17.7. Technology

- a. Information technology will include Wi-Fi, VR teleconferencing especially for tele-psychiatry, audio-visual, games, E-referrals, with adequate access and space.
- b. There will be IT support for the learning centre, including the department education IT.
- c. There will be capacity for observation, viewing and listening in the consultation room.

17.8. Change Management

- a. The following change management issues are identified for the CAMHS:
 - i. Patient flow and the relationship with other departments such as ED and ambulatory care;
 - ii. Training of staff in the new models of care, this is not restricted to mental health staff;
 - iii. Training of staff in the area of family models;
 - iv. Roll out of model care in phases;
 - v. Appointing senior staff to assist in the roll out;
 - vi. Formal identification of project champions to lead change management;
 - vii. Cross-communication and sharing of ideas/models between inpatient and community care.

18. Older Persons Mental Health Unit

18.1. Scope of Service

- a. An Older Persons Mental Health (OPMH) unit at Campbelltown Hospital, comprising 2 pods, will be a component of the overall development of inpatient services across the campus.
- b. The acute inpatient unit adopts a person centred, recovery-focused biopsychosocial philosophy of care.
- c. Functions of specialist mental health services for older people include:
 - i. specialist clinical assessment and treatment;
 - ii. joint care planning and care coordination with general practitioners, carers, patients and other healthcare providers;
 - iii. specialist clinical advice to other key services for older people such as aged care services;
 - iv. programs and collaborative activities to support prevention, early intervention and recovery for older people with mental health issues.

18.2. Model of Care

- a. The OPMH inpatient unit has a target population that comprises older people with acute, severe clinical symptoms of mental illness that have the potential for prolonged dysfunction or risk to self or others. The Unit will focus on patients with non-dementia related mental health problems and must be able to manage both voluntary and involuntary patients under the Mental Health Act 2007. Further detail is provided in *Specialist Mental Health Services for Older People: Acute Inpatient Unit, Model of Care Project Report (2012)*.
- b. Patients accessing this unit will be generally older than 65 years. However, there may be a cohort of younger patients who will be admitted to this unit if they meet clinical and/or functional indicators. The unit will accept patients aged 50 years and over if they identify as Aboriginal.
- c. The Unit will have a consultative role in regard to severe Behavioural and Psychological Symptoms of Dementia (BPSD), which would be complementary to the role of aged care services for older patients with the broader range of BPSD including the Geriatric Behavioural inpatient unit at Campbelltown Hospital.
- d. The OPMH Unit will provide tertiary Consultation-Liaison (CL) support as part of the broader Mental Health CL service.
- e. Referrals will be generated by way of the Emergency Department; Community Mental Health Teams (both Acute Adult and OPMH teams), General Practitioners, general hospital inpatient units and acute mental health units.
- f. The Unit will provide appropriate facilities for the reception, multidisciplinary assessment, admission, diagnosis and treatment of older people presenting with known or suspected psychiatric conditions along with assessment of physical health and psychosocial issues.
- g. Multidisciplinary assessment will be undertaken and a plan for treatment, coordination, monitoring and review established with potential for assessment by other medical specialists including a geriatrician.
- h. All patients arriving on the Unit will be reviewed by a medical officer to confirm the initial treatment plan and with a nurse the required level of nursing observation. If an initial assessment and treatment plan has not been developed, it will be done at this point. Nursing admission processes will be completed, and the patient orientated to the unit environment. Discharge planning among the multidisciplinary team will commence on the day of admission. There will be an emphasis on family/carer involvement in the admission, orientation and discharge processes wherever possible. Strategies to minimise the risks of falls and pressure areas will be emphasised.
- i. Physical illness often precipitates psychiatric admission and complicates treatment in older patients, so a clear process will be in place for screening potential admissions to exclude physical causes for their presentation and unstable medical conditions which could not be managed on the Unit. Once admitted patients will be able to access other medical and surgical care as required.
- j. Available treatments will include individual and group psychotherapy, behavioural interventions, psychoeducation, and pharmacotherapy, ECT, family and carer education and therapy as well as other non-pharmacological interventions appropriate for the range of common conditions managed within the unit. The treatment plan will be therapeutically

based, and patients would participate in individual and age appropriate group based programs as much as they are able with access to secured outdoor courtyards; activity space; exercise equipment; library/computer space and quiet rooms.

- k. The Unit will not utilise seclusion rooms and will minimise all forms of restraint and seclusion. Any patient deemed to be too acutely disturbed to be managed in the Unit on assessment will be transferred to a higher acuity Mental Health setting.
- l. The treatment plan for individual patients will be monitored and refined while in the Unit. Clinician reviews will occur on a one-to-one basis as well as in larger groups, with the inclusion of family / carers and other health professionals. Allied Health staff will engage patients in selected therapy programs according to their individually assessed need. The range of therapies provided will include appropriate psycho education and/or skills training with access to appropriate psychotherapy if indicated such as cognitive behavioural therapy (CBT), or grief therapy as appropriate.
- m. A comprehensive review including identified risks on admission by the multidisciplinary team will occur prior to transfer of care to the community or other facility. A discharge plan will be developed in consultation with the patient and their primary carer and with agencies involved in providing relevant services upon discharge to ensure a comprehensive discharge plan is developed and communicated.

18.3. Operational Description

18.3.1. Operating Hours

- a. The inpatient unit will operate 24 hours a day, every day of each year.

18.3.2. Access, Admission and Discharge/Transfer

- a. Admissions will be accepted on a 24-hour basis, seven days a week. Patients arriving from the ED should be transferred along a discreet route from the ED to the unit.
- b. Most patients will arrive on the unit with an assessment and initial management plan developed in the ED or by the referring consultant. Prearranged planned admissions, where it is known a bed is available, will arrive through the main reception during business hours. All patients arriving on the unit will be reviewed by a nurse and medical officer to confirm the initial treatment plan and required level of nursing observation. Nursing admission processes will be completed, and the patient orientated to the unit environment and families given the appropriate unit information.
- c. Older patients should have tailored individual treatment plans developed in collaboration with the family and carer. The patient should not be excluded from any treatment option based on age or dependency.
- d. One bedroom on each pod will be designed with increased observability directly from the staff station. IT solutions may assist with maintaining patient privacy and dignity.
- e. Meaningful activity plays a key role in the treatment plan. Therapies of this nature are provided through access to:
 - i. Secured outdoor courtyards;
 - ii. Activity space responsive to restricted access;
 - iii. Exercise equipment;
 - iv. Quiet rooms;
 - v. ADL kitchenette and laundry.
- f. The design will provide opportunities for physical separation between different levels of behavioural disturbance is important to maximise recovery.
- g. Patients will have access to television, audio equipment and a computer kiosk in the lounge area. Seating is to be designed to accommodate individual activities and small groups including patients and visitors.
- h. Interactive electronic information boards allowing patients and carer access to information including Unit policies, general mental health advice and other Unit information will be provided at strategic points on the Unit.
- i. For older patients the unit environment should be conducive to an eventual return home or good integration in residential aged care. Wearing one's own clothes, using kitchen and laundry facilities and maintaining as much independence in ADLs are all important for older patients who will be discharged home.
- j. Spaces will be available with videoconferencing equipment and other IT solutions for up to 15 people to attend multidisciplinary, mental health tribunal, teaching and pre-discharge meetings.

18.3.3. Clinical Support Services

18.3.3.1. Pharmacy Services

- a. All medications will be stored in a dedicated medication room. Medications will be dispensed to patients via a mobile trolley individually. Webster packs will be stored in the mobile trolleys, medication room and potentially in locked drawers in the patient rooms. Space allocation for trolley storage will be provided.
- b. Flexible medication dispensing systems will be incorporated to allow patients greater responsibility/autonomy as part of the discharge planning process.
- c. A pneumatic tube system will be used throughout the hospital and will be accommodated near the staff station.

18.3.3.2. Oxygen and suction

- a. 2 to 3 rooms will include piped oxygen and suction.

18.3.3.3. Allied Health and Support Services

- a. Occupational therapists, diversional therapists, clinical psychologists, social workers, peer workers and family/carer support staff will be based in the unit. Other allied health professionals, pharmacy and patient advocates will visit the unit as required.

18.3.4. Non-Clinical Support Services

18.3.4.1. Food Services

- a. Food will be delivered using the standard hospital system
- b. Lounge and dining areas will be provided for use by patients during the day and in the evening. An access toilet with a handwashing bay will be required adjacent to the lounge and dining area so that patients do not have to return to their bedroom during the day.
- c. The unit will include an ADL kitchenette for assessments and a beverage bay for patients and visitors can prepare beverages and snacks.
- d. Access to the ADL kitchenette will allow for separate and private assessment.
- e. The kitchenette will include adjustable height benching and cupboards, an induction cook top, microwave, wall oven, toaster, refrigerator, boiling water unit and ice machine. A shutter will be required to restrict access to the kitchenette area when not in use or being used for assessment.
- f. Rectangular dining tables for four people are preferred as they allow easy wheelchair access and don't require Food Service staff to reach over patients from behind.
- g. The outdoor area will include a power outlet for an electric barbeque.

18.3.4.2. Safety and Security

- a. An appropriately designed low stimulus room will be provided in each pod to manage patient and staff safety when required.
- b. All staff will be trained in age-appropriate aggression management strategies appropriate to their position.
- c. The unit will follow hospital wide evacuation responses and will ideally be located on the ground floor to aid mobility for fire evacuations.

18.3.4.3. Laundry Services

- a. Hospital wide linen services will be used within the unit. However, an ADL laundry will be provided to be used for patient assessment and therapy. The ADL laundry will be available to be used by patients, visitors and carers when not in use for assessment.

18.4. Relative Location, Functional Relationships and Unit Configuration

- a. The unit will be comprised of two pods zoned for varying acuity.

18.4.2. External Relationships

- a. The unit will have the following key functional external relationships and adjacencies in a prioritised order:
- i. Geriatric inpatient services – ready access for the transfer of patients
 - ii. ED and PECC - ready access for the transfer of patients
 - iii. Perioperative and interventional suite - routine access for the transfer of patients, staff and equipment, including ECT
 - iv. Secure entry zone – direct access via restricted circulation for the transfer of patients arriving by emergency vehicles
 - v. Adult acute mental health inpatient units – direct access for the movement of patients and staff
 - vi. Pharmacy - routine access for the transportation of medications and staff
 - vii. Pathology - routine access for the transportation of specimens and staff
 - viii. Food services - routine access for the transfer of staff and food and meal trolleys
 - ix. Security - ready access for the movement of security staff
 - x. Rehabilitation services – ready access for the transfer of patients
 - xi. Back of house services - routine access for the movement of staff, supplies, equipment and waste items

18.4.3. Internal Relationships

- a. Key internal functional relationships have been indicated as follows:

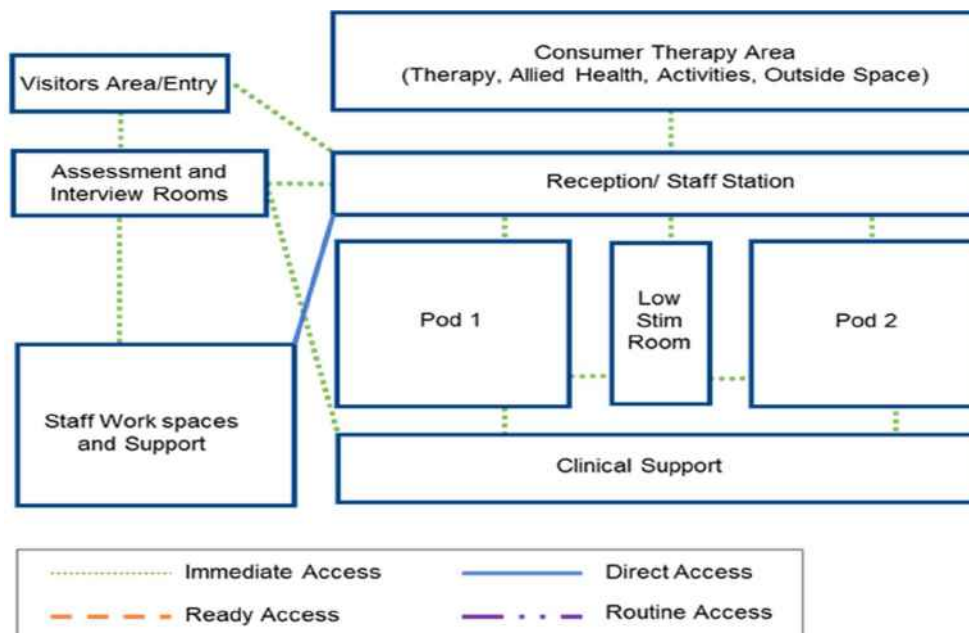


Figure 4 Older Persons MH internal relationships

18.5. Specific Design Requirements

18.5.1. General

- a. At least two bedrooms should be of a size sufficient to allow a family member/carer to stay with the person if required. These rooms with appropriate design could serve multiple purposes– to accommodate patient with disability; needing hoists, etc.
- b. Provision for at least one room suitable for bariatric patients.

- c. Access to mobile hoist will be required on occasions and will be arranged with the centralised equipment store.
- d. The multifunctional uses of quiet/family rooms should include space that will allow for spiritual and religious practice by patients.
- e. A family meeting room will be provided with appropriate monitoring and access for families with children.
- f. The outdoor area should have the capability of being divided to allow for continued use with patient groups with different levels of agitation and containment needs.
- g. The outdoor area should facilitate the feeling of a journey for the patient, for example by incorporating a walking track.
- h. Clean utility and medicine rooms should be separate
- i. A person-centred design model that supports therapeutic environments should be adopted where staff have unobtrusive locations to maintain good visual contact with patients but allow administrative tasks to be done without being interrupted.
- j. Minimum of 4 interview rooms to provide adequate capacity for assessment by various providers close to the entry of the unit.
- k. The unit should have access to dedicated parking space for psychiatrists and other key staff to maximise efficiency

18.5.2. Staff

- a. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan
- b. Staff access to and within the inpatient unit will be controlled by proximity access card.
- c. Staff oversight of and visibility from the lounge and dining areas during the day will be necessary for patient safety and support.
- d. Staff and students will require access to work spaces in a multidisciplinary clinical work room. This room will also house the electronic journey board and be used for case management discussion and teaching.
- e. Staff work in a multidisciplinary team approach as either a visiting or permanent capacity, and includes:
 - i. geriatricians
 - ii. psychiatrists
 - iii. nursing and allied health staff
 - iv. pharmacy staff
 - v. administrative staff
 - vi. housekeeping, maintenance and catering staff
 - vii. peer workers
 - viii. Community Mental Health team members
- f. For a fully commissioned unit, the following would be needed to be accommodated at any one time:
 - i. 1 NUM, 1 Administrator, 3 Registrars, JMO, 5 nurses, CNC, CNE, 1OT, 1 social worker, 2 Consultants, 1 diversional therapist, 2 cleaners, and 5 visitors (including official visitors and consultations from other hospital staff)
- g. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

18.5.3. Visitors

- a. Public access to inpatient accommodation will be via a Staff Station located at the entrance of the unit.
- b. Entry to patient and staff areas will be strictly controlled.
- c. Family and carer involvement in care delivery will be strongly encouraged. The lounge, dining and courtyard spaces will be sized to accommodate visiting family and carers. Family members will have access to a public toilets and coffee and tea making facilities within the unit.

- d. Visiting hours are to be as flexible as possible to accommodate the varying needs of older patients, to enable better access for family and carers, and to encourage appropriate involvement of families in care. Parking for older visitors should be affordable and located close to acute inpatient units. A drop-off zone would ideally be located close to the unit.

18.5.4. Mental Health Review Tribunal/Magistrate Hearings

- a. A large multi-purpose meeting room will be utilised for Tribunal Hearings on a sessional basis. Some Hearings may be conducted using videoconferencing facilities.

18.6. Technology

- a. Desktop computers linked to intranet with web-cams and headphones to allow video-conferencing.
- b. One to three desktops with limited and monitored access to the internet for patients.
- c. Intranet wireless access for wireless devices for therapy and training.
- d. Large meeting room with smart television/monitor with interactive (touch screen) capability and linked to intranet, and with a conference-quality web-cam for unit rounds teaching, video-conferencing.
- e. Touch screen display (POS or retail style device) in patient areas showing patient information and allowing patient feedback and unit news.
- f. USB charging ports in staff and patients' areas.

18.7. Change Management

- a. Significant increase in workforce with recruitment challenges, may need staged bed to start operating in line with staffing;
- b. Review of patient flow to determine functional relationship with Braeside, aged care sector and community teams.
- c. Explicit operational arrangements with Campbelltown geriatric medicine for reciprocal support for the unit and the geriatric behavioural unit.

19. CIVIL SECURE MENTAL HEALTH REHABILITATION UNIT

19.1. Scope of Service

- a. To provide a 20 bed state-wide civil secure mental health inpatient unit that provides rehabilitation in a therapeutic and safe environment. 4 beds of the 20 bed unit will be allocated to a step down area - these will be able to be flexed up and down with the rest of the inpatient beds as required, and will be attached to self-contained living areas and outdoor space.
- b. The Civil Secure Mental Health Rehabilitation Unit (CCSMHRU) will provide comprehensive care for both residents who live in South Western Sydney Local Health District (SWSLHD) and residents who live outside the District. The CCSMHRU purpose is to provide safe high quality and safe extended care management of appropriate involuntary patients with enduring mental illness planning to support safe transition to more independent living. Consumers have complex presentations including issues with personality illness, drug and alcohol illnesses, complex trauma and clinically significant deficits in psychosocial functioning. Associated issues of behaviour and risk which indicate a need for rehabilitation include severely disorganised behaviour leading to difficulty in managing activities of daily living, impaired impulse control, vulnerability, ongoing risk of aggression, and significant risk of self-harm.
- c. The Unit will admit the following patients:
 - i. aged between 18- 64 years old
 - ii. Male / Female (approximately 25% of the population will be female)
 - iii. Severe mental illness resulting in significant disability
 - iv. Requiring comprehensive psychiatric intervention and rehabilitation lasting from one - two years
 - v. Incomplete recovery from less restrictive attempts at rehabilitation
 - vi. Able to be maintained in a medium-secure level of care (as available at Campbelltown)
 - vii. Patients with mental health problems who require and are likely to benefit from therapeutic interventions in the Unit.
- d. The CCSMHRU will not admit the following consumers:
 - i. patients who are initially assessed as having a chronic organic brain syndrome and present with acute behavioural or accommodation issues
 - ii. patients with two or more previous CCSMHRU admissions inside six months should only be considered in the context of an ongoing management strategy.
- e. The key functions of the CCSMHRU are the:
 - i. Provision of civil secure mental health inpatient services 24 hours, 7 days a week in a specialised treatment and care environment, for people who are unable to be provided with clinical services in a less restrictive setting.
 - ii. Provision of contemporary, multi-disciplinary secure mental health rehabilitation services to assist people to recover from mental illness and to gain skills needed to live in a less restrictive setting.
- f. The CCSMHRU functions will support a consumer's treatment, care and recovery by:
 - i. Assisting consumers to maintain hope and to support consumers efforts in their recovery
 - ii. Providing a safe and structured therapeutic environment for consumers with persistent and disabling symptoms of mental illness
 - iii. Managing clinical risk and implementing behaviour management interventions
 - iv. Supporting individuals and their families and carers across the broad continuum of care, including facilitating a smooth transition of care to other teams/services.
- g. Placement in the CCSMHRU be for an extended period of one to two years in the circumstances of each individual case.
- h. The unit is a Declared Mental Health Facility under the Mental Health Act NSW 2007

19.2. Model of Care

- a. Model of care types include recovery-focused rehabilitation, care that is Trauma Informed, and a Patient-centred model.

- b. A key component of care will include a portion of the bed base to function as flexible step-down beds to facilitate a continuum of rehabilitation recovery and independence through self-supported accommodation.
- c. Consumers of the CSMHRU have a wide range of mental health, physical health, social and housing needs that require effective partnerships between multiple service partners including inpatient and community mental health, NGO partners providing social care, housing services, Drug Health, specialty physical health services and primary care. The model of care aims to address the need for improvement in care integration by:
 - i. Providing continuity of medical and allied health care for patients admitted to the CSMHRU and in some cases continuity of medical care between inpatient and community services
 - ii. Improving the interface between community and inpatient mental health services with pathways to care/admission/access and treatment and transition back to community within the PCLI framework and aligned with existing other services.
 - iii. Enabling access to cardio metabolic clinics involving Mental Health, Endocrinology, Cardiology, Oral Health, Dietetics and Exercise physiology to address the high rates of morbidity and premature mortality of consumers with enduring mental illnesses.
 - iv. Utilising consultation room within the unit in collaboration with general practitioners and primary health network to take advantage of long length of stay and maximise physical as well as mental health.
- d. Services include specialist behavioural and symptom management programs, individualised and group rehabilitation programs aimed at maximising individual functioning and minimising the effects of long term care and recovery oriented pre-discharge and community placement planning to support safe transition to more independent living.
- e. Use of Seclusion is regulated by the NSW Ministry of Health's 2000 Policy Directive PD 2007_54 – Seclusion Practices in Psychiatric Facilities and SWSLHD, Mental Health Service Seclusion Policy MH_PD2000_C100, and will be informed by the recommendations from the 2017 Review of Seclusion, Restraints and Observation of Consumers with a Mental Illness in NSW Health Facilities.
- f. The use of seclusion is expected to occur infrequently. Seclusion will generally be used to accommodate and to manage the behaviour of disturbed, aggressive or violent patients.
- g. Family and carers are included wherever possible to support the consumer's recovery. Ongoing engagement, reassurance and psychoeducation is important because of the distress and trauma often experienced by the consumer and their family and or/carers. A family assessment and intervention is offered by the social workers as early in the admission as is appropriate.
- h. Information and assistance will be provided to all consumers and their family/carers to ensure that they can be fully informed about the services and amenities to be provided and their care, in accordance with the Mental Health Act.
- i. Consumers will be involved in planning their care, informed about their condition and the plan for their care. Patients will be assisted to make informed decisions concerning their health status and to participate in the management of their illness through patient education and access to information.

19.3. Operational Description

19.3.1. Operating Hours

- a. The CSMHRU will operate 24 hours-a-day, every day of each year.

19.3.2. Access, Admission, Leave and Discharge/Transfer

19.3.2.1. Access and Admission

- a. The Unit will receive pre-booked admissions direct to the CSMHRU between the hours 9.30am – 4.00pm Monday to Friday. All consumers considered for admission will be reviewed by the treatment team with the referring Local Health District treatment team before any decision about admission is made. Should the referral be accepted, the CSMHRU team and the LHD referring team will work together and closely communicate regarding the transition to admission.
- b. The referral procedures will require appropriate design to ensure there is good liaison and communication with services that are involved in the care of the referred patient from the outset. This will support a comprehensive sharing of information and knowledge about the person that will aid rehabilitation and recovery. Contact with the lead referring

service will be maintained for the duration of the person's involvement with the CSMHRU, to further support discharge and return to the person's home when the rehabilitation period is completed.

- c. Referral assessment, preferably in person or via video-link, will be carried out by a designated multi-disciplinary team.
- d. As part of the consideration of consumers preference for pathways back into community, patient and public access to and from the unit will be from public areas which are preferably low traffic.
- e. It is proposed that the CSMHRU will have an airlock entry for visitors and patients that is secured from the unit, as well as a secure private entry directly into the unit for patients who present via patient transport.

19.3.2.2. Leave

- a. Leave will be granted following medical review and multi-disciplinary consultation. Leave will play an important therapeutic role in the consumer's care plan, either in providing them access to personal shopping, banking, therapeutic and leisure activities, outside of the unit. This provides the consumer the opportunity for community engagement, re-engagement with family/ carers and enables treatment teams to gauge progress and suitability for escalating patterns of leave.

19.3.2.3. Discharge and Transfer

- a. Linkages with other services, including disability support, housing, financial, and others, is undertaken at an early stage in the admission and ensures arrangements are well planned and implemented to support transition of care. Ease of access to this information will be required.
- b. Once the period of rehabilitation is completed, consumers may be discharged to a variety of settings. These include a facility in the referring LHD, self-contained supervised housing, NGO-operated community housing, and independent residences. Continuing clinical services will be provided by the designated local public mental health service, private psychiatrists, or both. In most cases, it is expected that the individual will return to his or her home area.

19.3.3. Clinical Support Services

19.3.3.1. Clinical Information and Medical Records

- a. Medical Records and Clinical Information processes will proceed as part of hospital-wide processes.
- b. Patients often bring lengthy, multi-volume medical records. The unit will include physical storage of active and recently discharged patient medical records. There will be no long term record storage within the unit.

19.3.3.2. Aboriginal Health

- a. The Aboriginal Mental Health staff are located in the Brown Street Community Health Centre and will provide support to Aboriginal patients who are admitted to the CSMHRU.

19.3.4. Non Clinical Support Services

19.3.4.1. Safety and Security

Design will take into consideration *Part C of the Australasian Health Facility Guidelines*, particularly *Chapter 06 Safety and Security Precautions* for security, furnishing and design considerations. In addition, design will incorporate the following principles:

- a. The approach to safety should be focused around providing comfortable environments with minimal barriers that minimise opportunities for self-harm, but which are residential in character¹. Design will therefore enhance patient

¹ Huynh, A. Keenan, B. & Sherson, B. (2017). *Envision Patient Experiences in Emergency*. Sydney: NBRSArchitecture

recovery by providing a non-threatening environment which is open and conducive to communication, integration and rehabilitation.

- b. The design of all spaces occupied by mental health patients should incorporate evidence-based therapeutic principles. This includes the use of natural light, connection with nature through windows and courtyards, normalised and domestic scale bedrooms and living spaces, as well as safe and robust materials and fixtures. ¹
- c. The internal floor plan will be designed to facilitate observation of patient living, main entrance access and recreational areas, with blind corners minimised.
- d. The arrangement of spaces and zones will offer a high standard of security through the grouping of like functions, control over access and egress from the unit and the provision of optimum observation for staff.
- e. Staff safety is a required design consideration. Staff will wear mobile duress alarms. A backup hardwired fixed duress alarm system will be required in the staff station/s for duress response backup and will require an annunciator panel with good audible sound alarm function. Further buttons such as staff assist will be reviewed in detailed design.
- f. Movement detection sensors will be considered for installation into all of the patient bedrooms, and will be individually programmable at the staff station.
- g. Fire warnings and alarms will alert and inform all staff, patients and visitors. Mimic audible and visual alarm will be required in the IPU staff station. Seclusion rooms require a flush mount fire detector.
- h. Master key locks will be required to all rooms. Doors with electronic access will have key override, preferably not wall mounted. The mental health unit will be keyed to the Campbelltown master key system on the mental health sub-master keying system.
- i. The unit will require direct, secure access to parking/drop off zones for patient transfer and transport. Where applicable, parking areas, drop off zones and pathways will be lit with external robust security lighting and clear visibility from the staff station and security.
- j. The CSMHRU will have an airlock entrance to the unit to ensure patient safety and prevent absconding issues, with clear visibility - direct or through technology - from the reception and staff station.

19.3.4.2. Food and Catering Services

- a. Discreet access will be required between the hospital-wide kitchens and the servery within the unit to ensure that food service delivery vehicles and trolleys do not traverse patient areas.
- b. Food will be delivered once per day on a roll-in refrigeration trolley to the unit servery which will be required to accommodate special equipment and meet air-conditioning requirements. The servery will require joinery and bench space for pantry food storage, cutlery, crockery and utensil storage, and a commercial type washer. The servery requires one servery counter to service the dining room with a cafe model of service.
- c. Additionally, patients will have access to tea/ coffee making facilities and chilled water within the dining area, supervised by staff. The hot water service should be able to be controlled by staff to prevent self-harm or harm to others.

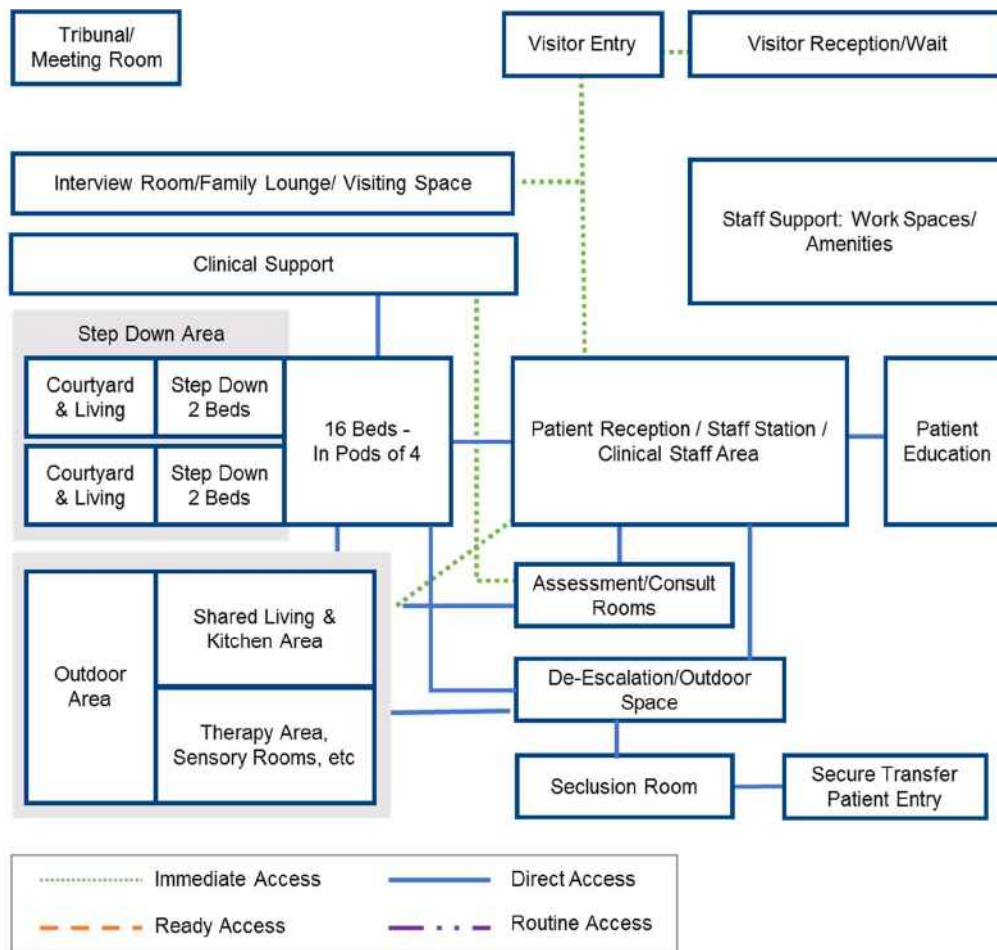
19.3.5. Teaching and Education

- a. Patient education services will be provided within the unit and will require a multifunctional area for media, learning, music and completing assessments.
- b. The tribunal room will function as a multipurpose room when not in use for staff education and training purposes and may be accessible to be booked by other units when not in use. The unit will require access to other shared education and meeting facilities outside the unit in accordance with wider mental health direction.
- c. Clinical education programs in place at the unit may include undergraduate and postgraduate clinical placement for medical, nursing and allied health students conducted in partnership with the Western Sydney University (WSU) and other education organisations. Workstations and storage facilities will be required to meet student's needs and will be detailed in design.

19.4. Relative Location and Unit Configuration

19.4.1. Unit Configuration

- a. The overall unit design envisages three functional areas: the main entry and visitors/patient reception, followed by an airlock with the clinical unit including bedrooms/step down area/therapy areas, and a staff work/amenities area. Further detail:
- 1. Main Entry/Visitors Area**
- i. Will include an interview room with paediatric design considerations for families and visiting children, and no visibility to the clinical area
 - ii. A visiting enclosed interview room to enable comfortable, open interaction between patients and their visitors. This will be separate from the clinical unit and will have access to a beverage bay and preferably access to an outdoor area.
 - iii. Lockers for storage of visitor belongings prior to entering visiting areas
- 2. Clinical Unit**
- iv. The unit will have 20 beds and care for people with medium to low secure needs nearing discharge. The beds will be configured so as to allow the flexibility required to meet the diverse range of need. The 20 beds will ideally be designed in pods of 4 beds to accommodate assessment and stabilisation, gender separation and step down.
 - v. The kitchen areas in the unit will comprise of:
 - A servery with a café style bay which will service the dining room as part of inpatient requirements with bulk reheat/retherm service.
 - A patient kitchen managed by clinical staff which allows for up to 10 patients at a time. This kitchen may also be used for ADL assessments.
 - Two complete kitchens; one each in the 2-bed step down areas to encourage self-dependant living as part of the rehabilitation process.
 - vi. The clinical area will include shared living, education, outdoor and kitchen areas which may have therapy areas integrated throughout or adjacent. Interview and consult rooms will also be provided within the clinical area for MDT meetings with patients, therapy sessions and assessments.
 - vii. The clinical area will include a de-escalation space. De-escalation is an approach to manage an agitated and emotionally disturbed consumer away from common areas in a room and outdoor courtyard that is calming and welcoming. The de-escalation area will provide a quiet, low stimulus space for people experiencing high levels of arousal/agitation who require a safe area to self-regulate with or without the guidance of clinical staff. This area will ideally have discrete access to the seclusion room however to encourage use, should not be visually associated with seclusion.
 - viii. This area will also include a central staff station and work room, with a separate and accessible patient reception counter to encourage staff-patient interaction.
- 3. Staff Work/Amenities Area**
- ix. Will include offices and workspaces which are required adjacent to but not directly on the clinical space, as well as access to shared meeting rooms, staff room.
- b. Additional spaces such as the tribunal room/large meeting rooms may be shared with other units and located outside the unit.
- c. The internal relationships will be required to be prioritised as follows:



19.4.2. External Functional Relationships

- a. There are a number of relationships with other clinical services and health support services which are core to providing integrated mental health care. These include services and support external to the secure unit:
 - i. Shared Staff Spaces with other Mental Health Inpatient Units (if collocated) – direct access
 - ii. Other Campbelltown Mental Health Inpatient Units, particularly the Mental Health Intensive Care Unit and the Mental Health Acute Unit – less frequent but direct access
 - iii. External hospital campus green space and parks – ready access
 - iv. Security - ready access
 - v. ECT/ Perioperative Suite - ready access
 - vi. Outpatient Services for cardiometabolic and clozapine clinics - ready access
 - vii. Parking/Secure Drop Off and ready access to the general hospital and transport to access community resources. – ready but secure access
 - viii. Retail/Café Space within Hospital – routine access
 - ix. Medical Imaging – routine access
 - x. Trust/Cashiers Office – routine access
 - xi. Dental Unit – routine access
- b. A ground floor location is preferable to facilitate leave, integration and recovery for the long lengths of stay planned for this unit.

19.4.2.2. Mental Health Review Tribunal (MHRT) & Guardianship Tribunal

- a. The MHRT has a wide range of powers that enable it to make and review orders and to hear some appeals about the treatment and care of people with a mental illness. Capacity for the MHRT to undertake its work will be required within the facility including a meeting room with audio and videoconferencing capability, medico legal support and associated interview room. This may be a multifunctional staff education space able to be shared with other mental health units in the hospital.
- b. Facilities for the Mental Health Review Tribunal (MHRT) in the CSMHRU will include:
 - i. Access to a bookable conference room capable accommodating up to 20 people and with two doors for egress. The room should have a table which allows access for people at both sides.
 - ii. MHRT staff will require access to computers and/or computer points. This area will be acoustically treated to prevent conversations being overheard outside the room.
 - iii. Video and audio-visual facilities will be required.
 - iv. An interpreter service will be accessed through a conference call made through the phone system.
 - v. MHRT may require access to up to 1 interview rooms at one time for solicitor and the MHRT.
 - vi. Separate waiting areas for families without the need to enter any inpatient units

19.4.2.3. Mental Health Consumers and Official Visitors

- a. Official Visitors are engaged under the Mental Health Act to ensure adequate standards of care and treatment, and the rights and dignity of people who are being treated under the Act. This includes people who are in involuntary treatment within inpatient services or on Community Treatment Orders. They will access existing interview room and office space to enable these functions to be fulfilled. An official visitor's poster and post box will be required for patient access.

19.5. Specific Design Requirements

19.5.1. General

- a. As part of harm minimisation and care of vulnerable patients, it is preferred that the CSMHRU be planned in four-bedroom pods
- b. 4-Bed Step Down Pod will consist of two 2-bed areas, each similar in design to a small 2-bed apartment with separate complete kitchen and living area, and outdoor space. These bed rooms will be able to be closed off from their kitchen, living and outdoor areas, and therefore integrate with the rest of the unit when flex capacity is needed.
- c. There will be two larger bedrooms and associated ensuites in the unit to allow for the care of ambulant bariatric patients and accessible patients.
- d. De-escalation space should be located roughly between the seclusion room and main living/therapy area to allow patients to voluntarily retreat if agitated, but also allow quick access to the seclusion room if required. The de-escalation space will be a single purpose area. It will be fitted out with soft foam furniture, weighted blankets with calming design achieved with wall graphic, mood lighting and the like.
- e. Patient outdoor space will require significant flexibility and greenery to facilitate the long lengths of stay in the unit. This may include space for ball games or handball court, shady recreational areas, a BBQ, a walking track, and others as set out in the *AUSHFG Health Planning Unit*. These spaces will also need to accommodate small and large group areas, therapy activities, and quiet spaces.
- f. A mixture of large and small living and therapy areas will be required.
- g. The central staff station should be directly beside an outer reception counter which will be designed to encourage patient-staff interaction and discourage remote observation by staff. It will provide visual observation of activity, living, outdoor areas and bedroom corridors and provide auditory connection to the unit on the night shift. The adjacent secure staff work room will provide sufficient space for staff to write reports (computer access), houses patient files and function as a centre for communication, duress alarm monitoring, motion sensor monitoring and telephone inquiries.
- h. Interview, consultation and meeting rooms including tribunal hearing room will require two doors for emergency egress.
- i. All meeting rooms will be provided with capacity to install telehealth services.
- j. Linen cupboards are required to be enclosed and lockable

- k. In a civil secure unit, a balance must be maintained between safety, security and patient rehabilitation. Refer to design principles in the security section of this brief. A safe environment will provide the structure necessary to maintain a therapeutic milieu, enabling effective treatment and rehabilitation

19.5.2. Sexual Safety

- a. Planning for the CSMHRU will maximise Sexual Safety to meet the requirements of NSW Health's Sexual Safety in NSW Mental Health Facilities. Design will include the capacity to separate vulnerable patients in bedroom pods and provide a range of spaces into which patients can retreat.
- b. All patients will have their own bedroom. Motion sensors will be installed into all bedroom ceilings with the ability to be individually controlled at the staff station

19.5.3. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. The Medium Civil Secure Mental Health Unit staff establishment may include:
 - i. social workers
 - ii. diversional therapists
 - iii. welfare officers
 - iv. occupational therapists
 - v. clinical and neuro psychologists
 - vi. speech pathology
 - vii. exercise physiologists
 - viii. drug and alcohol workers
 - ix. educators, peer and carer support workers
 - x. pharmacists
 - xi. dieticians
- c. Anticipated total number of workspaces will be defined in design stage. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan.
- d. Registrars, 24hr nursing staff and NUM office, admin/reception support will be located within the clinical area (i.e. Staff station or work room, or similar). All others will be in the staff support area of the unit.
- e. Depending on unit location and building design, there may be a staff room and education facilities attached to the unit, or shared with other units such as Mental Health.

19.6. Workforce Issues

- a. Security workforce and response implications and operational processes to be defined
- b. Development of workforce recruitment strategy
- c. Strategies for attracting and retaining staff

19.7. Technology

- a. The following communications systems will be considered as part of the overall hospital IT plan:
- b. Wireless systems (duress and IT)
 - i. Telephone including wireless and mobile telephones
 - ii. Paging (or other technology) system for staff as part of the campus-wide communications system;

- iii. Computer with internet and intranet access including vetted access for patients generally to access health education resources (subject to development of local policy regarding access) patients will have access to phones for phone calls.
 - iv. Wireless internet access will be an integral part of delivery of model of care, for example interaction with devices, applications, communication.
 - v. Disaster response phones at the main staff station to support disaster response, and enable access to communication technology in the event of disruption to standard VOIP phone services.
 - vi. Videoconferencing and Teleconferencing capability in the meeting rooms
 - vii. Early Warning Information System (EWIS) for evacuation warnings and public-address alerts.
- c. Access to telehealth will be required for:
- i. Mental Health Review Tribunal
 - ii. Case Conference/Meetings
 - iii. All meeting rooms will be provided with capacity to install telehealth services.

19.8. Change Management

- a. Implementation of new model of care
- b. Clinical redesign service model training
- c. Identification of clinical champions, training and additional information. PCLI consultation regarding model of delivery and statewide service required.

20. PSYCHIATRIC EMERGENCY CARE

20.1. Scope of Service

- a. The PECC is an established part of the comprehensive, integrated mental health services within the LHD. The PECC is a Declared Mental Health Facility under the Mental Health Act NSW (2007).
- b. The 6 bed Psychiatric Emergency Care Centre (PECC) under the governance of the Mental Health service and with a functional & controlled access with the Emergency Department, will provide short stay accommodation for the observation, immediate care and assessment of patients presenting to the Emergency Department with a mental health condition.

20.2. Model of Care

- a. The PECC operates through collaboration between Mental Health Services, the ED and Drug Health Services. Access to the PECC will be via the ED following a comprehensive and collaborative mental health assessment including the level of risk as well as negotiation with the Mental Health Nurse Manager for Patient Flow. An individual discharge plan will be arranged with each consumer to ensure follow up with appropriate services.
- b. The service will operate as an extension to the mental health triage and assessment service offered by the existing consultation/liaison psychiatry services and mental health CNC ED services.
- c. The model of care requires an integrated multidisciplinary team response to the symptoms arising from an acute exacerbation of mental illness.
- d. Patients and their carers will be actively involved in the planning, implementation and evaluation of care.
- e. PECC staff will assess and interview patients in an interview room and at the bedside.

20.3. Operational Description

20.3.1. Operating Hours

- a. The PECC will operate 24 hours a day, 7 days a week.

20.3.2. Access, Admission and Discharge / Transfer

- a. Patients will be admitted to PECC that are expected to have a short stay.
- b. Consumers with significantly acute mental diagnoses who present to the Emergency Department will be admitted to an appropriate on-site mental health inpatient unit or transferred to another mental health facility following a medical assessment.
- c. Unplanned admissions to the PECC will occur directly from the Emergency Department.
- d. Direct admissions to PECC may occur from the community mental health or mental health ambulatory care services.
- e. Discharges from PECC will typically return home with continuing community mental health or ambulatory care support. In a minority of cases patients may require transfer to an on-site mental health inpatient unit or other appropriate facility.

20.3.3. Clinical Support Services

20.3.3.1. Pharmacy

- a. Medications will typically be stored in a lockable medication cupboard within the staff station or medication room.
- b. Scheduled drugs will be secured in a safe within the medication cupboard.

20.3.4. Non-Clinical Support Services

20.3.4.1. Infection Control

- a. Alcohol gels will not be available in patient access areas due to risk considerations, but may be used in non-patient areas as an alternative to hand basins.

20.3.4.2. Security

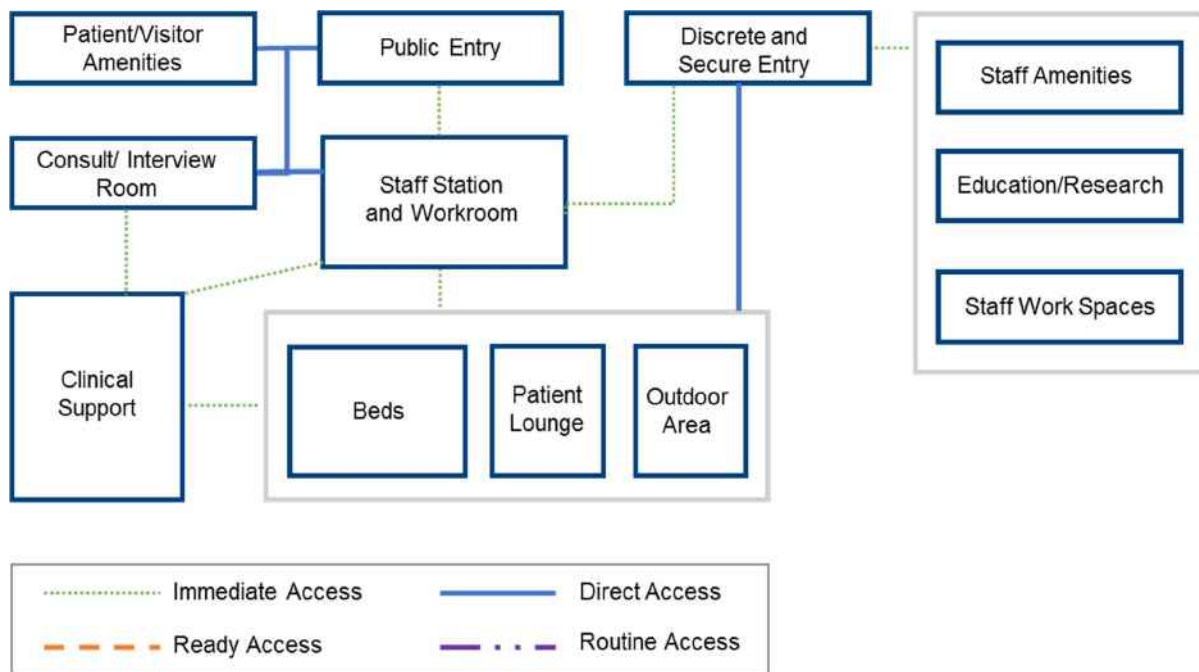
- a. Visitors and the public will access the PECC via a dedicated sub waiting area.
- b. Entry to the unit will be controlled from the staff station with an intercom and CCTV camera required in the sub waiting area for this purpose.
- c. Staff access to the unit will be controlled by electronic proximity access card (or similar).
- d. CCTV should be considered in the corridors, common patient areas, entrances/exits and exposed perimeters.
- e. A CCTV monitor will be required in the staff station with a link to security.
- f. Fire doors will be secured at all times with provision for remote release.
- g. Duress alarms will be provided for staff and will be integrated with the campus network.
- h. All support rooms such as dirty utility, linen and store rooms must not be accessible by patients.

20.4. Relative Location and Unit Configuration

20.4.1. Functional Relationships

- a. External relationships
 - i. Security Services – Direct access
 - ii. Ambulance bays – Direct access
 - iii. Mental Health Inpatient Units – Ready access for the movement of patients and staff. If collocated, access to shared Mental Health reception, waiting and Tribunal room is preferred.
 - iv. Emergency Department – high volume relationship however direct adjacency not required if discreet and safe access between ED and PECC is achieved.

b. Internal relationships



20.5. Specific Design Requirements

- a. The requirement to provide a safe and secure therapeutic environment for acute consumers' needs to be balanced with the need to provide patients, carers, visitors and staff with a pleasant, spacious, light-filled, comfortable and non-threatening facility.
- b. Access to a meeting room with telehealth, teleconference and videoconference capacity for up to 20 staff will be required. This may be a shared and bookable space with adjacent units, such as ED, and will require mental health capability design considerations and dual egress.
- c. The design should minimise the need for back of house services staff (linen, food services, environmental services) to enter patient care areas. Service areas such as disposal rooms, pantries, linen stores, should have dual secure access doors - one from the service corridor outside the unit and one for use by unit staff from inside the unit.
- d. An interview room will be required for admission and interview with dual access doors and a duress alarm. This room must be sized to allow for patient relatives and several staff to be in attendance.
- e. A consult room will be required for physical examinations and administration of medications. This room dual must have dual egress doors and a duress alarm for staff safety and must be sized to allow for several staff to be in attendance
- f. The interview, consult and bedrooms will have observation windows for safety with provisions for patient privacy within the room.
- g. Entry to the PECC will require a separate and discrete entrance for unplanned admissions via Emergency
- h. Linen bays are required to be lockable

20.5.2. Patient Areas

- a. The PECC will provide a low stress, ligature free, normalised environment consistent with a modern domestic residence.
- b. The design must facilitate the high visibility of patients by staff for patient and staff safety and support. Blind corners, dead end corridors and recesses where patients and staff are out of view are to be avoided.
- c. Patients will be accommodated in single bed rooms.
- d. Two of the six bedrooms will require ensuite toilet / shower facilities. The remaining four bedrooms will have access to two shared toilet / shower rooms. A toilet will also be required adjacent to the patient lounge.
- e. The lounge / dining and adjoining courtyard area should optimise patient observation while providing patients and their visitors with a choice of spaces to sit.
- f. The courtyard will require both open and shaded / weather projected space and a secure perimeter.
- g. Seating is to be designed to accommodate individuals and small groups including staff and visitors.
- h. Furniture is to be comfortable, durable and non-institutional in colour and design. Finishes and soft furnishings should be washable and easily maintained or restored, with a low flame index.
- i. Mental health design considerations will be incorporated including consideration for ligature points, visibility and the like.
- j. All ensuite and toilet / shower doors should be design to avoid the creation of a barrier or hiding place i.e. the door should open both ways. Ensuite and toilet / shower doors will have a privacy latch and will be able to be opened from the outside by staff in an emergency.
- k. One of the ensuites or toilet / shower rooms in the unit should be designed to accommodate independent wheelchair users.

20.5.3. Staff Support Areas

- a. The staff station should be located within the patient area and be able to be open to the patients.
- b. A locked clean utility / medication room should be accessible to staff from the clinical area.
- c. The PECC will require a clinical workroom – capacity for approximately two nursing staff, a consultant, a social worker, a registrar and visiting staff.
- d. The clinical workroom will provide a private work area for members of the multidisciplinary team including registrars and allied health staff. The clinical workroom will contain an electronic patient journey board and workspaces. The area will

be used for case management discussions, storage of manuals and resource material and clinical reporting / write-up. Clinical handover will also occur in this area and at the patient bedside as appropriate. The clinical workroom should be sound proof from the patient lounge to ensure private space for confidential discussions.

- e. The staff station should be within the patient area to allow interaction with the patient while the clinical workroom will be used as a private space away from the patient.
- f. Single office accommodation will be required within the unit for the Consultant and the NUM.
- g. A small interview room will be required within the unit for group and family meetings. This room will require dual egress.
- h. As part of the wider mental health services direction, PECC staff may access shared staff facilities such as staff rooms and work spaces with collocated units.

20.5.4. Technology

- a. Multiple clinical systems will be in use including, eMR, clinical patient information, and physiological data. The communications system needs to support and interface this information.
- b. Full wireless connectivity will be required in patient and staff work areas e.g. day, consult, interview and staff station.
- c. A patient entertainment system is required in the lounge / dining areas.
- d. The nurse call system in the bedrooms, ensuites, toilet/showers will be integrated with the campus network.
- e. The duress alarm system, both fixed and mobile devices,
- f. Patients will have access, based on a risk assessment, to a computer with internet connectivity located in the lounge/dining area.
- g. Other critical design considerations include:
 - i. privacy and safety (including sexual safety) - patients should be able to lock their bedroom doors without preventing staff entry when required
 - ii. maximum penetration of natural light
 - iii. spacious design to reduce the potential for aggressive behaviour
 - iv. acoustic attenuation, particularly in bedrooms, and the interview and consult rooms.
 - v. access to facilities for family and carers, which may be shared purpose and safely accessible such as the interview room or lounge.
 - vi. safe and supervised access for visiting family members, including children of parents with a mental illness
 - vii. flexibility to adapt over time in response to changes in practice, treatment and the patient demographic.

21. WOMEN'S HEALTH INPATIENT UNIT

21.1. Scope of Service

- a. Campbelltown Hospital will provide Role Delineation level 5 Maternity Services. The Women's Health Inpatient Unit will care for women and babies in the antenatal, intrapartum and postnatal period.
- b. Women requiring higher levels of care will be referred to a tertiary level service.
- c. A Short Stay Unit will be collocated with the inpatient unit will provide assessment and monitoring services for pregnant women on a day only basis. The unit will accommodate women of 20+ weeks gestation who require more frequent monitoring due to a higher risk pregnancy (e.g. requiring cardiotocograph (CTG) monitoring, ultrasound monitoring and inductions of labour).
- d. The model of care will align with State and National maternity service plans with maternity care being evidence based, 'women centred' and focussed on 'tounits normal birth'.
- e. A multidisciplinary team based model will be implemented including a midwifery model of care supported by evidence-based protocols.
- f. Normal risk Antenatal and Post-natal Services will be conducted in clinics at the Campbelltown Hospital, off site in the community and within women's homes.
- g. High risk Antenatal and Post-natal Obstetric adverse outcome follow up clinic Services will be conducted in Women's Health outpatient clinics at Campbelltown Hospital.
- h. Early Pregnancy Assessment Service (EPAS), Foetal Maternal Day Assessment Unit (FMAU), Maternal Foetal Medicine and Fertility services will be provided from outpatient clinics.
- i. A midwifery group practice service at Campbelltown Hospital, with co-located birth suite will be expanded.
- j. Gynaecology patients will be accommodated on the Women's Health Inpatient Unit.
- k. Gynaecology outpatients will be accommodated in the Women's Health outpatient area.

21.2. Model of Care

- a. One hundred per cent rooming in will occur in the Women's Health Inpatient Unit. Rooms will have accommodation for partners to stay overnight.
- b. Parenting skills will be taught at the bedside and in the mother's education and feeding room. Babies will be bathed in the inpatient rooms.
- c. Well baby checks will be done in the inpatient rooms with the parents. Separate spaces will not be required for baby checks.
- d. Neonatal hearing screening will be conducted in a consultation room for all neonates prior to discharge home.
- e. Essential and non-essential in-service education for nursing and medical teams will occur regularly and systematically with both formal sessions and bedside teaching to maintain currency of practice for all staff.
- f. Most clinical and non-clinical support areas will be shared between the Women's Health Inpatient Unit, Maternity Same Day Unit, Birth Suite and SCN.
- g. Clinic rooms will be required for antenatal and parenting areas.
- h. The use of the National Midwifery Guidelines for Consultation and Referral (2008) PD 2010_022 provide an evidence-based framework for collaboration between midwives and doctors in the care of individual women
- i. The Maternity-Tounits Normal Birth Policy Directive PD2010-045 provides direction to NSW maternity services regarding actions required to increase the vaginal birth rate and decrease the caesarean section operation rate
- j. Birthrate Plus® is a Midwifery Workforce Planning methodology from the United Kingdom which provides managers of midwifery services with a framework to assess the required midwifery Full Time Equivalents (FTE) of a service based upon the needs of women underpinned by the standard of one to one care in labour and birth

21.3. Operational Description

21.3.1. Operating Hours

- a. The Women's Health Inpatient Unit will be operational 24 hours a day, 7 days a week all year round.

21.3.2. Access, Admission and Discharge/Transfer

- a. The Unit will be secured at all times and there will be an intercom with audio-visual capacity at the entry for women and visitors to contact staff.
- b. Post-partum women will access the inpatient unit from the Birth Suite or from the Perioperative Suite post Caesarean Section. Women undergoing Caesarean Section will be recovered in the Post Anaesthetic Care Unit.

21.3.3. Clinical Support Services

- a. Clinical support areas will generally be shared between the Women's Health Inpatient Unit, Women's Health Day Stay, Special Care Nursery and the Birthing Suite.

21.3.3.2. Imaging Services

- a. Storage space will be required for mobile ultrasound machines (this could be shared with Birth Suite).

21.3.4. Non Clinical Support Services

- a. Non Clinical support areas will generally be shared between the Women's Health Inpatient Unit, Women's Health Day Stay, Special Care Nursery and the Birthing Suite.

21.3.4.2. Food Services

- a. Food services will be performed as per hospital wide processes with the addition of:
 - i. Mothers may will delay their meals due to the demands of breastfeeding and self-care. There needs to be the capacity to keep meals at the correct temperature for a short period of time.
 - ii. Some meals will be stored in the patient kitchen area.

21.3.4.3. Supply Services

- a. Capacity for the storage of a stock of consumables and equipment is to be incorporated into the design.
- b. Storage of medical and surgical equipment for use within the Unit requiring power for charging. This includes equipment which is used on a regular enough basis to be stored within the Unit, but is not required to be stored at the bedside e.g. intravenous pumps and other infusion devices, irrigation fluids, bariatric equipment and birthing equipment.
- c. All the equipment and consumable storerooms require flexible open spaces with mobile shelving to maximise storage options, data points, charging facilities and a small write up space.
- d. Space for storage of equipment capable of increased safe weight capacities will be required.
- e. All mobile equipment bays require power for charging equipment and must be readily accessible (e.g. access to portable ultrasound).

21.3.4.4. Security

- a. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.

21.4. Relative Location and Unit Configuration

21.4.1. Functional Relationships

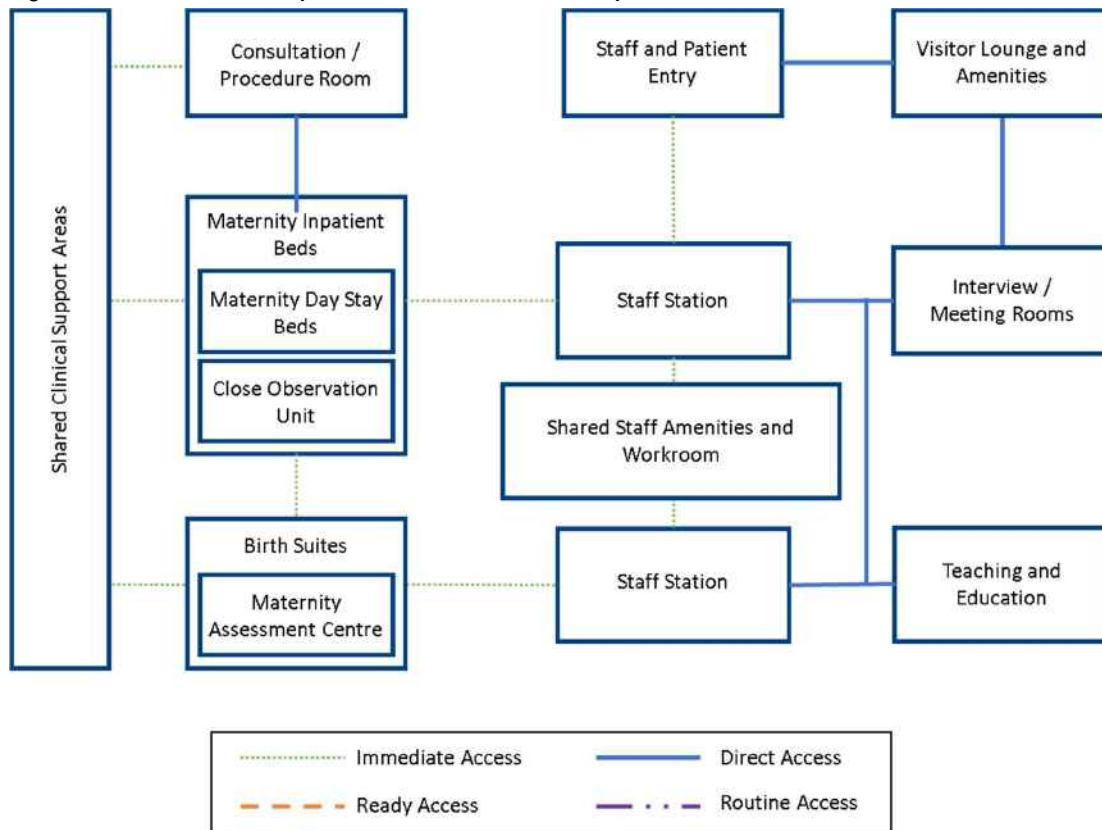
- a. The Maternity Inpatient unit, Birth suites and Special Care Nursery will be collocated in a Women's Unit.

- b. Ready access to Operating Theatres will be required for women returning following Caesarean Sections or other surgical procedures (especially for the antenatal unit). It is preferred to have smooth, horizontal access to reduce the risk of bumping small babies. However, direct access can be achieved through use of a hot lifts if horizontal access is not possible.
- c. Outpatient antenatal and postnatal clinics should be located near to the Maternity inpatient service to improve staff flow.
- d. Close proximity to the Paediatric unit will be beneficial to staff flow.
- e. Gynaecology patients will be located within the maternity inpatient units.
- f. 24-hour access to support services such as pathology, blood bank, pharmacy and radiology will be required.
- g. Ready access to Mental Health support for those women with increased mental health needs.
- h. Consideration should be made for future increase of Maternal Foetal Medicine (MFM) services. This will accommodate a sonographer and specialist.
- i. Ready access will be required to Allied Health pelvic floor clinics and incontinence clinics, as well as education spaces for pregnant mothers and post-natal care
- j. Allied health staff (e.g. physiotherapists, social workers, Healthy Hearing) will require ready access to post-natal units.

21.4.1.2. External relationships

- i. Special Care Nursery - Immediate access
- ii. Birth Suites - Immediate access
- iii. Maternity Assessment – Immediate access
- iv. Perioperative unit - Ready access (especially for antenatal unit)
- v. Transfer out - Ready access
- vi. Admissions - Ready access
- vii. Antenatal and Post-natal Clinics - Ready access
- viii. ED - Ready Access
- ix. Mental Health unit - Routine access
- x. Mortuary - Routine access.

Figure 5 Women's Health Inpatient Unit - Internal relationships



21.5. Specific Design Requirements

21.5.1. Women's Health Inpatient Unit

- a. The Women's Health Inpatient Unit will consist of single-bed rooms with ensuites.
- b. Consideration should be given to planning a number of rooms with no ligature points and other appropriate design to accommodate women with increased mental health needs.
- c. The Women's Health Inpatient Unit will require a resuscitation bay and procedure room, as well as assessment/induction rooms.
- d. Feeding areas and education space for classes will be required within the inpatient unit.
- e. Consult rooms near the entrance to the unit are required for antenatal clinics and other consultations (e.g. allied health).
- f. The Aboriginal Health Officer should have easy access and good visibility of the entrance and waiting areas. A culturally appropriate outdoor area should be easily accessible from the unit. Ideally an outdoor space for multipurpose cultural and bereavement purposes will be provided.
- g. An interview/meeting room with a beverage bay should be considered to accommodate larger families. An interview room with two doors for egress, one opening directly out of the unit will be preferable for the management of potentially anxious or aggressive visitors or family.
- h. Natural light is desirable in the birthing and assessment rooms and lounge. An outlook which protects the mother's privacy will be required. Windows should allow a view to the outside but should not allow viewing into room.
- i. Dimmable, individual lighting will be required in all patient areas where high dependency care is provided, i.e. birthing / assessment rooms, birthing room ensuites and bathrooms, nurseries and baby bathing / examination / resuscitation areas.

- j. Consideration should be made to include a small expressing room. Access to a staff expressing room located on the campus will also be required.
- k. Expressed breast milk will be stored in fridges / freezers. Space for fridges and freezers will be required, which can be shared with Special Care Nursery. Security of breast milk refrigerators and freezers requires special consideration and will have controlled access (e.g. barcoded milk).
- l. Space for vaccination fridges will be required.
- m. A formula room will not be provided in the Women's Health Unit as formula is prepared at the bedside. If required, a formula room will be available in the food services area under the governance of the dietetics department.
- n. A separate lounge with beverage bay for patients will be required.
- o. Access to a space for parent education with a plumbed small bath will be required. This can be shared between units.

21.5.2. Maternity Short Stay Unit

- a. A small staff station will be required.
- b. An accessible toilet and ensuite for patients will be required within the Unit.
- c. A mixture of enclosed and open assessment spaces will be provided (including a bariatric capable space. Close observation beds will be included in this unit.
- d. Medical gases are to be available at each space.
- e. A clean and dirty utility will be either within the Unit or immediately adjacent.
- f. A beverage bay is to be accessible to the unit and may be shared.
- g. A standard mobile equipment bay for CTGs, mobile ultrasound etc. will be required.

21.5.3. Shared staff amenities

- a. Access to a staff room (i.e. tea room) will be required and may be shared with other units.
- b. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor.
- c. A staff toilet is to be located within the clinical area of the unit.
- d. Overnight accommodation is to be available for on call medical officers.
- e. The Department of Obstetrics and Gynaecology will ideally be located in same area as the Maternity service, with direct access to inpatients units
- f. A central staff station will be required with a clinical / handover room is to be located directly behind the staff station. Additional staff sub-stations may also be required.
- g. Workspaces will be required for the registrars, allied health, educators, staff specialists, group practice midwives, lactation consultants etc. Associated storage will be required for midwifery educators.
- h. Access to a meeting / tutorial room with telehealth capacity for up to 20 staff will be required, and may be shared with adjacent units
- i. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Women's Health Inpatient Unit during a day time shift:
 - i. Nursing staff are permanently located in the unit with approximately 6 staff per shift, as well as a NUM, a Clinical Nurse Educator and a lactation consultant.
 - ii. There are 10 medical staff members (including paediatricians) on the unit during the day.
 - iii. Allied Health staff visit the unit with around 7 staff members in the area from each area (social work, physiotherapy, speech therapy, occupational therapy and dietetics) as well as the Aboriginal Health Officer and students.
 - iv. Approximately 6 staff from the midwifery group practice and midwifery support program will be present in the unit.
 - v. Around 3 nursing students and 5 midwifery students are also present in the Unit.
 - vi. There are also a number of unitmen/porterage staff and administration staff (including the CSO).

- j. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

21.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of women's health staff as well as increase the skill level to deal with higher acuity patients. Staff will be primarily conducted internally within Campbelltown Hospital
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- c. There will be substantial increase in staffing required across all disciplines. Plans to address this requirement are currently underway. Nursing and Allied Health 'grow your own' strategies with support from the Universities will be a key driver of this requirement.

21.7. Technology

- a. Telehealth capacity will be required within each birthing room. This can be achieved by mobile equipment.
- b. The multidisciplinary clinical handover room will require a patient journey board.
- c. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.
- d. Computers will be required at each bedside.

21.8. Change Management

- a. The increase in size and complexity of the service will require substantial change for the Women's Health Team. A substantial increase in staffing numbers and skills will be required.
- b. There will be an enhancement of maternity care options including the expansion of midwifery led models of care e.g. midwifery group practices, home birth programs etc.
- c. There will be enhanced Substance Use In Pregnancy Services and improved links between perinatal and family care services, obstetrics and gynaecology and Drug Health services
- d. There will be a greater focus on community based antenatal and postnatal services including:
 - i. expansion of the GP shared care program
 - ii. provision of home based antenatal monitoring for at risk women
 - iii. expansion of community clinics like those currently operating in Macquarie Fields and Macarthur Square improve access for women in other areas
 - iv. provision of special programs for higher risk mothers including Aboriginal midwifery, drug health and mental health services etc.
 - v. a phone service offering advice and support
 - vi. provision of education kiosks in all ambulatory areas.
- e. Links with dental services will be enhanced
- f. Enhanced allied health services will be provided.
- g. The Midwifery Continuity of Care models are aimed at improving and enriching maternity care provided to women and families and focuses on the needs of the woman and her family and places her at the centre of her care
- h. Development of all maternity services with a collaborative tiered networks approach which includes robust systems and processes for identifying and managing risk

Maternal Foetal Medicine

- i. Services will be provided to high risk antenatal and postnatal women with maternal and foetal problems

- j. Services will include a day stay unit for assessment and monitoring and for undertaking diagnostic procedures and foetal treatments.

Reproductive Endocrinology and Infertility

- k. Reproductive endocrinology and infertility services including gynaecology clinics including urogynaecology for undertaking uro-dynamic studies will be provided
- l. An In vitro-fertilisation service (IVF) will be provided on site.

Reproductive Imaging

- m. A Reproductive Imaging Service will provide a range of diagnostic procedures to investigate infertility including laparoscopy, ultrasound, X-ray etc.

Gynaecology

- n. Level 5 Gynaecology services will be provided at Campbelltown Hospital with major surgical procedures being undertaken on low, moderate and high risk women by gynaecological surgeons services
- o. Will include inpatient and ambulatory services including gynaecology clinics
- p. A range of minor and major surgical procedures will be undertaken on good, moderate and high risk patients
- q. Low level procedures will be undertaken in the Women's Health Precinct; moderate to high level procedures will be undertaken in the main hospital
- r. Gynaecology clinics will offer consultations for gynaecology conditions such as menstrual disorders, menopause symptoms, female urinary incontinence, genital prolapse, contraception, and infertility etc.
- s. General gynaecology procedures including colposcopy, diagnostic hysteroscopy, cervical biopsy, removal of cervical polyps will be undertaken in a surgically clean minor procedures area within the ambulatory care area or in the Day Surgical Unit.

22. BIRTH SUITES

22.1. Scope of Service

- a. Campbelltown Hospital will provide Role Delineation level 5 Birthing Services. Women requiring higher levels of care will be referred to a tertiary level service.
- b. The Birthing Suite will include birthing rooms and assessment rooms (the Maternity Assessment Unit).
- c. The Maternity Assessment Unit will be collocated within the Birth Suite to enable the assessment of women
- d. The Birthing Suite will cater for all deliveries within the hospital with the exception of elective and emergency caesarean sections which will be undertaken within the Perioperative Unit
- e. The model of care will align with State and National maternity service plans with maternity care being evidence based, 'women centred' and focussed on 'tounits normal birth'.
- f. A multidisciplinary team based model will be implemented including a midwifery model of care supported by evidence-based protocols.
- g. A midwifery group practice service will be provided at Campbelltown Hospital, with plans to develop further midwifery models including team midwifery and for a homebirth program to be established in the future.

22.2. Model of Care

- a. The model of care and environment will support women to birth in a non-clinical atmosphere.
- b. The model of care will accommodate both midwifery and clinical led care, supported by a multidisciplinary team.
- c. The Birthing Suite will be able to accommodate water births and the use of baths for pain management.
- d. Ultrasounds will be conducted in the Birthing Suite using mobile devices.
- e. Elective and emergency caesarean sections will be undertaken in the Perioperative Unit, performed under regional or general anaesthesia. Patients will be recovered by the staff within the Perioperative Unit (Post Anaesthetic Care Unit) in the nominated PACU bed spaces. Women transferred to the operating suite may be accompanied by their partner or a support person, who will normally be present at the birth.
- f. Generally, the placenta will be treated as clinical waste and handled in accordance with local waste management policies. However, disposal of the placenta consistent with ethnic or cultural norms is to be accommodated by the provision of a dedicated refrigerator or freezer for storage whilst awaiting disposal or collection by families for cultural reasons.
- g. The use of the National Midwifery Guidelines for Consultation and Referral (2008) PD 2010_022 provide an evidence-based framework for collaboration between midwives and doctors in the care of individual women
- h. The Maternity-Tounits Normal Birth Policy Directive PD2010-045 provides direction to NSW maternity services regarding actions required to increase the vaginal birth rate and decrease the caesarean section operation rate
- i. Birthrate Plus® is a Midwifery Workforce Planning methodology from the United Kingdom which provides managers of midwifery services with a framework to assess the required midwifery Full Time Equivalent (FTE) of a service based upon the needs of women underpinned by the standard of one to one care in labour and birth.

22.3. Operational Description

22.3.1. Operating Hours

- a. The Birthing Suite, including the Maternity Assessment Unit, will be operational 24 hrs a day, 7 days a week all year round.

22.3.2. Access, Admission and Discharge/Transfer

- a. A separate Women's Unit entrance, which is accessible 24/7 and has immediate access to the Maternity Assessment Unit and Birth Suites is preferred.
- b. The Unit will be secured at all times and there will be an intercom with audio-visual capacity at the entry for women and visitors to contact staff.
- c. The Maternity Assessment Unit will be available to assess women on arrival by a midwife.
- d. Patients arriving by ambulance should not have to traverse patient treatment areas or the ED.
- e. Following delivery, patients may be discharged home, to private facilities, tertiary services or admitted to the Women's Inpatient Unit.

22.3.3. Clinical Support Services

- a. Clinical support areas will generally be shared between the Women's Health Inpatient Unit, Women's Health Day Stay, Special Care Nursery and the Birthing Suite.

22.3.3.2. Pathology Services

- a. A Point of Care Arterial Blood Gas machine (shared with Special Care Nursery) will be required in an alcove with a hand basin.
- b. An Immunisation refrigerator will be required within the Birthing Suite and will be located in the clean utility.
- c. Cord blood collection will be done within the birthing rooms and short term storage will be required

22.3.3.3. Imaging Services

- a. Storage space will be required for mobile ultrasound machines (this could be shared with the Women's Health Inpatient Unit).

22.3.4. Non Clinical Support Services

- a. Non-clinical support areas will generally be shared between the Women's Health Inpatient Unit, Women's Health Day Stay, Special Care Nursery and the Birthing Suite.

22.3.4.2. Food Services

- a. Food services will be provided as per hospital wide process with the addition of:
 - i. Mothers may will delay their meals due to the demands of labour. Partners supporting women in labour may will be provided with meals. There needs to be the capacity to keep meals at the correct temperature for a short period of time.
 - ii. Some meals will be stored in the patient kitchen area.

22.3.4.3. Waste Management

- a. Waste management will be provided as per hospital wide process with the addition of.
 - i. Space will be required for a placenta fridge.

22.3.4.4. Linen Services

- a. Linen services will be provided as per hospital wide processes.
 - i. A hot box will be required for warming of blankets and solutions.

22.3.4.5. Supply Services

- a. Capacity for the storage of a stock of consumables and equipment is to be incorporated into the design.
- b. Storage of medical and surgical equipment for use within the Unit requiring power for charging. This includes equipment which is used on a regular enough basis to be stored within the Unit, but is not required to be stored at the bedside e.g. intravenous pumps and other infusion devices, irrigation fluids, bariatric equipment and birthing equipment.
- c. All the equipment and consumable storerooms require flexible open spaces with mobile shelving to maximise storage options, data points, charging facilities and a small write up space.

- d. Space for storage of equipment capable of increased safe weight capacities will be required.
- e. All mobile equipment bays require power for charging equipment and must be readily accessible (e.g. access to portable ultrasound).

22.3.4.6. Security

- a. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.

22.4. Relative Location and Unit Configuration

22.4.1. Functional Relationships

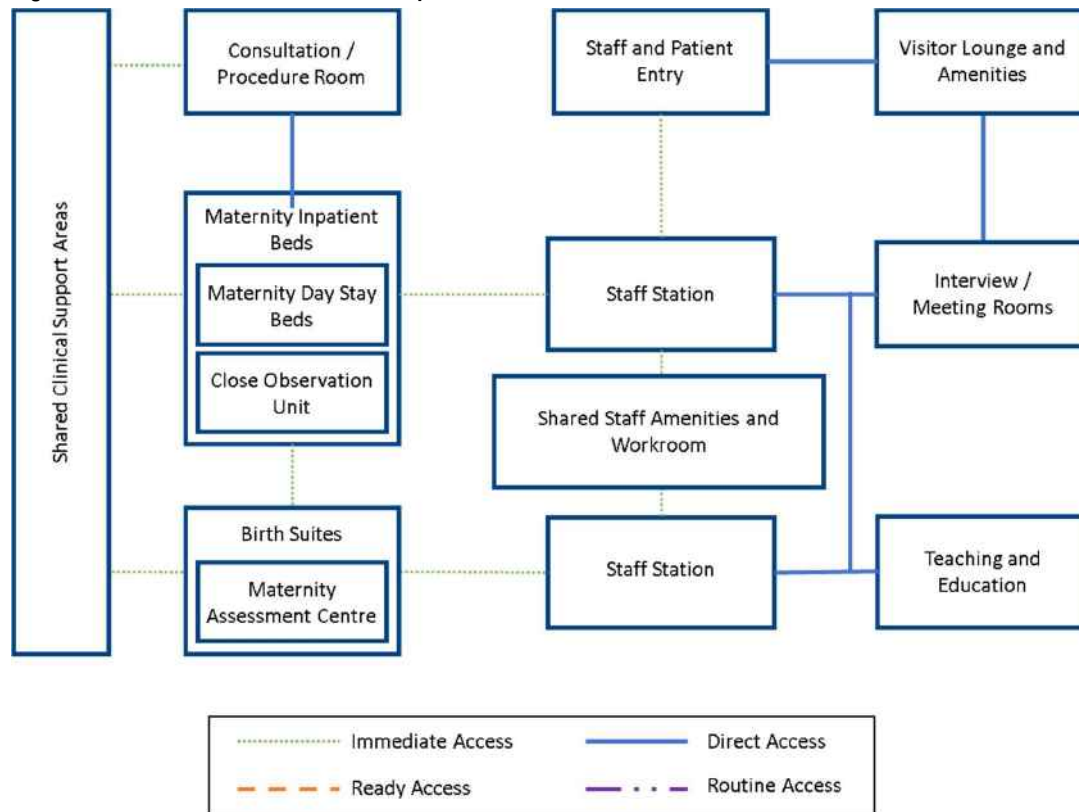
- a. The Maternity Inpatient unit, Birth suites and Special Care Nursery will be collocated in a Women's Unit.
- b. Direct access to Operating Theatres for emergency Caesarean Sections from the Birth Suite will be required. It is preferred to have smooth, horizontal access to ensure timely access to the operating theatre and to reduce the risk of bumping small babies as they transfer to the Special Care Nursery. Direct access can be achieved through use of a hot lifts if horizontal access is not possible however this is not preferred.
- c. Ready access to ambulance areas will be required for road transfers and retrievals.
- d. Ready access to the Women's Health Service access will be required to prevent heavily pregnant women walking or being transported long distances.
- e. 24-hour access to support services such as pathology, blood bank, pharmacy and radiology will be required.
- f. Ready access to Mental Health resources to support women with increased Mental Health needs.

22.4.1.2. Birthing Suite - external relationships

- i. Special Care Nursery - Immediate access
- ii. Inpatient Women's Health Inpatient Unit – Direct Access
- iii. Maternity Assessment – Immediate access
- iv. Perioperative unit - Direct access (preference for horizontal access)
- v. Transfer out - Direct access
- vi. Admissions - Direct Access
- vii. ED - Ready access
- viii. Pick-up and drop-off zones - Ready access
- ix. Mortuary - Routine access.

22.4.1.3. Birth Suite - Internal relationships

Figure 6 Birth Suite Internal relationships



22.5. Specific Design Requirements

- a. The birthing rooms are to accommodate both obstetrician and midwifery-led care, with medical gas services and equipment readily available but concealed from view.
- b. Each birthing room will have an adjacent birthing ensuite. The ensuite will include a shower area with 2 shower heads. A peninsula bath will be available in all birthing room ensuites. Capacity for a second person (such as a partner) to physically support postures adopted in the bath by the labouring women will be required. The bath is not to have spa jets. Ceiling hoists are to be considered above the baths in the case of emergencies where the woman may will be lifted from the bath.
- c. The design of the Birthing Suite is to consider Aboriginal and CALD women and their families and incorporate welcoming signs and ready access to an outdoor area.
- d. Each birthing room will have a directly accessible store area, which will house items used during the birthing process.
- e. Bed / sleeping accommodation for partners will be required within each birthing room. This can be a fold out arrangement.
- f. The following equipment will be able to be accommodated within each birthing room:
 - i. Cardiocograph (CTG) machines. portable ultrasound machines and birthing equipment
 - ii. Resuscitaires and cots
 - iii. Birthing aids
 - iv. Linen skip.
- g. Consideration should be made for a ligature-free birthing room for mental health patients who are birthing.
- h. 50 per cent of birthing rooms are to be bariatric compliant.
- i. The Birthing Suite needs to have a multipurpose interview room easily accessible from an outside corridor.

- j. A simulation training room with sufficient storage for equipment will be required. This could be one of the Birthing Suites with additional storage space for equipment.
- k. Capacity to cool ice packs and heat hot packs will be required.
- l. A hot box for warming liquids, as well as a linen warming cupboard will be required.
- m. Space for vaccination fridges will be required.
- n. Portable resuscitaires will be stored within each birthing room in an unobtrusive manner.
- o. Provision of sound proofing and privacy in design for consideration of still births and bereavement situations.

22.5.2. Shared staff amenities (with Women's Health Inpatient Unit)

- a. Access to a staff room (i.e. tea room) will be required preferably within the Unit.
- b. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor.
- c. Access to staff toilets are to be located in the staff zone within the Unit.
- d. Overnight accommodation is to be available for on call medical officers. 4 single ensuite rooms will be required and will be shared with the Women's Health Inpatient Unit.
- e. 1 central staff station will be required with a small clinical / handover room is to be located directly behind the staff station.
- f. Work spaces) will be required for the registrars, allied health, educators, staff specialists, group practice midwives, lactation consultants etc. Associated storage will be required for midwifery educators.
- g. A meeting / tutorial room with telehealth capacity for up to 20 staff will be required.
- h. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Birthing Suite during a day time shift:
 - i. Nursing staff are permanently located in the unit with approximately 6 staff per shift, as well as a NUM and Clinical Nurse Educator.
 - ii. There are 2 medical staff members per shift. This includes a resident and a registrar.
 - iii. Allied Health staff visit the unit with around 2 staff members in the area as well as the Aboriginal Health Officer.
 - iv. Around 3 nursing students and 4 midwifery students are also present in the Unit.
 - v. There are also a number of unitmen/porterage staff and administration staff (including the CSO).
- i. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

22.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of Maternity staff as well as increase the skill level to deal with higher acuity patients. Staff will be primarily conducted internally within Campbelltown Hospital
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- c. There will be substantial increase in staffing required across all disciplines. Plans to address this requirement are currently underway. Nursing and Allied Health 'grow your own' strategies with support from the Universities will be a key driver of this requirement.

22.7. Technology

- a. Telehealth capacity will be required within each birthing room. This can be achieved by mobile equipment.
- b. The multidisciplinary clinical handover room will require a patient journey board.

- c. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.

22.8. Change Management

- a. The increase in size and complexity of the service will require substantial change for the Women's Health Team. A substantial increase in staffing numbers and skills will be required.
- b. There will be an enhancement of maternity care options including the expansion of midwifery led models of care e.g. midwifery group practices, home birth programs etc.
- c. There will be enhanced Substance Use In Pregnancy Services and improved links between perinatal and family care services, obstetrics and gynaecology and Drug Health services
- d. There will be a greater focus on community based antenatal and postnatal services including:
 - i. expansion of the GP shared care program
 - ii. access to genetic counselling on-site
- e. The Midwifery Continuity of Care models are aimed at improving and enriching maternity care provided to women and families and focuses on the needs of the woman and her family and places her at the centre of her care
- f. Development of all maternity services with a collaborative tiered networks approach which includes robust systems and processes for identifying and managing risk.

23. SPECIAL CARE NURSERY

23.1. Scope of Service

- a. Campbelltown Hospital provides a Role Delineation level 4 Special Care Nursery (SCN). The 30 cot Special Care Nursery will provide care for premature babies from 32 weeks gestation born at the Campbelltown Hospital, including short-term ventilation up to 6 hours awaiting retrieval; and accept back transfers of babies returning from Liverpool Hospital or other higher-level facilities.
- b. The Special Care Nursery will provide short term care of babies less than 32 weeks for stabilisation prior to transfer to a higher-level facility.
- c. Babies ready for discharge will be referred to the multidisciplinary specialist outpatient and Allied Health services at Campbelltown Hospital.
- d. Campbelltown Hospital will provide a community home-based support service for patients and babies post discharge.
- e. The future potential to increase services to Role Delineation level 5 should be considered within the design.

23.2. Model of Care

- a. The Special Care Nursery will provide care for infants and families based on a family centred and a developmentally supportive model.
- b. Care will respond flexibly and sensitively to the social and cultural needs of families. The involvement and participation of families in the care of their child will be promoted.
- c. The environment and delivery of care will promote an increased sense of belonging for parents and families in the Special Care Nursery and allow personalisation of the baby's space.
- d. Appropriate facilities will be available for rooming in of a parent or carer. These will be single rooms with an ensuite, for parents to use prior to discharge of the baby. These rooms will be separate to baby rooms as mothers can be discharged from post-natal units and use the rooming in area for breastfeeding their baby.
- e. The Special Care Nursery will cater for families with multiple births and enable siblings to stay together in a single room.
- f. The Special Care Nursery service will provide a resuscitation service to the Birthing Service and Interventional Suite for babies delivered by Caesarean section and for emergency birthing in the ED.
- g. Neonates needing surgical intervention or more complex or prolonged medical support will be transferred to the nearest tertiary neonatal facility with capacity.
- h. Palliative care will be provided to babies and their families, through single room accommodation and providing quiet areas for parents.
- i. Special Care Nursery outpatient services will be provided from the paediatric outpatient area and will offer medical, surgical and Allied Health review of nursery babies including ophthalmology and developmental follow up.
- j. Babies removed from parents through Family and Community Services (FaCS) assumptions of care will be cared for in the SCN

23.3. Operational Description

23.3.1. Operating Hours

- a. The Special Care Nursery will operate 24 hours a day, 7 days a week all year round..

23.3.2. Access, Admission and Discharge/Transfer

- a. Premature babies of 32 weeks gestation or greater will be admitted to the SCN from the Birth Suite.
- b. Premature babies less than 32 weeks gestation will be admitted for stabilisation prior to transfer to a higher-level facility.
- c. Premature babies from the catchment born at other facilities will be returned to Campbelltown SCN for ongoing care.

- d. Babies arriving by ambulance from a higher-level facility should not have to traverse patient treatment areas or the ED.
- e. Babies will usually be discharged to home with their parent or carer.
- f. Non-infectious babies (including those with respiratory illnesses) up to 6 weeks of age may be readmitted to the SCN from home.
- g. The Unit will be secured at all times and there will be an intercom with audio-visual capacity at the entry for visitors to contact staff.

23.3.3. Clinical Support Services

- a. Clinical support areas will generally be shared between the Women's Health Inpatient Unit, Women's Health Day Stay, Special Care Nursery and the Birthing Suite.

23.3.3.2. Pharmacy Services

- a. Drug and immunisations fridges will be required in the clean utility room.
- b. A Total Parenteral Nutrition Fridge will be required in the medication room.
- c. When required centralised supply of individually manufactured sterile medication will be via the Cytotoxic Sterile Suite located in the MCTC and the Aseptic Sterile Suite located in the Main Pharmacy

23.3.3.3. Pathology Services

- a. Space for point of care testing machines (i-STAT) and an alcove for a blood-gas machine will be required.

23.3.4. Non Clinical Support Services

- a. Non-Clinical support areas will generally be shared between the Women's Health Inpatient Unit, Women's Health Day Stay, Special Care Nursery and the Birthing Suite.

23.3.4.2. Food Services

- a. Food services will be performed as per hospital wide processes with the addition of:
 - i. Mothers may will delay their meals due to the demands of breastfeeding and self-care. There needs to be the capacity to keep meals at the correct temperature for a short period of time.
 - ii. Some meals will be stored in the patient kitchen area.

23.3.4.3. Waste Management

- a. Waste management will be performed as per hospital wide processes with the addition of.
 - i. Dirty cots will be sent to the Central Equipment Store for cleaning and storage. A spare cot will be kept on the unit for emergencies.

23.3.4.4. Linen Services

- a. Linen services will be performed as per hospital wide process with the addition of:
 - i. Warming cupboards for linen will be required, including one in the bathing area.
 - ii. Space will be required for a washer and dryer for laundering muslin wraps and baby clothes.

23.3.4.5. Supply Services

- a. Capacity for the storage of a stock of consumables and currently used equipment is to be incorporated into the design.
- b. Storage of medical and surgical equipment for use within the Unit requiring power for charging. This includes equipment, which is used on a regular enough basis to be stored within the Unit, but is not required to be stored at the bedside e.g. intravenous pumps and other infusion devices, irrigation fluids and humidicribs.
- c. All the equipment and consumable storerooms require flexible open spaces with mobile shelving to maximise storage options, data points, charging facilities and a small write up space.

23.3.4.6. Security

- a. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.

23.4. Relative Location and Unit Configuration

23.4.1. Functional Relationships

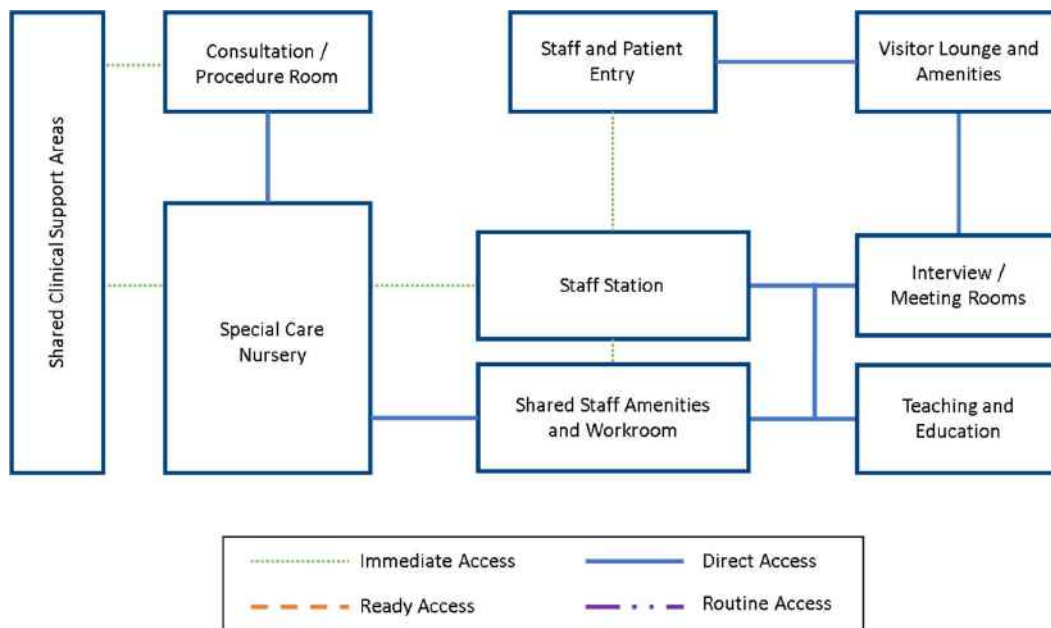
- a. The Special Care Nursery, Birth suites, the Maternity Inpatient unit and Women's Health Day Stay area will be collocated in a Women's Health unit.
- b. Immediate access to the Birthing Suite will be required for the ease of transfer of premature babies. It is preferred to have smooth, horizontal access to reduce the risk of bumping small babies. However, direct access can be achieved through use of a hot lifts if horizontal access is not possible.
- c. Direct access to Operating Theatres for surgical procedures will be required. It is preferred to have smooth, horizontal access to reduce the risk of bumping small babies. However, direct access can be achieved through use of a hot lifts if horizontal access is not possible.
- d. A discreet controlled access route from the Women's Health Inpatient Unit for mothers to easily visit their babies will be required.
- e. Close proximity to the Paediatric unit will be beneficial to staff flow.
- f. Ready access to ambulance areas will be required for road transfers and retrievals.
- g. 24-hour access to support services such as Pathology, blood bank, pharmacy and radiology will be required.
- h. Ready access for allied health particularly social work will be required.

23.4.1.2. SCN - External Relationships

- i. Birth Suites - Immediate access
- ii. Perioperative unit - Direct access (preference for horizontal corridor access to prevent unwanted bumping of cots into lifts)
- iii. Women's Health Inpatient Unit - Direct access
- iv. Transfer out - Ready access
- v. Paediatric unit - Ready access
- vi. Admissions - Ready access
- vii. Allied Health and social worker areas - Ready access
- viii. Antenatal and Post-natal Clinics - Ready access
- ix. ED - Ready access
- x. Helipad - Ready access
- xi. Mortuary - Routine access.

23.4.1.3. SCN - Internal Relationships

Figure 7 SCN Unit - Internal relationships



23.5. Specific Design Requirements

23.5.1. General

- a. The Special Care Nursery will include regular and larger cot spaces (to accommodate multiple births).
- b. The design of the SCN should be as groups of cots in pods i.e. 8 cots in a larger walled room (with automatically closing glass doors) designated as a pod. Design will assist with staffing and the ability to work in teams, assist patient flow, parent privacy, noise reduction and improve line of sight for staff. Some single rooms will also be required. The John Hunter Hospital SCN has been identified as a reference model.
- c. If appropriate with collocations, wait area may be shared with another unit eg. Birth suites
- d. Shared ensuites for those parents and carers not in single rooms will be required.
- e. Resuscitation bays will be required for stabilising and treating premature babies awaiting transfer to a higher-level facility. The resuscitation bays and at least two cot spaces bays will be designed as high acuity bays.
- f. All patient spaces must accommodate parents who wish to stay overnight. All cot spaces must be capable of accommodating a pull-out single sofa bed for parents wishing to remain at the cot side overnight.
- g. Two sinks for each pod of 8 cots will be required. The sinks will be recessed and designed to prevent any splashing.
- h. Negative pressure isolation rooms will be provided, with a baby bath in each room.
- i. Two interview rooms will be required - one in clinical area and one in family area. The family interview room will require two doors for egress and design with high visibility into the room.
- j. To facilitate staff and parents at bedside, a staff workstation and computer will be included in each special care bay/room.
- k. Task lighting with diffused, warm general light will be required throughout the unit
- l. Discreet controlled access between the Maternity IPU and Special Care Nursery must be provided for mothers to visit their babies.
- m. The design of the Special Care Nursery is to consider Aboriginal and CALD women and families and incorporate welcoming signs
- n. Ready access to a medically gassed outdoor area is preferred.

- o. Natural light is desirable in the interview rooms, meeting / tutorial rooms, staff room and offices. Patient areas should have the ability to be completely blacked out.
- p. Dimmable, individual lighting is essential in all patient areas where high dependency care is provided, i.e. all nurseries and baby bathing / examination / resuscitation areas. The lighting should not shine directly onto babies and should be a warm coloured light. Spotlighting and procedure lighting will be required for each cot, as well as task lighting for work spaces.
- q. The Special Care Nursery must be designed to reduce noise to 40-45 dB (as per AusHFG guidelines) and provide finishes and fixtures that allow parents and carers to personalise the baby's space.
- r. An interview / meeting room for patients and relatives will be located within the Unit. These must have two doors to facilitate a second entry/exit point and avoid staff members being trapped in a room with an aggressive person.
- s. A bathing area equipped with medical gases will be required. This should be an enclosed room with two baths and a linen warming cupboard. An independent thermostat will be required to control room temperature.
- t. A small formula room with preparation area and freezer will be required. If required, a formula room will be available in the food services area.
- u. Consideration should be made to include a small expressing room. Access to a staff expressing room located on the campus will also be required.
- v. Expressed breast milk will be stored in fridges / freezers. Security of breast milk fridges / freezers require special consideration and require controlled access.
- w. Space for vaccination fridges will be required.
- x. A meeting room in the staff support area will be required to be equipped with medical gases for training purposes.
- y. A separate lounge / dining room with a beverage bay for parents and carers will be required. Seating for visitors waiting to see patients should be included near the staff station.
- z. Consideration should be made for a play area and sitting room that can be operated by a charity or volunteer or other similar group, potentially together with overnight accommodation for parents. This could be shared with the Paediatric Unit.
- aa. Appropriate storage space will be required. There is a preference for cupboards with sloping tops to store equipment such as CPAP trolleys and other equipment.
- bb. Alcove space for a mobile chest X-Ray, two ultrasound machines and a retinal camera will be required.

23.5.2. Shared staff amenities (with Women's Health Inpatient Unit)

- a. Access to a staff room (i.e. tearoom) will be required within the Unit as staff will be required to remain on the unit in order to respond quickly to any issues.
- b. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor.
- c. Access to staff toilets are to be located in the staff zone within the Unit.
- d. Overnight accommodation is to be available for on call medical officers. 2 single ensuite rooms will be required.
- e. A central staff station will be required with a small clinical / handover room is to be located directly behind the staff station. The central station will be the central monitoring hub.
- f. Work spaces will be required for the registrars, allied health, clinical nurse educators, staff specialists, group practice midwives, lactation consultants etc. Associated storage will be required for midwifery educators.
- g. A meeting / tutorial room with telehealth capacity for up to 20 staff will be required (shared with the Women's Health Inpatient Unit). This education space should have suction, power points and gases to function as a semi-simulation space.
- h. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Special Care Nursery during a day time shift:
 - i. Nursing staff are permanently located in the unit with approximately 5 staff per shift, as well as a NUM and Clinical Nurse Educator.

- ii. There are 3 medical staff members per shift. This includes a RMO and registrar.
- iii. Allied Health staff visit the unit with around 4 staff members and 4-5 Allied health students and aides in the area (one from each division (social work, physiotherapy, speech therapy, occupational therapy and dietetics) as well as the Aboriginal Health Officer.
- iv. A number of staff from the midwifery group practice and midwifery support program will be present in the unit.
- v. Around 4 medical students present in the Unit.
- vi. There are also a number of unitsmen/porterage staff and administration staff (including the CSO).
- i. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

23.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of Special Care Nursery staff as well as increase the skill level to deal with higher acuity patients. Staff will be primarily conducted internally within Campbelltown Hospital
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- c. There will be substantial increase in staffing required across all disciplines. Plans to address this requirement are currently underway. Nursing and Allied Health “grow your own” strategies with support from the Universities will be a key driver of this requirement.

23.7. Technology

- a. The multidisciplinary clinical handover room will require a patient journey board.
- b. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.
- c. Computers will be required at each bedside.
- d. Consideration should be made for cameras at each bedside for baby monitoring by parents. Further work will be required on determining the relevant policies and guidelines for baby monitoring and remote access by parents from home.

23.8. Change Management

- a. The service will transition to Role Delineation level 4 by March, 2019.
- b. There will be a requirement for improved resources in step-down facilities, community based programs providing home support services such as hospital in the home and home-based early neonatal discharge programs will improve discharge rates
- c. Increased home visiting programs will be developed with new models of care in collaboration with the Women's Health Inpatient Unit.
- d. Telehealth/virtual consultations will be conducted with women in their homes
- e. Multidisciplinary specialist and Allied Health clinics including clinics for babies born prior to 32 weeks or who weigh <1500 grams who require developmental follow up assessment and screening will be provided
- f. Campbelltown Hospital will provide a community home-based support service for patients and babies post discharge. The Liverpool Hospital growth and development Clinic will work in conjunction with this service.

24. PAEDIATRIC SERVICES

24.1. Scope of Service

- a. Campbelltown Hospital will provide paediatric medicine at Role Delineation level 5 and paediatric surgery at Role Delineation level 4. The service will provide care for children up to 18 years of age.
- b. A range of paediatric services will be provided including:
 - i. emergency services (excluding trauma)
 - ii. inpatient services with medical and surgical beds
 - iii. paediatric short stay unit (acute medical unit)
 - iv. mental health and drug health services (in-reach from Mental Health unit)
 - v. surgical/procedural services including paediatric extended day only
 - vi. close observation services for managing patients with complex conditions
 - vii. palliative care services
 - viii. ambulatory care and outpatient services including general paediatrics and specialist clinics
 - ix. community outreach services
 - x. day medical procedural services e.g. transfusions, drug therapies etc.
 - xi. cancer services including medical and radiation oncology
 - xii. Eating Disorder Unit (future development of a designated unit as part of state-wide service).
 - xiii. paediatric sleep studies within the adult sleep studies service
 - xiv. special facilities for children with 'special needs' e.g. autistic etc. including soft playrooms etc.
 - xv. diagnostic services.
- c. Paediatric inpatient services will be child friendly and provide accommodation for children up to 16 years with adolescent specific accommodation for those aged 12 to 18 years.
- d. A paediatric Short Stay unit will be collocated with the inpatient unit to provide rapid assessment and day medical treatments for a range of conditions for children presenting to the Emergency Department or referred from a consultant's rooms that may not require admission to an extended stay bed. The Short Stay Unit will also accommodate day surgery children post-surgery for stage 2 and 3 recovery.
- e. A Close Observation Unit will be collocated with one of the inpatient unit areas for children requiring increased medical and nursing care. Children who deteriorate and require transfer to a higher-level facility may also be accommodated in this area awaiting transfer.
- f. A paediatric specific zone within the acute area of the ED will provide rapid assessment and management of children presenting to the Emergency Department. Children requiring a short episode of care up to 23 hours will be accommodated in the paediatric inpatient Short Stay Unit. This will facilitate decisions as to the appropriate ongoing management of children including admission for urgent care or discharge for future follow-up.
- g. A paediatric specific rapid response team (RRT) will be established to manage paediatric emergencies.
- h. Paediatric and adolescent Mental Health Services will be enhanced with expanded services to include children and adolescents with drug and alcohol, suicidal and self-harm problems. This will be an in-reach model for Mental Health services, for those patients who require medical intervention. Acute mental health services will be provided with in the Mental Health units.
- i. Generalist and specialty outreach clinics will be provided in residential growth areas to facilitate access. Hospital in the Home (HITH) services will be enhanced with intravenous antibiotics able to be administered in patient's homes.
- j. Services will be enhanced to provide care and ongoing management to premature babies (from tertiary neonatal units) and back transfers of paediatric patients.
- k. Support services will be provided for young people with chronic conditions transitioning to adult care in consultation with a range of other clinical specialties e.g. Endocrinology, Gastroenterology, and Respiratory Medicine etc. This will include both inpatient and outpatient services including transition clinics for adolescents.

24.2. Model of Care

- a. Paediatric services at Campbelltown Hospital will develop into a comprehensive paediatric service with adult and paediatric services integrated within the Campbelltown Hospital Services.
- b. The model of care will involve improved local access to a more comprehensive and integrated paediatric service, with Campbelltown Hospital becoming a regional paediatric centre for the south west of Sydney for some medicine and surgical subspecialties, in accordance with the Paediatric Services role delineation of the facility.
- c. The model of care will vary given the unique needs of children of different ages. The care given will be developmentally appropriate to ensure that the needs of children and their extended family are met (i.e. infants/small children vs. adolescents).
- d. Paediatric services will be provided to children and adolescents from birth to 18 years of age. However, older patients may still be cared for in the paediatric unit depending on the individual patient's needs.
- e. The Paediatric IPU will admit patients from home, GP's, outpatient facilities and ED for the management of acute and chronic clinical conditions.
- f. Planned surgical admissions will be admitted from home to the Day of Surgery Admission unit on the day of procedure and receive treatment in the Perioperative Suite. All patients will attend first stage recovery within the Post Anaesthetic Care Unit. Second and third stage recovery will be undertaken in the paediatric inpatient areas including short stay unit.
- g. Day only admissions will be accommodated in the inpatient short stay unit and overnight admissions will be cared for within the Paediatric IPUs.
- h. A dedicated Paediatric Medical Emergency response team will be established.
- i. The paediatric inpatient unit will include beds grouped for babies (cots), surgical patients, medical patients, adolescent patients, as well as close observation beds and a Short Stay unit that will include Stage 2 and 3 recovery areas. Units will be designed to be flexible for different patient types.
- j. Adolescent mental health patients that require medical supervision (e.g. overdose and anorexia) will be kept on the paediatric unit with Mental Health in-reach. Adolescent mental health patients that do not require medical supervision (e.g. psychosis) will be transferred to the Mental Health unit.
- k. An Eating disorder unit will be part of adolescent bed base, with patients seen by a multi-disciplinary team including mental health, diversional therapy, a dietician, social workers and physiotherapists.
- l. Care by parent models to be considered for patients who cannot be transitioned to home. This would enable parents to provide basic nursing care in hospital (e.g. feeding, tubes etc.). This will require a bed-sit arrangement with a kitchenette.
- m. Critical paediatric patients requiring higher-level care or awaiting transfer will be managed in the Paediatric Close Observation Unit. Critically ill patients aged over 4 years that require ventilation may be moved to ICU to await transfer.
- n. Day medical services to be part of Paediatric Ambulatory Care Service (PACS) with separate admission/waiting area.
- o. The Paediatric emergency department will share a common triage area, but separate reception and treatment areas for paediatric patients.
- p. Subspecialty clinics including chronic and transition care, endocrinology, gastroenterology, orthopaedics, dermatology, physical disabilities, multidisciplinary overweight and obesity, renal, palliative care and respiratory medicine will be further developed and enhanced
- q. Comprehensive services will be provided to young people with chronic conditions, including transitioning to adult care.
- r. Children requiring tertiary or highly specialised paediatric services will be transferred to facilities within the Sydney Children's Hospital Network in accordance with NSW Critical Care Tertiary Referral Networks (Paediatrics) guidelines.
- s. It is expected that the increase in ambulatory care services will balance length of stay with capacity to care for higher acuity patients. Currently only complex cases are kept on units. An increase is also expected in investigations (e.g. radiology, pathology etc.).
- t. Family centred and integrated care will be provided through multi-disciplinary teams of nurses and Allied health staff working together with patients and their families and transitioning them across the continuum of care.

24.3. Operational Description

24.3.1. Operating Hours

- a. The paediatric inpatient unit will be operational 24 hours a day, 7 days a week all year round.

24.3.2. Access, Admission and Discharge/Transfer

- a. Patients will be admitted either through the Emergency Department, from a procedural area or as an inter-hospital transfer. There will also be booked admissions.
- b. Discharges will be to home or to other facilities.
- c. The Unit will be secured at all times and there will be an intercom with audio-visual capacity at the entry for visitors to contact staff.
- d. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic tagging system.

24.3.3. Clinical Support Services

24.3.3.1. Pharmacy Services

- a. Drug and immunisations fridges will be required in the clean utility room.
- b. When required, centralised supply of individually manufactured sterile medication will be provided via the Cytotoxic Sterile Suite located in the MCTC and the Aseptic Sterile Suite located in the Main Pharmacy.
- c. A refrigerator for the storage of expressed breast milk will be required within the medication room.

24.3.3.2. Imaging Services

- a. Child friendly imaging services should be provided to decrease anxiety for children.
- b. Space to store a mobile X-ray should be provided near to the Close Observation unit
- c. The development of a simulation MRI for paediatrics should be considered.

24.3.4. Non Clinical Support Services

24.3.4.1. Food Services

- a. Food services will be performed as per hospital wide processes with the addition of:
 - i. Formula will be prepared at the bedside. If required, formula preparation will be available in the food services area under the governance of the dietetics department

24.3.4.2. Waste Management

- a. Waste management will be performed as per hospital wide processes.
 - i. Appropriate disposal of cytotoxic waste will be required.

24.3.4.3. Supply Services

- a. Capacity for the storage of a stock of consumables and equipment is to be incorporated into the design.
- b. Storage of medical and surgical equipment for use within the Unit requiring power for charging. This includes equipment, which is used on a regular enough basis to be stored within the Unit, but is not required to be stored at the bedside.
- c. All the equipment and consumable storerooms require flexible open spaces with mobile shelving to maximise storage options, data points, charging facilities and a small write up space.
- d. Space for storage of equipment capable of increased safe weight capacities will be required.
- e. All mobile equipment bays require power for charging equipment and must be readily accessible (e.g. access to portable ultrasound).

24.3.4.4. Security

- a. Consideration should be given to electronic tracking system to ensure the safety of children.

24.4. Relative Location and Unit Configuration

24.4.1. Functional Relationships

- a. Direct access to the Special Care Nursery and to ambulatory and outpatient services would be beneficial for rapid-response access by the paediatric medical emergency team and patient safety.
- b. Ready access to the Emergency Department (paediatric zone) and ICU, as well as the helipad and ambulance zone (for ease of transfers and retrievals) will be required.
- c. Ready access between operating theatres and paediatric surgical units will be required.
- d. Ready access to the Women's unit would be beneficial for staff flow.
- e. 24 hour access to support services such as pathology, blood bank, pharmacy and radiology will be required.
- f. Access to the full suite of medical imaging services will be required.
- g. Allied health staff will require ready access to paediatric units as well as close proximity to an appropriate gym space.
- h. Easy access to drop-off and pick-up areas as well as the car park is needed for staff, patients and the public.

24.4.1.2. Paediatric Unit - external relationships

- i. Special Care Nursery - Direct access
- ii. PACS and outpatient clinics - Direct access
- iii. ED - Ready access
- iv. ICU - Ready access
- v. Perioperative unit - Ready access
- vi. Medical imaging - Ready access
- vii. Transfer out - Ready access
- viii. Helipad - Ready access
- ix. Admissions - Ready access
- x. Women's Inpatient unit - Ready access
- xi. Adolescent Mental Health - Ready access
- xii. Pickup/drop-off zone - Ready access
- xiii. Car park - Routine access.

24.4.1.3. Paediatric Unit - Internal relationships

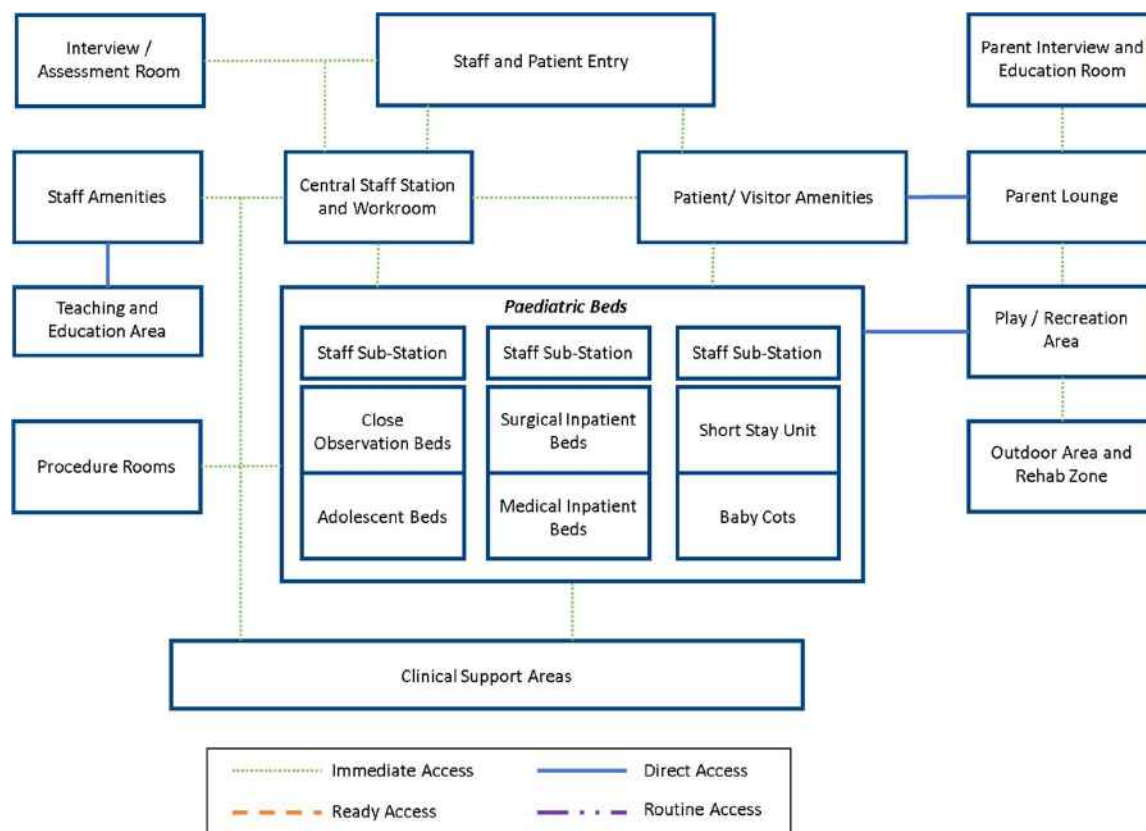


Figure 8 Paediatric Unit internal relationships

24.5. Specific Design Requirements

24.5.1. General

- a. The Paediatric Inpatient Unit will consist of a mixture of single-bed rooms and two-bed rooms.
- b. Space and amenities will be required to enable a parent or carer to sleep comfortably overnight.
- c. A small wait area will be shared between the units.
- d. The central Staff Station must not be too far from the entry to the unit to ensure security and safety for patients and staff. Additional staff sub-stations will be required for each unit with appropriate visibility of patient areas.
- e. Consideration should be made for appropriate security and patient tracking measures e.g. RFID tracking to better enable child protection orders and security.
- f. The child safety unit (FaCS) will require access to an examination room and safe assessment room in the Paediatric Unit.
- g. Procedure rooms will be required within the unit to enable procedures to be completed away from the bed space.
- h. A large medication room will be provided with sufficient capacity to store chemotherapy and oncology medication. Additional smaller medication rooms should be considered for each unit within the unit.
- i. A formula room will not be provided in the Paediatric Inpatient Unit, as formula will be prepared at the bedside. If required, formula preparation will be available in the food service area under the governance of the dietetics department.
- j. A plaster trap will be required in the inpatient area.

- k. A small appropriate play area will be incorporated into the unit. An outdoor play area will be provided near to the paediatric unit. Consideration should be made to include stairs/ramps in the outdoor space for rehabilitation tests. A low stimulus area should also be provided for children with autism and similar conditions.
- l. Space will be available on the campus for charitable organisations (e.g. Kids of Macarthur, Starlight)
- m. Consideration should be made for education spaces for paediatric patients, including areas for diversional therapy.
- n. A bathroom will be required with capacity to fit a toddler bath, a standard size bath, a shower and bench space. Located between units.
- o. One double cardiac protected bedroom will be required.
- p. Allied health services will require appropriate spaces for physiotherapy assessment (including access to ramps and stairs). This can be part of an outdoor therapeutic space.
- q. An ADL kitchenette/beverage bay with sink will be provided within a shared allied health gym space.
- r. Dimmable, individual lighting is essential in all patient areas where high dependency care is provided. The lighting should not shine directly onto patients and should be a warm light. Spotlighting and procedure lighting will be required for each cot.
- s. The cot area in the unit must be designed to reduce noise (to 40-45 dB as per AusHFG guidelines) and provide finishes and fixtures that allow parents and carers to personalise the baby's space.
- t. School area may be shared and bookable with adolescent mental health unit if collocated.
- u. Beds will be grouped for babies, adolescents, high acuity, and other cohorts. Design will allow flex between these cohorts.

24.5.2. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.

24.5.3.

- a. A central staff station will be required with a small clinical / handover room is to be located directly behind the Staff Station. Additional staff sub-stations will be required for each unit with appropriate visibility of patient areas.
- b. The unit clerk will have a designated work area in the Staff Station overlooking the entry to the unit and in close proximity to the clinical workroom.
- c. Work spaces will be required for the registrars, allied health, students, educators, staff specialists etc. These will be available in a multidisciplinary clinical workroom, which will also house the electronic journey board and be used for case management discussion and teaching.
- d. The Nurse Educator will require a work space in the patient area of the unit.
- e. Access to a staff room (i.e. tearoom) will be required preferably within the Unit.
- f. Access to staff toilets are to be located in the staff zone within the Unit.
- g. Change rooms including a shower and lockers will be available to the staff and will be located in the staff zone with access to an external corridor.
- h. The current number of staff working with in the unit varies across the day, however at present the following staff members would be in the Paediatric Inpatient Unit during a day time shift:
 - i. Nursing staff are permanently located in the unit with approximately 4 staff per shift, as well as a NUM and Clinical Nurse Educator.
 - ii. There are 4 medical staff members per shift. There are a total of 12 junior medical staff and 12 consultants in the unit.
 - iii. Allied Health staff visit the unit with around 4 staff members in the area from each area (social work, physiotherapy, speech therapy, occupational therapy and dietetics) as well as the Aboriginal Health Officer.
 - iv. Around 4 medical students and 4 Allied Health students present in the Unit.
 - v. There are also a number of unitmen/porterage staff and administration staff (including the CSO).

- vi. The pain team, Mental Health services, CNCs and parents and siblings are also present on units.
- i. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

24.6. Workforce Issues

- a. Training and upskilling of will be one of the major tasks over the coming years to increase the number of paediatric staff as well as increase the skill level to deal with higher acuity patients. Training and upskilling of staff will be primarily conducted internally within Campbelltown Hospital
- b. Consideration should be made for increased collaboration and partnerships with universities to increase the number of allied health, nursing and medical students at Campbelltown Hospital.
- c. There will be substantial increase in staffing required across all disciplines. Plans to address this requirement are currently underway. Nursing and Allied Health, “grow your own” strategies with support from the Universities will be a key driver of this requirement.
- d. Recruitment of sufficient paediatric nurses will be required for all areas of expansion including perioperative services, Close Observation, Paediatric ED etc.
- e. An Enhancement Plan being progressed for close observation, SCN and ambulatory care staffing requirements.
- f. There is currently an increase in new graduates intake and casual staff, with training programs being conducted.
- g. Transition funding will be require to increase the current workforce, including new graduate and mid-level positions. New staff will require appropriate training.

24.7. Technology

- a. The multidisciplinary clinical handover room will require patient journey boards.
- b. Paediatric patient entertainment systems will be separate to clinical information systems.
- c. Technology solutions for education resources and programs can be coupled with the patient entertainment system.
- d. Medical records will be moving to an electronic system in the future.
- e. Meeting rooms and gym spaces should be telehealth capable. Consideration should be made for using technology to aide interpreter services.
- f. An appropriate security system to minimise risk of theft of babies from the Unit will be required. This may include an electronic patient tagging system.

24.8. Change Management

- a. The development of new services such as palliative care and pain management will commence.
- b. Additional Allied health Services to enhance clinical care and improve outcomes for children such as Diversional Therapy and music therapy will be developed.
- c. Expansion of existing services including extending Paediatric Ambulatory Care Service to include short stay and HITH.
- d. Some ambulatory services could be located offsite in the Oran Park IHH.
- e. Development of child protection services.
- f. A Close Observation Unit will be included in the inpatient component of the service and will require up skilling of staff and appropriate governance structures in place.
- g. The development of fast track subspecialty Paediatric Outpatient Services.
- h. The further development of dedicated Paediatric emergency services.
- i. Surgical services will be networked with the Sydney Children's Hospital Network in a hub and spoke arrangement.

- j. Allied health staff will require upskilling. This will require a strong linkage with universities to attract new graduates.
- k. Strong links with Sydney Children's Hospital Network will be require to appropriately upskill staff and describe new ways of working with new types of patients.
- l. Future services will include gastroenterology and bring in nuclear medicine, EEG, bone scans in-house and paediatric elective surgery services including ENT, ophthalmology, upper GIT, orthopaedics, plastics and reconstructive surgery.
- m. Paediatric Assessment Services and Paediatric Psychiatry Services will be enhanced with improved links to Mental Health & Drug Health services.
- n. A multidisciplinary eating disorder unit providing inpatient and ambulatory services will be established.
- o. Paediatric Ambulatory Services (PACS) will be linked with Emergency Services.
- p. Subspecialty clinics including chronic and transition care, endocrinology, gastroenterology, orthopaedics, dermatology, physical disabilities, multidisciplinary overweight and obesity, renal, palliative care and respiratory medicine including sleep studies will be developed and enhanced.
- q. A full time multidisciplinary Developmental Diagnostic Service will be enhanced and further developed.
- r. A number of specialty outreach clinics will be provided in residential growth areas to facilitate access.
- s. Services in adolescent medicine including development of services with associated treatment and therapy services for adolescents will be developed.
- t. Community paediatricians will provide Community Medical Services to at-risk young people.
- u. Services will be provided to young people with chronic conditions, including those transitioning to adult care.
- v. Development of health facilities closely linked with universities to ensure capacity to expand as a tertiary facility i.e. Campbelltown Hospital affiliation with Western Sydney University.
- w. Consideration should be given to the role charities and volunteers can play in the enhancement of paediatric care.

25. AMBULATORY AND OUTPATIENT PAEDIATRICS

25.1. Scope of Service

- a. The service will provide a number of treatment spaces as outlined in the capacity table, predominantly for bookable and planned appointments.
- b. Some non-inpatient planned services will be delivered within the Ambulatory Care Centre via a nursing or medical led model of care. Short stay emergency patients will predominantly be seen in the unit as short stay patients.
- c. Allied health led outpatient services will be provided for complex, medical patients using a multidisciplinary, family centred model of care with multiple therapists present concurrently.
- d. Outpatients spaces are for all services including medical, surgical, allied health and any other services that require a consultation room or similar environment.
- e. Paediatric Ambulatory Care Service (PACS) has 8 major categories of services including:
 - i. HiTH
 - ii. Chronic & Complex Case Management
 - iii. ED & Unit Discharge Phone Support
 - iv. Acute Medical Review Clinic
 - v. Paediatric Short Stay Unit
 - vi. Medical Infusion Centre
 - vii. Burn, Wound and Minor Surgical Care Clinic
 - viii. SCHN Tertiary Shared-Care / Outreach Services (eg. Haematology/Oncology Satellite Unit)
 - ix. After-hours rostering of PACS RNs in the ED.
- f. All outpatient-type appointments will be provided from this area. ENT and Ophthalmology may require a different type of room and may be located in the adult area with scheduled times for paediatric patients.
- g. Renal Services are excluded from the scope of this service and is outlined elsewhere in the brief.
- h. Paediatric allied health unit services include:
 - i. Medically vulnerable infant follow-up
 - ii. Rapid discharge support
 - iii. Hospital avoidance services (feeding clinics, equipment prescription)
 - iv. Plaster, splinting clinics and orthopaedics
 - v. Pre-diagnostic complex therapies
 - vi. Multi-disciplinary services- Occupational therapy, physiotherapy, speech pathology, and dietetics
 - vii. Tertiary shared allied health care
 - viii. Palliative services.
- i. The child assessment team is a separate unit that provides one-off assessments for children with developmental vulnerabilities. It is currently staffed by a developmental paediatrician, an occupational therapist, a social worker and a speech pathologist.
- j. The scope of services may change in the future with the expanding role of the non-government sector and increasing collaboration between public sector and other providers.

25.2. Model of Care

- a. The model of care for all ambulatory services will focus on enhancing the integrated patient journey from acute, subacute and ambulatory care services to community based or outpatient based services in partnership with community health services, NGOs, Medicare Locals and other health providers.
- b. The integrated model of care will work to:

- i. Integrate assessment and care coordination of patients to create a better flow of patients across the continuum and between settings.
 - ii. Provide ambulatory care services to potentially avoid hospitalisation for some impairments and facilitate an earlier discharge from hospital.
 - iii. Provide ambulatory care services enabling a structured program and continuation of care following a stay in the acute or subacute setting.
 - iv. Facilitate and enhance integrated research and educational activities.
- c. Ambulatory services will be delivered by a range of practitioners including medical, nursing and allied health staff working in multidisciplinary teams. However, the ambulatory service is currently predominantly a nursing lead model of care while the outpatient area is either a medical or allied health model of care.
 - d. Paediatric Allied Health currently functions as a singular unit providing assessment and interventions to vulnerable infant or acutely unwell children and adolescents or rehabilitation for paediatric patients.
 - e. Paediatric allied health services provide integrated, immediate services to acutely unwell children and children without a diagnosis to prevent hospital admission and maximise transition to a community setting.
 - f. It should be noted that demand for ambulatory services will increase over time as models of service delivery change. Services that were traditionally provided as multi-day inpatient episodes of care are increasingly provided as day only or 'ambulatory' episodes of care. Alternatives to hospitalisation such as rapid review clinics, multidisciplinary clinics, allied health specialist services, procedural clinics and ambulatory treatments will increasingly require accommodation in areas designed to maximise this level of care.
 - g. Design flexibility also needs to ensure that minor procedures involving light sedation and/or local anaesthetic and a short recovery period will be increasingly performed in treatment rooms within the Ambulatory Care Centre. Clinical care will be aligned with the Australian & New Zealand College of Anaesthetists Guidelines for Diagnostic & Interventional Medical Dental & Surgical Procedures. (Note: procedures requiring sedation, general anaesthetic and/or extended recovery period will be performed in operating rooms within the Perioperative Unit).
 - h. There is significant allied health input into the paediatric population requiring paediatric gym space and treatment areas adjacent to the ambulatory and outpatient areas. The paediatric allied health area has specific functional requirements to facilitate specialised and team based interventions. These are described in specific design requirements within this chapter.
 - i. The PACS area is utilised as an overflow of ED and Inpatient unit in a disaster situation.

25.3. Operational Description

25.3.1. Operating Hours

- a. Hours of operation for the ambulatory care unit will be 14 hours or more per day and up to 7 days per week. Currently the service operates from 8.00am to 6.30pm 7 days per week

25.3.2. Access, Admission and Discharge/Transfer

- a. The day and outpatient unit will be located in the Paediatric Ambulatory Precinct with a dedicated reception and waiting area. Patients or their carers will self-register on arrival and wait in the waiting room or café area until called for treatment.
- b. A play area will be required and access to a shady outdoor therapeutic space would be beneficial for therapy and recreation
- c. Outpatient, allied health and PACS patients will come directly to the unit, not via the main Integrated Bookings Unit.
- d. Outpatient and PACS access is via booked admission from referral of a specialist (internal or external), the treating team or a GP. Some patients will be referred from the Emergency Department.
- e. Discharge will be through nurse / therapist / medical initiated discharge.
- f. Separation of paediatric and adult patients prior to admission will be required.

25.3.3. Clinical Support Services

25.3.3.1. Pharmacy Services

- a. The majority of patients will receive PBS prescriptions and the majority of medications will be provided during treatment.
- b. Due to the low levels of medication required, a combined clean utility and medication room will be suitable.

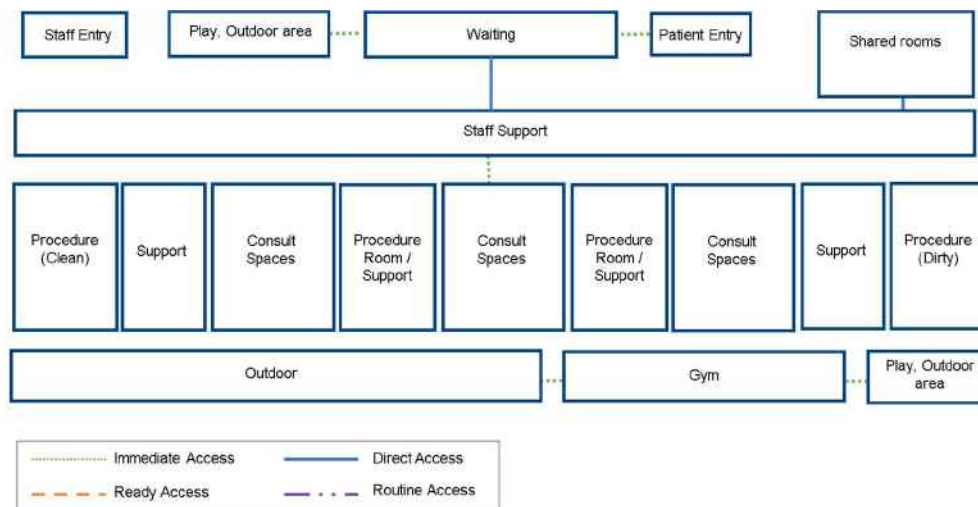
25.3.3.2. Pathology Services

- a. A blood refrigerator with Electronic Blood Release Systems (EBRS) will be required in the unit.
- b. An adjacency to the phlebotomy service is important to allow patients to have blood taken pre or post attendance.

25.4. Relative Location and Unit Configuration

25.4.1. Functional Relationships

- a. The main External Relationship in order of priority for Paediatric Ambulatory and Outpatients are:
 - i. The paediatric unit(s) - direct access
 - ii. Allied health - direct access
 - iii. A front entry - direct access
 - iv. Blood bank – ready access due to the collection of units of blood for transfusion
 - v. Pharmacy - ready access to both hospital pharmacy and retail
 - vi. MET team - ready access
 - vii. Emergency Department -- ready access.
- b. The proposed internal layout consists of 3 pods of consult spaces with 2 single rooms in each pod and a procedure room between two pods.



25.5. Specific Design Requirements

25.5.1. General

- a. The Ambulatory Care Centre design will ensure that there are opportunities to adapt and expand the facility as more services are delivered on an ambulatory basis. A key example is the increasing use of procedural and treatment rooms as a result of the improvements in anaesthesia and technology that shift the activity from dedicated same day procedural areas to outpatient clinic areas. Pods of 10 and 12 with a shared support will allow expansion into a new pod later.
- b. A standard design for rooms will be promoted to support flexibility and functionality – this must include adequate space for family members to be involved in the care. The design of some consultation spaces will depend on the need for specialised equipment.

- c. All pods require access to shared weigh bays for supervised weight & height measurement – these bays will be able to include wheelchair scales and a baby weigh / length area.
- d. Discreet staff access will be required between the consultation and treatment spaces and the shared utility and treatment areas.
- e. Change rooms and changing tables will be designed with capacity for an adult weight limit.

25.5.2. Entry / reception

- a. The day unit will require a reception desk and waiting area. Patient check-in should be available at each door, providing wayfinding to the location of the ambulatory care pod.
- b. A reception function will be required for the area, predominantly for automated admission and discharge.
- c. Space for allied health administrative and clinical support will be required

25.5.3. Treatment Areas

- a. A mixture of enclosed and open rooms for consultation and treatment will be required. Two of the treatment spaces within each pod should be closed single rooms; one of which will require an ensuite.
- b. All rooms will require access to shared toilets.
- c. The two isolation rooms will also be used as patient holding bays. The rooms will be large enough to accommodate a trolley / bed and allow entry of a bariatric bed into the room. The rooms will also be used as holding bays for patients requiring transfer to an inpatient unit and for patients requiring procedures such as lumbar punctures.
- d. The PACS spaces should be separated for clean and dirty with potential for separation of flows in and out of these areas so that there is no cross between clean and dirty flows.
- e. Each patient bay must provide privacy whilst maintaining an ability to socialise if desired. The bay needs to be large enough to allow nursing access from both sides of the chair and for the patient to be accompanied by a visitor.
- f. The rooms will require a larger parent / carer area due to the number of relatives anticipated to be attending with the patient.
- g. Medical gases will be provided to chair / treatment spaces in accordance with the AusHFG.
- h. Sufficient power points for the permanent charging of infusion pumps at each chair / bedside will be required.
- i. A large amount of allied health paediatric trial equipment will be stored within the area.
- j. The child assessment team (medical and allied health) are a separate service requiring access to two-four treatment rooms with viewing mirror and adequate space for 4 therapists, a preschool child and family. The child assessment team is expected to increase its capacity in future to include school aged children.

25.5.1. Allied Health Treatment Areas

- a. Allied health treatment spaces should be designed to support flexibility and functionality, safety of children and group interventions.
- b. The paediatric allied health area has specific functional requirements to facilitate specialised and team-based interventions, including:
 - i. Some consultation rooms with audio-visual capability and one-way mirrors or other technology that allows linkage to another room;
 - ii. Open paediatric gym space that allows for large group interventions and gross motor and movement treatment with suspended equipment points in the ceiling, gym equipment and trial of bulky wheelchairs and specialised equipment. Space for multiple bulky equipment pieces at one time will be required as the space will also be used for the trial of different types of equipment in the one session. Ideally this space will be configured in two open gym spaces able to be partitioned or joined.
 - iii. Three group treatment rooms that are large enough to accommodate multiple professionals, families and specialised equipment, approximately 5 to 10 people.
 - iv. Plaster and splinting areas;
 - v. An area to bath infants in pavlik harnesses;

- vi. Large storage spaces for bulky specialised equipment that will be utilised regularly throughout the day for multi-patient use, for example wheelchairs and standing frames;
 - vii. Individual consult room for counselling and bereavement support from social work;
 - viii. Clinical kitchenette access for feeding therapies;
 - ix. Additional workrooms depending on the number of allied health practitioners in this area;
 - x. Sinks in all treatment spaces;
 - xi. Adequate power points located above child height;
 - xii. Viewing mirrors to facilitate observation and training of students.
- c. The child assessment team (medical and allied health) are a separate service and will require access to two treatment rooms with viewing rooms and adequate space for 4 therapists, a preschool child, and family.

25.5.2. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. The staff establishment may include:
 - i. Medical specialists - 1 to 2 per pod visiting
 - ii. Junior medical staff - 1 per pod visiting
 - iii. Nursing staff - 3 per pod permanent
 - iv. Allied health staff including, physiotherapy, social work, occupational therapy, speech pathology or dietitian – 12 total allied health staff permanent
 - v. Administrative staff 1 to 2 per pod permanent
 - vi. Clinical support staff including patient services assistants – visiting
 - vii. Child Assessment Team – 2 developmental paediatrician's permanent, 1 JMO permanent, 4 allied health visiting
 - viii. Psychologists and neuropsychologists from the Development Assessment Team.

25.6. Workforce Issues

- a. There will be a significant increase in workforce requirements.
- b. Additional clinical psychologists and allied health workforce will be required for the developmental assessment team.

25.7. Technology

- a. An automated self check-in system will be available to allow patients to check in themselves and receive notification when the area is ready for admission.
- b. Ability to integrate with personal devices (eg. SMS notification) is ideal.
- c. Ability to integrate with hospital wide systems is crucial.

25.8. Change Management

- a. The opportunity exists to develop new models of care for ophthalmology and adult ophthalmology.
- b. Integrated care will include multiple admission and multiple ED admission review.
- c. Increasing use of telemedicine is a strategy for reducing ED attendance.
- d. Set targets and review targets (2 admissions per 6 month or 4 admission per 2 year period).
- e. The approach for continuum of care will be broadened.
- f. There should be effective processes to facilitate streamlined and timely access and patient flow.
- g. Develop greater options for community (a possibility of a step-down facility).

- h. Procedure room may be considered for medical day or day surgery for abscess etc.
- i. District will investigate a bus and transport services for patients to facilitate admission and discharge.
- j. Most common and complex flows are to be further explored:
 - i. Paediatric patients from Outpatient to Ambulatory
 - ii. PACS from Allied Health
 - iii. Inpatient services for adolescent mental health who need medical procedures - adjacency to Adolescent Mental Health and Paediatrics
 - iv. Allied health patients will increase in acuity, complexity and number of tertiary service transfers.

26. AMBULATORY AND DAY MEDICAL

26.1. Scope of Service

- a. The service will provide predominantly bookable and planned appointments.
- b. The area will comprise of 26 treatment spaces for patients that are general day medical patients and 14 spaces for aged care / rehabilitation day patients.
- c. The proposed utilisation of the 14 aged care treatment spaces includes:
 - i. 4 consultation spaces
 - ii. 10 treatment spaces
- d. These would be directly collocated with a gym space for rehabilitation. Other services will be provided in the aged care / rehabilitation area, predominantly through an allied health led model. These spaces will therefore be designed with aged care considerations but not exclusively aged care to allow future flex capacity for other patient types as needed.
- e. A number of services will be delivered within the Ambulatory and Day Medical Unit via a nursing led model of care although some patients may be under the care of a medical officer.
- f. The service will provide General Ambulatory and Day Medical designated procedures for infusions and minor procedures, including:
 - i. Plasmapheresis
 - ii. Intravenous therapy
 - iii. Long term regular therapy for patients with serious chronic disease;
 - iv. Provision of a safe environment for potentially lethal allergy testing and immunotherapy
 - v. Intravenous infusions for autoimmune disease
 - vi. Intravenous antimicrobial therapy
 - vii. Administration of experimental cytokine and other immune-based therapy
 - viii. Laser and phototherapy for dermatology patients
 - ix. Provision of education for patients
 - x. Wound care
 - xi. Biopsies
 - xii. Changing tubes
 - xiii. Hospital in the home services where the patient attends for one of the above services but is admitted to home
 - xiv. Invasive diagnostic and therapeutic therapies
 - xv. Urology procedures
 - xvi. Minor ophthalmological procedures.
- g. Multidisciplinary staff will provide diabetes and endocrinology as a predominantly ambulatory service. This will include patient and community education, screening of diabetes related complications with services such as retinal photography and an on-site podiatrist, in addition to rapid access and out of hours clinics.
- h. Some ambulatory care services will be located in the 24 hour areas of the hospital, including:
 - i. Same day surgery (which will be located with the Perioperative Unit)
 - ii. Women's Health Day Stay Unit (which will be collocated with the Birthing Unit).
- i. Excluded from the scope of this service are the following services, which are outlined in other chapters:
 - i. Renal
 - ii. Chemotherapy
 - iii. General Outpatients
- j. The scope of services may change in the future with the expanding role of the non-government sector and increasing collaboration between public sector and other providers.

26.2. Model of Care

- a. The model of care for all ambulatory services will focus on enhancing the integrated patient journey from acute, subacute and ambulatory care services to community based or outpatient based services in partnership with community health services, NGOs, Medicare Locals and other health providers.
- b. The integrated model of care will work to:
 - i. Integrate assessment and care coordination of patients to create a better flow of patients across the continuum and between settings;
 - ii. Provide ambulatory care services to potentially avoid hospitalisation for some impairments and facilitate an earlier discharge from hospital;
 - iii. Provide ambulatory care services enabling a structured program and continuation of care following a stay in the acute or subacute setting;
 - iv. Facilitate and enhance integrated research and educational activities.
- c. Ambulatory services will be delivered by a range of practitioners including medical, nursing and allied health staff working in multidisciplinary teams. However, it is predominantly a nursing led model of care.
- d. It should be noted that demand for ambulatory services will increase over time as models of service delivery change. Services that were traditionally provided as multi-day inpatient episodes of care are increasingly provided as day only or 'ambulatory' episodes of care. Alternatives to hospitalisation such as rapid review clinics, multidisciplinary clinics, procedural clinics and ambulatory treatments will increasingly require accommodation in areas designed to maximise this level of care.
- e. Design flexibility also needs to ensure that minor procedures involving light sedation and/or local anaesthetic and a short recovery period will be increasingly performed in treatment rooms within the Ambulatory and Day Medical Unit. Clinical care will be aligned with the Australian & New Zealand College of Anaesthetists Guidelines for Diagnostic & Interventional Medical Dental & Surgical Procedures. (Note: Procedures requiring sedation, general anaesthetic and/or extended recovery period will be performed in operating rooms within the Perioperative Unit).

26.3. Operational Description

26.3.1. Operating Hours

- a. Hours of operation for the Ambulatory and Day Medical Unit will be up to 12 hours per day and up to 7 days per week. Currently the service operates from 8:00am to 5:00pm Monday to Friday.

26.3.2. Access, Admission and Discharge / Transfer

- a. The day unit will be located in the Ambulatory Care area with a dedicated reception and waiting area. Patients or their carers will self-register on arrival and wait in the waiting room or café area until called for treatment.
- b. Day medical patients will come directly to the unit, not via the main Integrated Bookings Unit. Day medical patient access is via booked admission from referral of a specialist or a representative of the treating team and GP for hospital in the home service. Some patients will be referred from the Emergency Department.
- c. Discharge will be through nurse initiated discharge.
- d. If collocated, separation of paediatric and adult patients prior to admission will be required, however sharing of services may occur.

26.3.3. Clinical Support Services

26.3.3.1. Pharmacy Services

- a. The majority of patients will receive PBS prescriptions and the majority of drugs will be provided during treatment.
- b. Due to the low levels of medication required a combined Clean utility and Medication room will be suitable.

26.3.3.2. Pathology Services

- a. Adjacency to phlebotomy or a visiting phlebotomist will be required.

- b. Adjacency to the phlebotomy service is important to allow patients to have blood taken pre or post attendance.

26.3.3.3. Imaging Services

- a. If imaging is required, the patient will be sent to imaging for the procedure and returned to ambulatory service for recovery; alternatively a mobile x-Ray will be utilised in the procedure room.
- b. A room within Ambulatory care for image intensifier should be considered.

26.4. Relative Location and Unit Configuration

26.4.1. Functional Relationships

- a. The main external relationship in order of priority for Ambulatory Care are:
 - i. A front entry - direct access
 - ii. Emergency Department -- ready access
 - iii. Outpatients
 - iv. Pharmacy - ready access to both hospital pharmacy and retail
 - v. MAU - ready access
 - vi. Podiatry and Allied health - ready access
 - vii. MET team - ready access
 - viii. Pathology and Blood bank (or blood fridge if not adjacent) – ready access due to the collection blood products.
- b. The following diagram shows the internal relationships

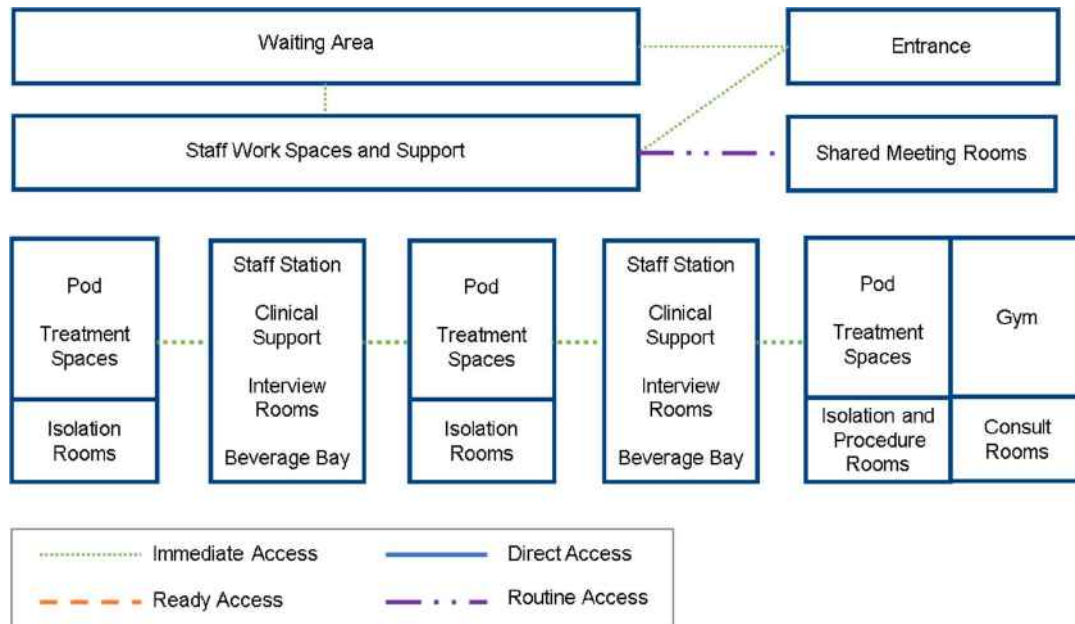


Figure 9 Ambulatory and Day Medical internal relationships

26.5. Specific Design Requirements

26.5.1. General

- a. The Ambulatory and Day Medical Unit design will ensure that there are opportunities to adapt and expand the facility as more services are delivered on an ambulatory basis, including activities that are used to be carried out in dedicated

same day procedural areas. An isolation room is proposed to be designed with procedural specifications to allow this future proofing.

- b. An isolation room with bariatric requirements including a ceiling hoist will be required. An ensuite with a toilet suitable to 350kg is preferable (to be detailed in detailed design).
- c. A standard design for rooms will be promoted to support flexibility and functionality – this must include adequate space for family members to be involved in the care. Design for some consultation spaces will depend on the need for specialised equipment.
- d. All pods will require access to shared weigh bays for supervised weight and height measurement – these bays will be able to include wheelchair scales.
- e. Discrete staff access between the consult and treatment spaces and the shared utility and treatment areas will be required.

26.5.2. Entry / Reception

- a. The day unit will require a reception desk and waiting area. A reception function will be required for the area but predominantly for automated admission and discharge.
- b. Patient check-in should be available at each door, providing wayfinding to the location of the ambulatory care pod.

26.5.3. Treatment Areas

- a. The total of 40 ambulatory and aged care treatment spaces will be designed as 3 pods:
 - i. Pod 1 includes:
 - 10 treatment spaces
 - 2 isolation rooms with ensuites
 - 2 additional and separate ensuites to be accessible by the 10 treatment spaces
 - ii. Pod 2 includes:
 - 10 treatment spaces
 - 2 isolation rooms with ensuites
 - 2 additional and separate ensuites to be accessible by the 10 treatment spaces
 - iii. Pod 3 will be designed as flexible spaces, including:
 - 4 consult rooms
 - 10 treatment spaces
 - 1 isolation room with special ensuite and bariatric capability
 - 1 isolation room with ensuite designed with procedure room specifications for future flexibility
 - 2 additional and separate ensuites to be accessible by the 10 treatment spaces

Pod 3 will require immediate adjacency to a gym space to facilitate aged care and other rehabilitation services such as in-reach orthotics.
- b. Gym spaces will preferably have access to outdoor spaces such as therapeutic gardens facilitating patients rehabilitation through daily activity training with, for example, clothes lines, stairs and cars.
- c. The 3 pods will have access to 2 shared support spaces with weigh bays, interview rooms, staff stations and workrooms, beverage bays and some clinical support.
- d. One isolation room will have bariatric capability. For future proofing, all isolation rooms will allow entry of a bariatric bed into the room. The isolation room will also be used as holding bays for patients requiring transfer to an inpatient unit and for patients requiring procedures such as lumbar punctures.
- e. One isolation room will be designed to the size and function of a procedure room to support future flexibility of service delivery.
- f. Each patient bay must provide privacy whilst maintaining an ability to socialise if desired. The bay needs to be large enough to allow nursing access from both sides of the chair and for the patient to be accompanied by a visitor.
- g. Medical gases will be provided to chair / treatment spaces in accordance with the AusHFG.

- h. Power points for the permanent charging of infusion pumps at each chair / bedside will be required.
- i. Access to a plaster room will be required.

26.5.4. Staff Amenities and Work Spaces

- a. Indicative work space requirements will be considered in the context of activity based working and will be informed by the workforce plan.
- b. The staff establishment may include:
 - i. Medical specialists - up to 3 per pod visiting
 - ii. Junior medical staff - up to 3 per pod visiting
 - iii. Nursing staff - 4 per pod permanent
 - iv. Allied health staff including, physiotherapy, social work - approximately 5 per pod
 - v. Administrative staff - 1 to 2 per pod permanent
 - vi. Clinical support staff including patient services assistants – visiting.

26.6. Workforce Issues

- a. There will be a significant increase in workforce requirements due to the large increase in size of this area.
- b. There will be training and education requirements for new systems.
- c. There will be training requirements for remote monitoring.

26.7. Technology

- a. The opportunity exists to introduce an automated self check-in system to allow patients to check in themselves and receive notification when the service is ready for admission.
- b. There are subsequent technology implications e.g. integrated with personal devices – e.g. SMS alerts.
- c. There will be remote monitoring and tele-health requirements.

26.8. Change Management

- a. Relationship review will be required between the medical day area at Camden and other sites and the Ambulatory and Day Medical Unit at Campbelltown.
- b. Change in self check-in may be implemented prior to any move to new facility.
- c. There will be significant increase in the volume of work.
- d. Research may be increased in this area.
- e. Most common and complex flows are to be further explored:
 - i. Patient presenting to the Emergency Department and assessed as suitable for Ambulatory and Day Medical Unit or Hospital in The Home and come to the Emergency Department - both Adult and Paediatrics.
 - ii. Patient sent directly from GPs - patient wayfinding requirements.
 - iii. Adult Ambulatory Care for Mental Health - complex but occasionally done.
 - iv. Bariatric patient flow within the Ambulatory and Day Medical Unit - may need one hoist.

27. OUTPATIENT SERVICES

27.1. Scope of Service

27.1.1. Adult

- a. The service will provide a consulting room service as outlined in the capacity table predominantly for booked and planned appointments for outpatients and pre-admission clinics.
- b. Most services will be delivered within the Outpatients area via a medical led model of care with some input from nursing and clerical staff on admission and discharge to the area.
- c. Four of these rooms would be Ophthalmology / ENT rooms which would be slightly larger to allow multi-use for adult and paediatrics and other specialty use.
- d. Outpatient services will cover all specialities. There is future potential to relocate the fracture clinic currently located at Camden to Campbelltown Hospital, for which a general x-ray collocation would be preferable. The multidisciplinary High Risk Foot Service will be re-located from Camden to Campbelltown in line with the LHD approved model of care
- e. A number of specialists clinics will be placed offsite as planning has shown a shifting of services from Campbelltown Hospital to Camden Hospital and other sites. Planning shows the development of services at other sites to relocate select services off the Campbelltown Hospital campus e.g. renal dialysis, chemotherapy, dental, day surgery, clinics, allied health, primary and community care, urgent care clinics.
- f. Excluded from the scope of this service are the following services which are outlined in other chapters:
 - i. Renal Dialysis
 - ii. Chemotherapy clinics
 - iii. Ambulatory and Day Medical services
 - iv. Paediatric Services.

27.1.2. Maternity and Gynaecology

- a. The service will provide treatment spaces for assessment, booked and planned services as outlined in the Clinical Services Plan. The majority of services provided will be ante-natal services, however some post-natal and gynaecology services will also be provided, including Early Pregnancy Assessment Service (EPAS) and Foetal Maternal Day Assessment Unit (FMAU).
- b. The Foetal Maternal Day Assessment Unit (FMAU) service is proposed to operate from Outpatient Services.
- c. Gynaecology clinics will offer consultations for gynaecology conditions such as menstrual disorders, menopause symptoms, female urinary incontinence, genital prolapse, contraception, infertility, etc.
- d. General gynaecology procedures including colposcopy, diagnostic hysteroscopy, cervical biopsy, removal of cervical polyps will be undertaken in a surgically clean area for minor procedures within the ambulatory care area or in the Day Surgical Unit.

27.1.3. Allied Health

- a. The Allied Health service provides outpatient allied health led services focusing on hospital avoidance, prevention of re-admissions, supported discharge, immediate time limited post-acute rehabilitation and crisis response
- b. Services bring together the skills of various disciplines to manage complex patients as an alternative to inpatient admission.
- c. The podiatry service will have an increased presence on site as part of the multidisciplinary High Risk Foot Service across both inpatient and outpatient areas

27.2. Model of Care

- a. The model of care for all outpatient services will focus on enhancing the integrated patient journey from acute and ambulatory / outpatient services to community based services in partnership with community health services, NGOs, GPs and other health providers.
- b. The integrated model of care will work to:
 - i. Integrate assessment and care coordination of patients to create a better flow of patients across the continuum and between settings;
 - ii. Provide outpatient care services to potentially avoid hospitalisation for some impairments and facilitate an earlier discharge from hospital;
 - iii. Provide outpatient care services enabling a structured program and continuation of care following a stay in the acute or subacute setting;
 - iv. Provide outpatient specialist services that are not available in a community setting;
 - v. Facilitate and enhance integrated research and educational activities.
- c. Outpatient services will be delivered by a range of practitioners including medical, nursing, midwifery and allied health staff working in multidisciplinary teams in addition to Allied Health discipline specific interventions.
- d. Other alternative models of care are also growing with such programs as the follow-up phone call post discharge already implemented. The Campbelltown Hospital will consider further expansion of telephone call and advice (phone coaching, assessment).
- e. Model of care will include automated self check-in and referrals.
- f. The model of care for allied health will include the provision of inpatient, outpatient, home visiting and outreach allied health services. There will be close collaboration with private providers and community services. The model of care will be a coordinated, multidisciplinary approach with services provided on a one-to-one or group basis depending on the discipline and patient needs.
- g. Increasingly allied health care has a focus on an educative model and incorporates:
 - i. Group sessions for peer support
 - ii. Group exercise classes and targeted rehabilitation programs for specific diseases e.g. cardiac and respiratory rehabilitation
 - iii. Self-management and carer education programs.
- h. There will be a greater focus on community based antenatal and postnatal services, including:
 - i. Expansion of the GP shared care program
 - ii. Access to genetic counselling on-site
 - iii. Provision of home-based antenatal monitoring for at-risk women
 - iv. Expansion of community clinics like those currently operating in Macquarie Fields and Macarthur Square to improve access for women in other areas
 - v. Provision of special programs for higher risk mothers including Aboriginal midwifery, drug health and mental health services etc.
 - vi. A phone service offering advice and support
 - vii. Provision of education kiosks in ambulatory areas.
- i. The High Risk Foot Service will provide integrated multidisciplinary services for patients with diabetes related foot ulcers, infections and lower limb ischaemia. It will work closely with diabetes services, HITH, vascular surgery on a hospital avoidance/minimisation model
- j. Teaching and meeting spaces will be required within the area due to the large amount of teaching occurring in this space.

27.3. Operational Description

27.3.1. Operating Hours

- a. Hours of operation for the outpatient unit will be up to 12 hours per day and up to 7 days per week. Currently the service operates from 7:30am to 5.30pm Monday to Friday.

27.3.2. Access, Admission and Discharge / Transfer

- a. The outpatient units will be located in the ambulatory precinct with a dedicated reception and waiting area. Patients or their carers will self-register on arrival and wait in the waiting room or café area until called for treatment.
- b. Allied Health outpatient services are currently housed in Building D, within both the
 - i. Allied Health Outpatient area
 - ii. Within the general outpatient consult rooms
- c. Outpatients will come directly to the unit. All patients will have booked appointments on the basis of a valid referral and will therefore self-register on arrival.
- d. Discharge will be at the end of the consultation with a clerical discharge and any future appointments made. Self-initiated appointments may also occur.
- e. Separation of paediatric and adult patients prior to admission will be required, however, sharing of services may occur.

27.3.3. Clinical Support Services

27.3.3.1. Pharmacy services

- a. The majority of patients will receive PBS prescriptions and the majority of drugs stored will be provided during treatment.
- b. Due to the low levels of medication required a combined clean utility and medication room will be suitable.
- c. Adjacency to pharmacy would be preferable as patients may be directed to appropriate pharmacy depending on medication prescribed.

27.3.3.2. Pathology services

- a. Adjacency to the phlebotomy service or an area within the unit to allow phlebotomy is important to allow patients to have blood taken pre or post attendance.

27.3.3.3. Imaging services

- a. If fracture clinic is moved to this area, a general x-ray machine will be required to be adjacent to the area.
- b. If fracture clinic remains in its current location, patients will be directed to the imaging service if imaging is required.

27.3.4. Non-Clinical Support Services

- a. Fabric seats will not be provided in the waiting area.

27.4. Relative Location and Unit Configuration

27.4.1. Functional Relationships

- a. The main external relationships in order of priority for Outpatients are:
 - i. Phlebotomy – immediate access or within the unit due to the number of blood tests ordered on outpatients
 - ii. A front entry / car parking - direct access
 - iii. For maternity outpatients - direct access to the maternity unit / birth suites
 - iv. Café/Retail - ready access
 - v. Ambulatory and Day Medical - ready access
 - vi. Clinical Measurements Unit - ready access
 - vii. Aboriginal liaison -- ready access
 - viii. Retail pharmacy - ready access
 - ix. Cashiers office – routine access.
- b. The internal relationship diagram is as follows:

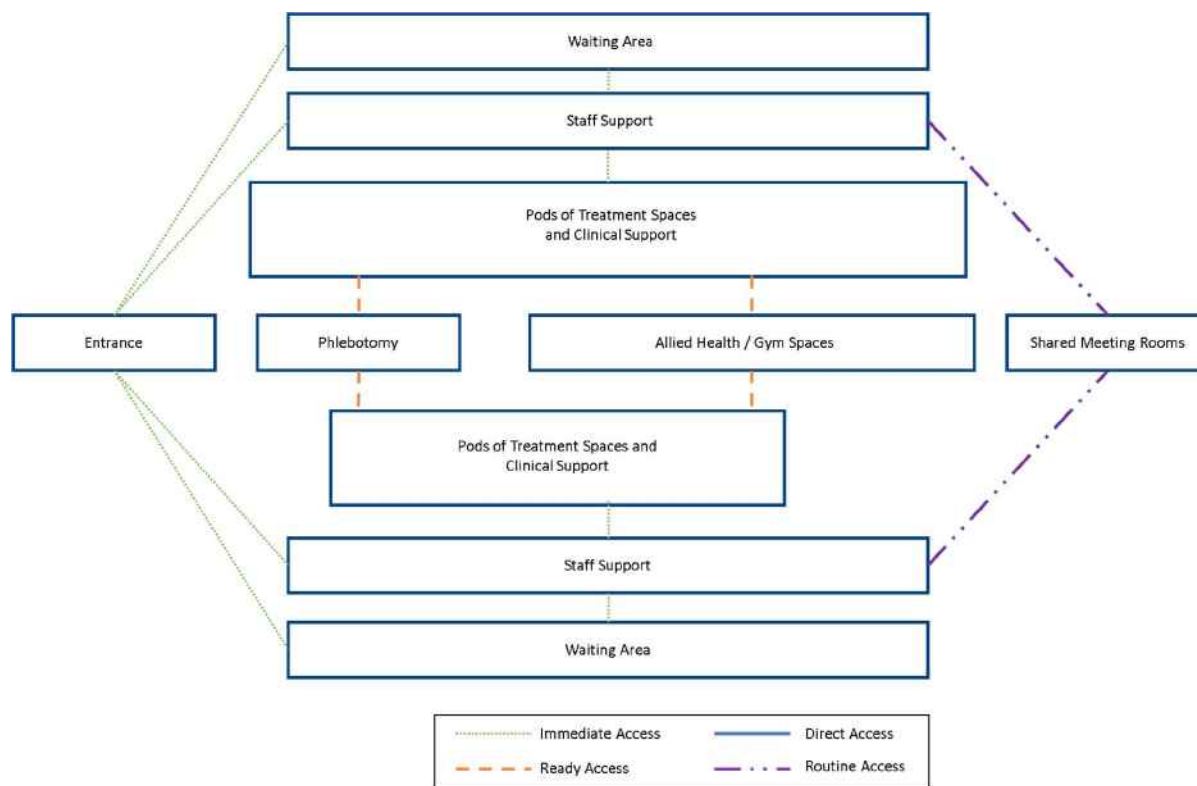


Figure 10 Outpatient Services internal relationships

27.5. Specific Design Requirements

27.5.1. General

- The Outpatient design will ensure that there are opportunities to adapt and expand the facility as more services are delivered on an outpatient basis. Pods of 10 with a shared support will allow expansion with a future new pod of 10.
- A standard design for rooms will be promoted to support flexibility and functionality – one room per pod will be larger to allow large family groups or a large number of clinicians to assess the patient. Some consultation spaces will be specifically designed dependent on, for example, the need for bariatric and specialised equipment.
- All pods require access to shared weigh bays for supervised weight & height measurement – these bays will be able to include wheelchair scales.
- Discreet staff access between the consult and treatment spaces, and between the shared utility and treatment areas will be required.
- One accessible toilet with change table facilities will be required at each end of the area.
- Access to an ADL kitchen will be required in adult and paediatric areas for clinical assessments.
- A patient IT helpdesk will be required to assist in the streamline technology integration for service delivery eg. Video, app connectivity.

27.5.2. Entry / Reception

- Paediatric and adult waiting areas will be separate. A design solution for this will be further detailed in design stage for a considerate and paediatric appropriate approach to waiting which promotes an integrated paediatric and adult service.
- The outpatient area will require a reception desk and waiting area. Each reception desk should be able to process 2 pods and enable 2 staff with an enclosed area adjacent to an additional staff of 3.

- c. An additional separate and secured entry for after-hours attendance for maternity patients will be required.
- d. There will be no fabric seating in reception and clinic areas for infection control management.
- e. An Outpatients / Ambulatory switchboard/call centre is proposed to manage the volume of calls received. Location to be determined in design, this may be positioned in the clerical workrooms, workstations, or reception/staff stations.

27.5.3. Treatment Areas

- a. The patient treatment area within the outpatient area will be comprised of pods of 10. Two rooms within each pod should be larger than normal and have two doors for egress. All rooms will require access to toilets.
- b. Medical gases will be provided to each consultation room in accordance with the AusHFG.
- c. The location of the examination couch should allow examination of the patient from the patient's right side.
- d. The ante-natal / gynaecology / EPAS pod would ideally be in groups of 10
- e. The ante-natal area will require 2 ultrasound rooms per pod.
- f. The ante-natal / gynaecology / EPAS areas will require access to two procedure / treatment rooms with ensuites.
- g. A procedure room will be required for non-anaesthetic procedures including IUD insertions, bioscopies.
- h. Ultrasound rooms will be required within this service for the assessment of Maternal Foetal Medicine patients.
- i. Ante-natal clinics will be required to be adjacent to a group room for conducting ante-natal classes.
- j. Allied Health treatment spaces currently are as follows
 - i. Social work, Speech Pathology and dietetics sessions can be conducted in either consult/interview/treatment rooms
 - ii. Specific clinic space is currently designated for Lymphodema with 2 treatment rooms including bariatric plinth and adjoining ensuite.
 - iii. The high risk foot clinic will be re-located from Camden hospital to Campbelltown Hospital. The High Risk Foot Service should be an open plan partitioned space to allow for the flow of different members of the MDT and equipment to be used for individual clients
 - iv. Specific clinic space designated for physiotherapy including two gym spaces, designated musculoskeletal section with curtained spaces for 10 plinths, designated women's health treatment room with closed doors
- k. The High Risk Foot Service requires larger treatment rooms to accommodate for procedures (wound debridement, vascular assessment) and simultaneous multidisciplinary consultation. It requires sterile wound supplies, as well as access to an appropriate place to store dirty instruments whilst awaiting collection from CSSD for reprocessing.

27.5.4. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
- b. The staff establishment may include:
 - i. Medical specialists (or midwife in maternity or specialist nursing) - 1 to per consultation room visiting
 - ii. Junior medical staff - up to 1 per consultation room visiting
 - iii. Student - up to 1 per consult room visiting
 - iv. Nursing staff - 1 per pod permanent
 - v. Allied health staff including, physiotherapy, social work, occupational therapy speech pathology, podiatry or dietitian - 3 to 5 per pod visiting
 - vi. Administrative staff - 2 per pod permanent
 - vii. Clinical support staff including patient services assistants – visiting.
- c. Separate allied health administration staff are currently employed and working to support the 6 allied health departments and will require appropriate space to conduct their duties.

- d. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan.

27.6. Workforce Issues

- a. There will be a significant increase in workforce requirements due to the large increase in size of this area.
- b. Training and education in new systems will be required.
- c. Moving tounits a 12 hour per day 7 day per week service will require additional financial/workforce support to fund coverage of these additional hours/penalty rates for Allied Health staff.

27.7. Technology

- a. An auto check-in system will be available to allow patients to check in themselves and then be called when the area is ready for admission.
- b. Further expansion of telephone call and advice (phone coaching, assessment) will be considered.
- c. Remote monitoring and tele-health will be utilised in this area.
- d. An automated referral system will be available.
- e. Handy access to printers for each pod will be considered within the pod.
- f. A phone hub for all calls is considered rather than each reception area receiving calls.

27.8. Change Management

- a. There will be finalisation of the types of outpatient clinics to be provided at Camden and Campbelltown.
- b. There is significant increase in volume of work.
- c. Self check-in will require significant change to business processes, including changes to inpatient referral processes.
- d. Call centre for outpatient appointments space will be required.
- e. Significant change management is required for ways of working among both clinical and non-clinical staff.
- f. Most common and complex flows are to be further explored:
 - i. Fracture clinic - present - radiology then back;
 - ii. GP referral - appointment booked- patient arrives -sees clinician - then to Radiology, phlebotomy and pharmacy (most common flow; some go to clinical measurements);
 - iii. Allied Health may have clashes with Medical review to the patient;
 - iv. Outpatient to Ambulatory care for both adult and paediatrics;
 - v. Met calls is complex as patient generally go the Emergency Department after Met call;
 - vi. Cashier is often required;
 - vii. Medicare ineligible patients require access to cashier as do patients who obtain loan equipment or pressure stockings;
 - viii. Patient is brought in by patient transport on a stretcher (No bed bay to be decanted into, at present patients arrive and check-in then transferred to the transit unit);
 - ix. Preference to have bed bay for waiting with one or two patients being overseen by a nursing staff station;
 - x. Antenatal flow: GP referral - assessment unit - unit or unit for pathology or pharmacy - referral to outpatients (Camden outpatients can be sent to Campbelltown).

28. ORAL HEALTH SERVICES

28.1. Scope of Service

- a. The scope of service for the Macarthur Centre for Oral Health (MCOH) (at Campbelltown Hospital) will be to provide assessment and treatment at a role delineation level of 6. The service will be accessed through:
 - i. South Western Sydney (SWS) LHD call centre as part of the NSW Priority Oral Health Program for public dental services;
 - ii. waiting list as per the Dental NPA Public Waiting List reduction strategy for SWSLHD;
 - iii. eligible patient referrals across SWSLHD through Oral Health Specialist Clinical Referral pathways and protocols including referrals from the Aboriginal Service, PHN, Refugee Health, FACS and NDIS.
- b. The dental services at Campbelltown Hospital will include a specific focus on Paediatric Dentistry and cancer support services in the initial phase of commissioning.
- c. The service will deliver community oral health services and hospital inpatient services.
- d. A consultation and liaison service will be provided within the hospital.
- e. Denture services will be outsourced.
- f. The MCOH will provide a range of preventative, restorative, and oral surgery treatments principally under local anaesthesia, relative analgesia / nitrous oxide, IV sedation at the Centre, and also surgical treatment under general anaesthetic through the perioperative department of Campbelltown Hospital.
- g. The MCOH will focus on developing a strong teaching and research role.

28.2. Model of Care

- a. The MCOH will be the hub of a 'Hub and Spoke' model with other SWSLHD Oral Health Clinics.
- b. There will be progressive investment in the "Population Oral Health Approach" through:
 - i. Capacity building of other health professionals;
 - ii. Partnership with other health providers;
 - iii. Engaging community participation in planning and consultative processes;
 - iv. Adopting evidence based oral health promotion activities.
- c. The MCOH will be located on the Campbelltown Hospital and will provide the full scope of both general and specialist services.
- d. Higher level services will be provided by visiting dental specialists.
- e. A Geriatric Oral Health Stream will be developed as part of the future services at MCOH.
- f. There will be strong linkages with teaching and research including University of Sydney, Faculty of Dentistry and Western Sydney University for undergraduate and postgraduate teaching and population health research and clinical trials.
- g. The development of strong clinical linkages between oral health and the medical specialities relies on the provision of responsive dental care including patients who require dental care as a component of an integrated medical treatment plan.
- h. Oral health services will provide support to a number of services at Campbelltown Hospital, including:
 - i. An inpatient consultation service;
 - ii. Assistance with surgical procedures (such as head and neck oncology);
 - iii. A consultation/liaison service to the Emergency Services in the case of oral trauma - emergency oral health care will be provided to patients presenting with trauma, uncontrolled haemorrhage of dental origin or systemic infection and/or facial swelling of dental origin;
 - iv. Direct admissions for eligible patients requiring dental restorations and extractions;
 - v. Paediatric dentistry services to admitted paediatric patients;

- vi. Integration of oral health into general health services e.g. antenatal care, aged care assessment etc. to permit early intervention of at risk patients;
- vii. Increase in the number of surgical procedures being undertaken;
- viii. Enhancement to the paediatric oral health services to cater for an increasing young population;
- ix. Consolidation of the community oral health services the Integrated Primary and Community Health Centres (IPCC);
- x. Provision of mobile domiciliary oral health services, including general dentistry services and services offered by dental hygienists to disadvantaged groups such as residential aged care facilities and similar;
- xi. Expansion of the outreach special care dentistry services, including links with the Division of General Practitioners to facilitate referral and access to oral health services;
- xii. A strengthened approach to oral health promotion and preventative care to reduce the burden of disease on individuals and the community.

28.3. Operational Description

28.3.1. Operating Hours

- a. The oral health service will operate from 8:00am to 4:30pm Monday to Friday with extended hours in the future. Access to an on-call facility will be provided for after-hours.

28.3.2. Access, Admission and Discharge/Transfer

- a. Admission will follow the hospital wide outpatient approach to incorporate a self check-in system.
- b. Patients will access the oral health service for treatment as either an outpatient through a call centre or a pathway for inpatients.
- c. Patients will be discharged home or back to their inpatient unit / facility.

28.3.3. Clinical Support Services

28.3.3.1. Imaging Services

- a. An OPG machine is proposed to be located within the dental services unit. Alternatively, collocation with medical imaging would be required.

28.3.3.2. Allied Health Services

- a. Visiting allied health services will utilise the interview room.

28.3.3.3. Pharmacy

- a. Each treatment room will have a lockable cupboard to store prescription pads.

28.3.4. Non Clinical Support Services

28.3.4.1. Infection Control

- a. All dental treatment rooms and utility rooms will be equipped with general staff hand basins (Type B). Staff will require access to hand hygiene (basins or alcohol-based hand rubs) throughout the unit. Gel and glove dispensers will be located in all patient care areas and utility rooms.

28.3.4.2. Education and Training

- a. Access to a shared meeting / tutorial room with telehealth capacity will be required.

28.3.4.3. Information and Communication

- a. Access is required to the oral health information system for patient level records and to the dental imaging system.

- b. Duress alarms are required in each dental treatment room.
- c. Access to telehealth and videoconferencing facilities for the provision of clinical advice, education and training is required in meeting and interview rooms.

28.4. Relative Location and Unit Configuration

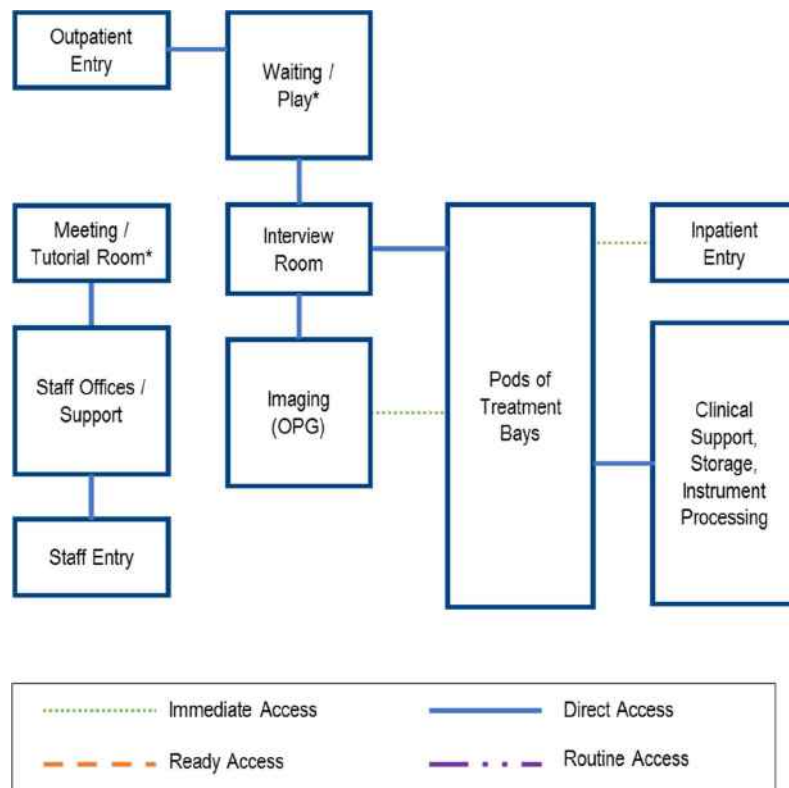
28.4.1. External Relationships

There will be strong linkages with teaching and research including University of Sydney, Faculty of Dentistry and Western Sydney University for undergraduate and postgraduate teaching and population health research.

The unit will have the following prioritised external relationships:

- a. Main Entry/Outpatients – direct access
- b. Emergency Department – ready access
- c. Cancer Therapy Centre – ready access
- d. Inpatient Services - eg. Mental Health - ready access
- e. Pharmacy - ready access
- f. Anaesthetic relationship and processes to be confirmed

28.4.2. Internal Relationship Diagram



* Potential to be shared with adjacent departments eg. Outpatients

28.5. Specific Design Requirements

28.5.1. General

- a. Design must be consistent with AusHFG, Part B Facility Planning and Briefing, 280 - Oral Health Unit.
- b. Waiting rooms with access close by to public toilets and a public corridor will be required.
- c. Access to a children's play area and separation for adult waiting area is required in the waiting room. This is able to be shared with outpatients if collocated.
- d. A secure entry for inpatients is required, particularly with Mental Health considerations.
- e. It is essential that clean and dirty flows are kept separate.
- f. Building considerations must include additional ceiling support for clinical lights, water, power, compressed air, dental suction and drainage supply to chairs and electricity supply with isolator switches.

28.5.2. Treatment Areas

- a. The treatment area will ideally be designed in pods of 4 treatment spaces.
- b. The majority of treatment areas will be open bays with 3 bays closed for use to treat patients with special needs, infectious patients, or low immunity patients.
- c. The three enclosed treatment bays will require sufficient space to allow access and space for manoeuvring electric wheelchairs and patients with mobility disabilities.
- d. A special needs interview room for patient education is required to provide an interview space with privacy.
- e. A modular system for dental treatment room is to be considered e.g. Adec Solution Design for right and left handed operation and future flexibility.
- f. Within each dental treatment bay there will be a workspace for write-up and documentation.
- g. Piped nitrous oxide will be required for the 3 enclosed dental treatment rooms.
- h. Mounted x-ray units will be available to each dental treatment bay/room.
- i. Additional imaging modalities will be available in Medical Imaging and each dental surgery will have access to take, store, receive and read digital images in situ and between other oral health services. There will be a small requirement for hard copy storage.
- j. A dental lab will be required with a bunsen burner and plaster trap.
- k. Sterile stock store room will be required for instruments.
- l. An instrument processing room is required for gross cleaning.
- m. An interview / counselling room for patient education will be located within the MCOH.

28.5.3. Staff Areas

- a. There will be a separate staff only entry to the unit which does not require traversing the public waiting area.
- b. Staff toilets and lockers will be dedicated to the MCOH.
- c. The MCOH will have access to a staff room.

28.5.4. Storage

- a. Capacity for the point of care and bulk storage of a stock of consumables and frequently used equipment is to be incorporated into the design. Ideally this should be a modular solution.
- b. Storage of medical and surgical equipment requiring power for charging for use within the unit is required. This includes equipment used on a regular basis to be stored within the unit, but is not required to be stored in a dental treatment room.
- c. A designated sterile stock store room is required for instruments.

28.6. Technology

- a. Embracing technology to allow the development of telemedicine dentistry, particularly oral medicine consultations.

28.7. Change Management

- a. Implementing a new hospital based service will require upskilling of staff.
- b. Specific and a targeted recruitment strategy is required to build up the capacity of the service that aligns with the new role.

29. RENAL DIALYSIS UNIT

29.1. Scope of Service

- a. This is an in-centre and satellite unit. The service is a tertiary service with networks throughout SWSLHD and for renal services throughout NSW.
- b. The service will also perform home training and outpatient services.
- c. The service will operate from Campbelltown with support provided to satellite units elsewhere. Planning consideration for the future expected increases in incidence of end stage renal failure due to diabetes and age has been taken into account across inpatient, outpatient and satellite renal dialysis services.
- d. This will be an adult service. Children under 18 years of age will not receive renal dialysis at Campbelltown and will instead be transferred to other facilities.
- e. All inpatients other than cardiac monitored patients will be treated in this unit.
- f. Allied health services (Dietetics, Social Work, Occupation Therapy and Psychology) will be provided to patients including
 - i. home HD
 - ii. home PD
 - iii. inpatient HD
 - iv. non-dialysis renal patients including pre-dialysis patients

29.2. Model of Care

- a. The model of care requires a multidisciplinary team response to the treatment of renal failure
- b. Training of patients in home dialysis will occur in this unit in a separate, dedicated area with HD and PD.
- c. Training of patients in Continuous Ambulatory Peritoneal Dialysis (CAPD) and Automated Peritoneal Dialysis (APD) and home haemodialysis will occur in this unit in a separate area dedicated to home training.
- d. Ideal model of care will incorporate on-site vascular diagnostic services with renal dialysis as a high priority.
- e. The unit will be staffed by dedicated nursing staff with access to medical staff and allied health staff including psychologists / psychiatrists, dieticians, social workers, pharmacists and occupational therapists.
- f. Allied Health models of care center around individual face to face consults in both open plan setting and private room settings based on patient need. For example, privacy will be required for crisis support for the patient or carer, patient specific dietary recommendations that may be misused by other renal patients if overheard
- g. Allied Health require access to consult rooms for outpatient services. Treatment spaces will also be used for non-dialysis renal patients and pre-dialysis patients.
- h. Pre-dialysis and non-dialysis renal patients are seen jointly by nursing and social work. They are also seen individually by social work and dietetics.
- i. The model of care will incorporate shared staffing and work areas with a separation of outpatient and inpatient treatment areas.

29.3. Operational Description

29.3.1. Operating Hours

- a. At present, the dialysis unit operates between 7:00am and 10:00pm 6 days per week, providing 2 patient shifts. Implementation of different models of care including nocturnal dialysis and self-care dialysis may require extension of these hours.
- b. Patients requiring emergency treatment after-hours will receive dialysis in the ICU.

29.3.2. Access, Admission and Discharge/Transfer

- a. Patients are admitted to the unit. Most patients admitted are known to the unit and booked for appointments.
- b. The unit requires a reception point with a clear view of entry and exit / egress points of the unit.
- c. A main waiting area is required for patients to use prior to dialysis whilst waiting for transport home.
- d. Access for the renal maintenance technicians to bring large machines in and out should be separate from the patient entrance and in close proximity to vertical transportation with capacity for vehicular pickup. This access point should be internal and in proximity to nursing staff who collect the dialysis machines.

29.3.3. Clinical Support Services

29.3.3.1. Infection Control

- a. Facilities will be provided to manage infectious patients with the allowance of some single rooms.

29.3.4. Non-Clinical Support Services

29.3.4.1. Food Services

- a. An ice machine will be required out of patient accessible areas.

29.3.4.2. Linen Services

- a. Linen will be provided on a trolley in proximity to the weighing area.

29.4. Relative Location and Unit Configuration

29.4.1. Functional Relationships

- a. The chair unit will be located close to transport and the main entry to the hospital. The unit will have:
 - i. Entry / Reception / waiting area;
 - ii. Treatment bays / Education bays;
 - iii. Outpatient consultation area;
 - iv. Clinical support areas;
 - v. Staff Support areas.
- b. The main external relationships will be:
 - i. Entry / patient pick-up and drop-off areas - ready access;
 - ii. Outpatients - ready access;
 - iii. Radiology; - routine access
 - iv. Inpatient units (including renal) - routine access;
 - v. CCU - routine access;
 - vi. Perioperative Unit, particularly intervention – routine access.
- c. The internal relationship diagram is as follows:

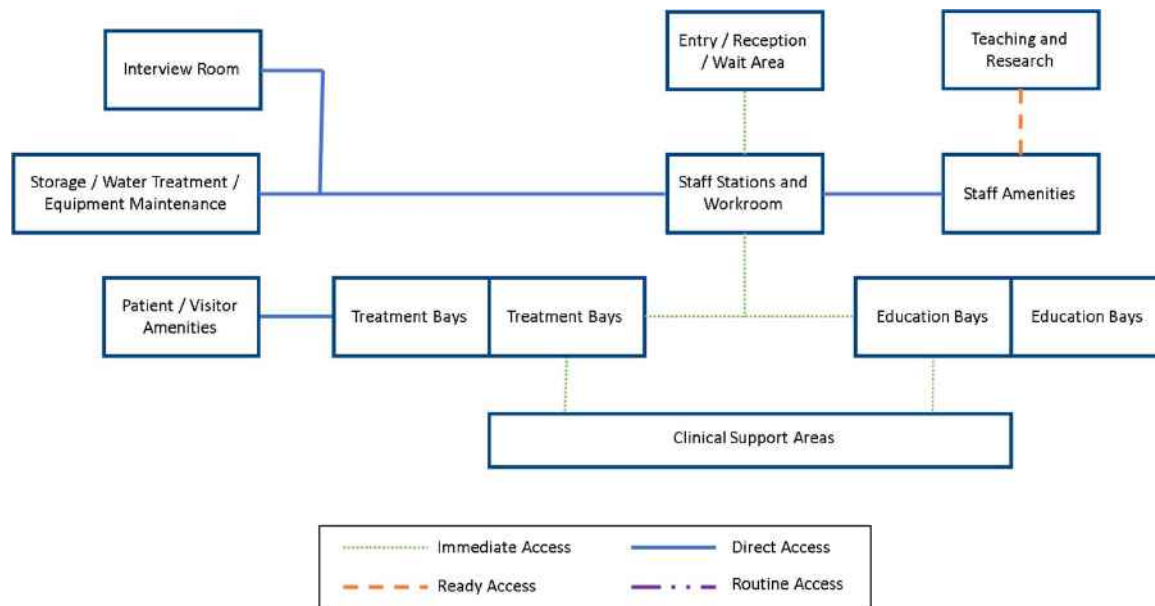


Figure 11 Renal Dialysis Unit - Internal relationships

29.5. Specific Design Requirements

29.5.1. General

- The reception / clerical area is to oversee the waiting area.
- The configuration of the chair spaces will be flexible and open plan, with the staff station overseeing all patients being treated as well as those in the waiting room. Each chair space will be supported by a dialysis station with support spaces separate but integral to the unit. Design should also enable staff visibility while standing, patient privacy, and noise reduction while seated.
- Treatment spaces should be large enough to allow future potential increase in acuity and trolley size.
- The unit will be operationally self-sufficient due to the extended hours compared to other outpatient areas.
- The design should minimise staff travel distances internally.
- Access for the renal maintenance technicians to bring large machines in and out should be separate from the patient entrance and in close proximity to vertical transportation with capacity for vehicular pickup. This access point should be internal and in proximity to nursing staff who collect the dialysis machines.

29.5.2. Entry/Reception

- The unit will require:
 - A waiting area for visitors and planned admissions. If possible, the waiting area should be separate from the home training area;
 - A reception desk that can oversee the waiting area and allow entry to the unit;
 - A meeting room, which could also be considered in the training area or staff areas;
 - Public toilets.

29.5.3. Patient Areas

- The unit configuration will include:
 - bays for chair-based dialysis (including larger bays where possible);

- ii. 20% enclosed bays for isolation (class S) with ensuite toilets.
- b. A dialysis station is required at each patient space connected to the water treatment plant with appropriate fixtures for the connection and drainage of haemodialysis machines.
- c. In areas where dialysis ports are installed, all the other plumbing within the area must be incapable of connecting to a dialysis machine.
- d. Treatment areas must have floor waster and drainage (can be PVC).
- e. Specialist drainage must be High Density Polyethelene (HDPE) to each bed.
- f. All patients should be within the sight of a nurse station.
- g. The main principal for this area is that the nurses can see and be seen (by patients and other nurses).
- h. Privacy in the design of the open plan environment needs to be considered. Privacy curtains will be required around all treatment spaces.
- i. Access to a private consultation room will be required as the open plan environment is not conducive to some allied health interventions for example, carer support, crisis and other counselling, education and individual reviews.

29.5.4. Education/ Home therapy training areas

- a. The Education and home therapy area is proposed to include:
 - i. Four education spaces for haemodialysis and four for peritoneal dialysis;
 - ii. Education rooms that are set up as per the above bays but with additional 2 normal water outlets to allow training with a Reverse Osmosis (RO) machine;
 - iii. Two workstations in a separate area from the main area to allow oversight of separate peritoneal dialysis and haemodialysis training separately.
- b. Easy access to clean and dirty utilities should be provided within this area.
- c. Access to at least two interview / private consult rooms will be required for:
 - i. Dietetics: dietary assessment and education for new PD and HD patients
 - ii. Social work and psychology: Assessment, carer support and psychosocial counselling for PD and HD patients
 - iii. Occupational therapy: Functional assessments and home training. This will require access to a disabled bathroom with toilet and shower
- d. Storage space for mobility aids and small equipment will be required in or adjacent to the unit.
- e. The home training area should be adjacent but visible to the renal dialysis area.
- f. The home training area should have entry and exit separate from the main dialysis.

29.5.5. Support area

- a. A Reverse Osmosis Unit must be provided. The unit must be readily accessible to staff to allow daily calibration and maintenance.
- b. A doorway of double-door width for access to the reverse osmosis treatment plant room is required.
- c. The room must be located with easy access to the external perimeter of the unit while being close to the treatment area. It requires the following specific attributes:
 - i. Space for water treatment components which may include booster pumps (usually two which alternate), particle filters, water softener, carbon filter and reverse osmosis system as well as product to keep these units operational;
 - ii. Workable space around all sides of the units (at least 1 metre) to enable routine calibration, servicing and maintenance to be conducted in a safe and easy manner;
 - iii. Sufficient space with soft curving of tubing to prevent right angle bends;
 - iv. Adequate ventilation, air-conditioning and / or exhausting to reduce the heat generated by the equipment;
 - v. Noise attenuation is important to prevent any sound disturbance to patients and staff;
 - vi. Floor must be capable of withholding 3,000 kg of weight;
 - vii. Specialist drainage in the water treatment plant room - possible reclamation to be considered;

- viii. Communications ports.
- d. The clean and dirty utilities should be located close to patient care, servicing both the patient areas and outpatient / education areas.
- e. The bulk store will be serving all areas and should be close to patient care. There should be 2 separate areas within the store for home training and dialysis.
- f. Staff room can be shared with adjacent units.
- g. A NUM office will be located in the clinical area of the unit.

29.6. Technology

- a. Each unit will utilise a centralised electronic status board displaying current cases and planned activity promoting staff coordination and communication. Arrival of patient should set off a cascade of largely automated event to facilitate their care (e.g. likely length of stay, signalling to relevant medical, diagnostic and allied health teams of their potential involvement, clinical decision support tools). An optimal location for a work room with adequate space will be identified to ensure equal access by all members of the clinical team.
- b. It is preferred that each chair / bed space has access to a television.
- c. Strategies to utilise Workstations on Wheels (WOW) across the unit will include specifically designed space in corridors and adequate access to power sources.
- d. Access to telehealth and videoconferencing facilities for the provision of clinical advice, education and training is required. This may be in the shared staff areas.
- e. Integrated nurse call systems including emergency response will be in place in all patient treatment / care areas.
- f. A fixed personal computer in clean utility medication rooms is required to capture medication requirements and bar coding stock utilisation.
- g. Staff communication should be a multifunction call system with internal alert, phone, person location, cleaner and portage functionality. The communication system needs to allow the staff to remain mobile and at point of care whilst communicating on a one-on-one or one-to-many basis using a hand-free device. Further detail of functionality will be identified during detailed design.

29.7. Workforce

- a. The redevelopment will see an increase in the number and configuration of dialysis chairs for both in-centre and satellite patients. Future staffing requirements will change to meet predicted demand as outlined in the workforce plan. Population demand, patient acuity, new models of care and the available workforce will all influence the composition and number of staff in the unit.
- b. There are three main groups of staff:
 - i. unit-based staff (full time, part time and casual) who provide continuous care as part of a multidisciplinary team;
 - ii. visiting staff who provide periodic or specialist care; and
 - iii. support services staff – housekeeping, hotel services administration, etc. who may be unit based or visiting.
- c. A large proportion of staff occupying each clinical unit include:
 - i. Nurse Unit Manager, Clinical Nurse Specialists and Consultants, Nurse Educators, Registered and Enrolled Nurses, Registrar and Resident Medical Officers, Nephrologists and other Specialist Medical Officers, Allied Health professionals including Physiotherapists, Dieticians, Occupational Therapists, Social Workers, Pharmacist, Psychologist and specialty specific scientist, technicians and researchers;
 - ii. volunteers who may provide a range of intermittent services according to operational policy;
 - iii. students and / or educators who may be visiting the unit or based in a unit in a supernumerary short-term capacity.

30. PHARMACY

30.1. Scope of Service

- a. The scope, operational details and functional requirements of pharmacy services at Campbelltown Hospital is under development by the district.
- b. Campbelltown Hospital pharmacy services will support inpatient units, outpatient and ambulatory care, as well as provide clinical support to areas such as perioperative and interventional services.
- c. Pharmacy services will operate at Role Delineation Level 6. The services will include TGA accreditation and the following services:
 - i. medication dispensing and provision of medicines information;
 - ii. management of imprest stock in clinical units;
 - iii. clinical pharmacy service providing medication review, patient discharge planning and staff education in clinical areas;
 - iv. support for clinical specialty and highly specialised services;
 - v. active involvement in clinical trials and research activities;
 - vi. outreach for Camden/Bowral and future IHH.
- d. Medical management will be a mixed model of electronic medication management system in selected units and usual practice. A medication management system will be implemented in the ICU, ED, and a test unit with sufficient space.

30.2. Model of Care

30.2.1. General

- a. Pharmacists will be allocated to units as part of a multidisciplinary team in order to review inpatient medications on admission and provide education and advice prior to discharge.
- b. There will be a main pharmacy and satellite compounding unit in the Cancer Therapy Centre.
- c. The Cancer Therapy Centre satellite pharmacy will provide medication reconciliation, dispensing, sterile cytotoxic compounding, medication counselling, drug information and clinical trials services during hours of operation.
- d. Throughout the hospital,
 - i. general pharmaceuticals will be provided by the imprest system and will be stored in the inpatient unit clean utility / medication rooms;
 - ii. each medication room will be swipe care accessed only and preferably also include space for automated electronic dispensing if required in the future;
 - iii. drug and immunisations fridges will be required in the clean utility / medication rooms;
 - iv. medications will be stored in accordance with NSW Health regulations;
 - v. all medications trolleys / cupboard will lock by default when closed.

30.2.2. After-hours

- a. 24-hour on-call access to pharmacy services will be provided.
- b. There will be a collocated / satellite after-hours drug store.

30.3. Operational Description

30.3.1. Operating hours

- a. The pharmacy dispensary service will operate seven days per week, from 8:00am to 8:00pm Monday to Friday and 8:00am to 6:00pm on weekends and public holidays.
- b. Pharmacy services to inpatient units will be provided from 8:00am to 5:00pm Monday to Friday.

- c. Outpatient and inpatient operating hours are to be confirmed.
- d. There will be 24-hour on-call access to pharmacy service.
- e. An after-hours drug store will be available for a limited range of stocks. The main pharmacy and after-hours drug store will be collocated unless the distance to the main pharmacy from Block E is too far. In this instance, consideration must be made to move the after-hours drug store to Block E. The after-hours drug store will be accessible from the outside.

30.3.2. Access, admission and discharge/transfer

- a. The main pharmacy requires a public reception and waiting areas.
- b. Ideally there will be two separate waiting areas for inpatients and outpatients.
 - i. Staff should be able to see visitors as they approach.
 - ii. There will be counters appropriate height for wheelchair access.
 - iii. The reception desks should allow for privacy.
 - iv. The process for dropping off scripts should be separate from the collection for medicines to enable better work flows.
 - v. There will be an interview room adjacent to the waiting area.
 - This will ideally have two entry points - from within pharmacy and from the waiting area, with the ability to be secured.
 - The outpatient interview room will be used for medicines counselling and for meetings with pharmaceutical representatives.
 - The inpatient interview room will be used for patients waiting for the dispatch of DDs.
- c. The public access point and waiting areas need to be separate from the access point for hospital staff.
- d. Access to the pharmacy will be limited to pharmacy staff. No visitors or other staff will be permitted in the main assembly and dispensing area of the department. Any visitor to the department will need to report to the front reception and be escorted to their destination in the pharmacy.

30.3.3. Non clinical support services

30.3.3.1. Security

- a. The Pharmacy will require 24-hour security surveillance and alarm responses.
- b. Duress alarm systems will be required in a number of locations such as dispensing counters, interview rooms and for after-hours staff.

30.3.3.2. Supply

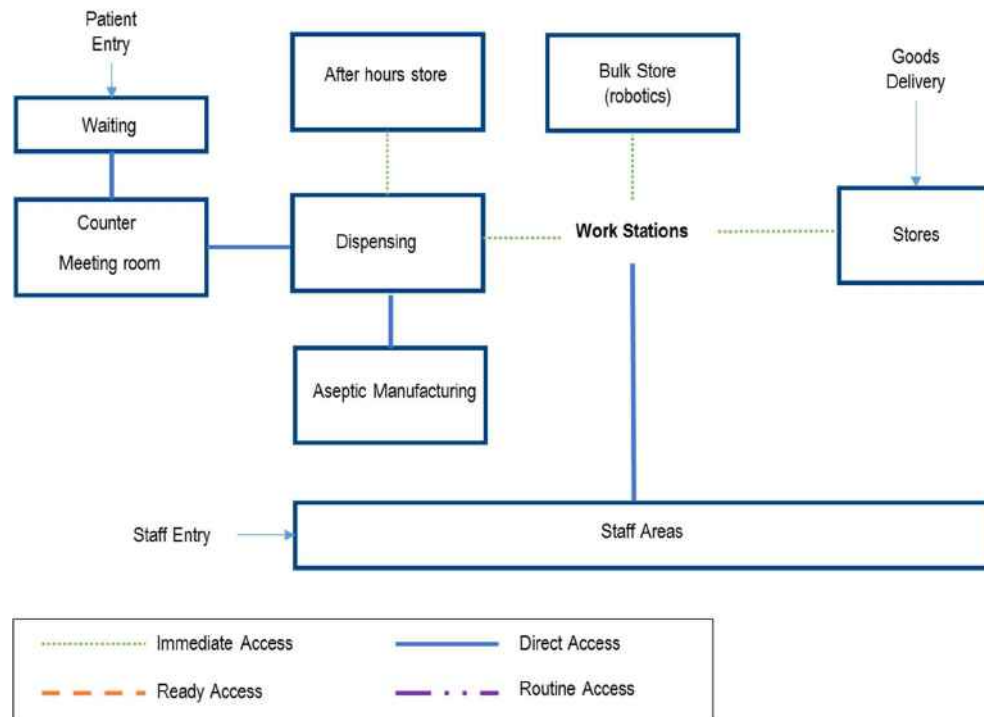
- a. Pharmaceutical deliveries will be received through the loading dock. Deliveries will be made regularly by transport vehicles from external suppliers and couriers
- b. Bulk intravenous fluid will be delivered directly to clinical areas, such as inpatient units.
- c. Pharmacy stores require a temperature-controlled environment ensuring correct storage conditions for all medications, including monitored temperature alarms for cold stores and freezers.
- d. The Accountable Drugs Store will be sized sufficiently to be able to store both 'in-use' and 'awaiting-collection' drugs simultaneously.

30.4. Relative Location and Unit Configuration

30.4.1. External Functional Relationships

- a. Pharmacy provides services across all areas of Campbelltown Hospital and will need to be located close to the inpatients units, as well as near outpatient / commercial area that can be accessible by the public.
- b. Pharmacy will require direct access to the loading dock.

30.4.2. Internal Functional Relationships



30.5. Specific Design Requirements

30.5.1. General

- There will be separation between areas that are accessible to the public and general staff and restricted areas for access by pharmacy staff only.
- The design should minimise staff travel distance internally. Flows within the dispensing area should be separated, with one flow for dispensing to inpatient clinical areas, one for discharge medications, and the one for dispensing to outpatients.
- The pharmacy should have access to natural light and external view where possible as this is associated with significantly lower rates of dispensing errors. There will be a balance between solar gain and security considerations with windows.
- Ambient noise should be minimised to reduce staff distraction and incidence of errors.

30.5.2. Sterile Compounding Suites

- The facility will have two sterile compounding suites - one in the main pharmacy and one in the Cancer Therapy Centre.

30.5.3. Storage

- Space for a workstation within the accountable drugs store will be required.

30.5.4. Staff

- Access to a staff tea room with lockers will be required and these may be shared with other units.
- Access to emergency shower and staff shower (or ensuite) will be required.
- Indicative office requirements will be considered in the context of activity-based working and will be informed by the workforce plan.

- d. The department will require access to a meeting room with the capacity for 60 staff.
- e. Access to workstations on each unit and its requirements are to be confirmed.
- f. Clinical trial space is to be confirmed.

30.6. Workforce Issues

- a. A Level 6 Role Delineation requires roles for Pharmacy Director, Clinical Specialist Pharmacists, and senior pharmacy technicians.
- b. A unit implications of Level 6 service include after-hours, including working in the Cancer Therapy Centre.

30.7. Technology

- a. Cerner e-meds will be fully implemented.
- b. Electronic medication management system trial is proposed in ED, ICU and one trial unit.
- c. Robotics for storage and automated dispensing may be considered.
- d. Barcoding for stock management and ordering may be considered.

31. PATHOLOGY

31.1. Scope of Service

- a. The Pathology service will operate at a Role Delineation Level 6.
- b. Pathology services use a range of service delivery models, such as networking arrangements and 'Hub and Spoke' service models, to ensure that clinical services have appropriate and timely access to the pathology services needed to support quality patient care.
- c. Clinical Trial, Research and Teaching activities will be supported.
- d. The Pathology unit will function independently of Liverpool Hospital Pathology Laboratory but will utilise some services based at Liverpool Hospital to provide a service appropriate to a complex comprehensive campus.
- e. The NSWHP PoCT program and staff from Campbelltown Laboratory will continue to jointly provide support and maintenance for current and future PoCT devices located within Campbelltown Hospital.

31.2. Model of Care

31.2.1. General

- a. A comprehensive range of complex clinical, laboratory and business support services will be provided. Complex technical testing in clinical chemistry, histopathology, cytology, microbiology, serology, haematology and transfusion services will be provided to support specialist clinical services.
- b. Accessioning / barcoding is completed at the point of collection.
- c. The majority of specimens will arrive via pneumatic tube. All parts of the hospital, including services in separate physical buildings on site will need to be connected via pneumatic tube to the pathology laboratory. In particular there should be a dedicated connection from the Emergency Department.

31.2.1.1. Specimen reception

- a. The pre-analytical service will provide receipt, data entry, initial processing and distribution of pathology specimens to the appropriate processing site if necessary. This will be achieved using a paperless system.
- b. Pre-analytical services will also co-ordinate pathology services for research and clinical trials.
- c. Innovations in the pre-analytical stage include increasing automation of sample test preparation. In the near future, additional specialist pre-analytical modules for core laboratory analysers will be available for the majority of pre-analytical functions. This will reduce the laboratory footprint required for pre-analytical processing.
- d. The pre-analytical area will employ two Clerical Assistants and two Technical Assistants to process and pack/unpack samples. These estimated staff levels assume that pre-analytical services are paperless and automated. Couriers will also require direct access to the lab specimen reception area; at least four courier parking spaces with direct level access to the core laboratory will be required by 2031.
- e. The pre-analytical area will have a pneumatic tube station; a window for courier drop-off and pick up of test samples and two workstations for initial sample processing and data entry. The reception area is ideally located adjacent to the pre-analytical area and will contain one work station and a secure entry point to the laboratory. This area will also have access to a landline phone in case of VOIP downtime.
- f. The pre-analytical area will be part of the open plan core laboratory to maximise future automation and connection with the main laboratory.

31.2.1.2. Core laboratory

- a. Pathology services would be provided from a single floor, large, open plan core laboratory with abundant access to natural light. A number of smaller specialty zones would be located in smaller areas surrounding the core laboratory. These will provide functionally discrete areas for transfusion services, haematology services and biochemistry services. Transfusion services and haematology will be adjacent as much of the activity is shared.

- b. The majority of testing in Campbelltown Pathology Laboratory will be processed by automated analysers. Remaining pathology tests performed onsite will be those with a high clinical impact – urgent but manually processed. This would be supported by full track lines and automated pre and post analytics, including refrigerated and non-refrigerated sample storage.
- c. Clinical Chemistry, Haematology, Serology, Immunology, Coagulation and molecular diagnostic tests will be performed using large core automated analysers. At least two analysers are required for each core Clinical Discipline (one as a backup):
 - i. Two Clinical Chemistry analysers
 - ii. Three Haematology cell analysers
 - iii. Two Coagulation analysers
 - iv. Track system
 - v. Two Blood bank analysers are also required. There is also scope for selected appropriate modules for core Immunology, core drug level and serology testing in the Core Laboratory. The types of tests available with automated solutions will continue to increase.
- d. There would also be ample centralised cold storage and dry storage for the storage of reagents and consumables with access and space to cope with the dimensions of pallets. Currently, four to six pallets per week of material is used by automated analysers. This will increase to ten to twelve pallets per week when the redevelopment is completed and fully functional.
- e. The following refers to requirements for specialist zones; some of the instruments could be shared across disciplines, such as microscopy, digital workstations and a cytometry suite for cell counting.

31.2.1.3. Microbiology

- a. Campbelltown Pathology Laboratory will include a satellite Microbiology lab that will be closely linked to the Liverpool Pathology Microbiology service. This satellite lab will support all microbiology and serology testing that can be performed in the core lab (including molecular microbiology) as well as a full range of high impact, time critical direct tests such as microscopy, antigen testing and POC molecular tests. Culture based testing will continue to be sent to the Liverpool laboratory with digital links back to the Campbelltown clinical laboratory service.
- b. Accordingly the Satellite Microbiology lab will require space for microscopy (up to 4 microscope stations and automated cell counters and urine/fluid microscopy if not part of the core lab track) and bench space for other direct tests. There will be a need to access appropriate biosafety cabinets (at least two).
- c. Molecular Point of Care Technology within Campbelltown Pathology Laboratory will be expanded to include testing capacity for high clinical impact testing for Microbiology, Haematology, Clinical chemistry and possibly Immunology and Anatomical Pathology testing. This equipment will be located in a small specialist laboratory termed the Molecular Specialist Unit. The size of this space and the number of instruments included will be directly in proportion to the number and locations of Point of Care Technology (PoCT) in key clinical areas, such as the Emergency Department, Intensive Care and Maternity Clinical Services.
- d. There will be up to 4-5 FTE Molecular Microbiology Scientists on a rotating roster and 1.0 FTE Microbiologist (Pathologist) on site. The Microbiologist will provide laboratory supervision and consultation and liaison in Clinical Microbiology and Infection Prevention and Antimicrobial Stewardship support. This pathologist may also have a role in Public Health consultations at Campbelltown Hospital.
- e. In the future, microbiology microscopy may be digitised and analysed by intelligent instruments and checked by pathologists that could be located offsite. Manual microscopes will then be progressively replaced by digital microscopy units.
- f. Requirements for the specialist Microbiology area off the main laboratory will include:
 - i. automated Blood culture instrument
 - ii. two biohazard safety cabinets
 - iii. up to four microscope/digital microscope stations
 - iv. four automated cell counters and equipment for urine/fluid microscopy (if not part of the core lab track)
 - v. bench space for other direct tests.

31.2.1.4. Haematology

- a. A minimum of four Staff Specialists will be appointed. Additional inpatient beds and ambulatory care services in Haematology and Oncology Services are planned at Campbelltown Hospital; in particular for follow up services for paediatric patients from Westmead Children's Hospital.
- b. Core (High volume) Haematology testing will be performed on up to three haematology analysers within the core laboratory setting. Specialist testing (specialised coagulation, Haemoglobin EPGs) may be performed in a small zoned area off the main laboratory adjacent to transfusion.
- c. The zoned area will have fully flexible benches with access to eight microscopes (half of these will be digital morphology stations, two workstations and a range of small bench top analysers).
- d. The following equipment will be needed to develop and examine Blood films, Bone Marrow samples and special coagulation testing:
 - i. One automated stainer (and custom bench)
 - ii. Two slide makers
 - iii. Three automated slide scanning systems
 - iv. One Flow Cytometer may be required.
- e. Innovative practices in Haematology include the use of digital morphology to capture, store and transfer images within NSW Health Pathology in order to access specialist consultation and opinion if required. Three digital haematology units will be required.
- f. Haematology will also require access to:
 - i. One multi-header (eight) microscope with projection screen
 - ii. Additional workspaces for five additional manual morphologists
 - iii. Meeting area
 - iv. Offices for four Staff Specialists
 - v. Additional shared workspaces for two to four registrars
 - vi. Additional two workstations for administrative staff
- g. Designated space in a centralised wet cold storage area will also be required. Sufficient onsite dry storage capacity for haematology slides for up to two years is required onsite.

31.2.1.5. Transfusion

- a. The transfusion service will exchange blood and blood product requests and direct blood deliveries.
- b. Transfusion services will be located adjacent to the pre-analytical area and haematology. There will be an assigned window at waist height that visiting staff will use to pick-up urgent blood products, which, by policy, are not distributed by pneumatic tube.
- c. The hatch will be large enough to exchange blood and blood product requests and direct blood deliveries. There will be an area outside the hatch for staff to sit whilst blood is being dispensed. A buzzer is recommended to alert the transfusion staff. Until the process is fully automated, a computer, barcoding unit and printer will be located in an area adjacent to the hatch so staff members are able to print labels that match the request form. Barcoding systems support this matching process. Sorting will also occur here.
- d. This transfusion laboratory will be divided into three areas:
 - i. Two flexibly located benches with two small workstations with PCs and microscopes.
 - ii. A third area with a PC, range of bench top analysers, a bench top water bath and a free standing platelet shaker.
- e. A fridge/freezer space containing two double door fridges and two Fresh Frozen Plasma freezers. The fridge used to issue blood products to clinical areas will be located closest to the hatch.

31.2.1.6. Genetics and genomics

- a. There will be an increase in genetics and genomics clinical services provided. Advances in molecular genomics will allow rapid, cost effective and small footprint technology with centralised interpretation and reporting if required.
- b. Future service delivery of Genomics services at Campbelltown Laboratory will be guided by the current NSW Health Pathology Genomic Strategic Plan 2016-2018 (and future Clinical Service strategic planning documents)

- c. Additional specialist services such as IVF and Molecular Genetics testing will be referred to statewide specialist pathology services.

31.2.1.7. Anatomical pathology

- a. An Anatomical Pathology presence at Campbelltown Hospital will be required to support the increase in complexity and volume of oncology services and operating theatres. The Anatomical Pathology service will provide histopathology and cytopathology; including frozen section and fine needle aspiration services from Campbelltown Hospital.
- b. Preparation and processing of anatomical pathology samples will be completed at Liverpool hospital and images will be digitally scanned and transmitted to Campbelltown (or elsewhere) for interpretation and reporting. At least 1.0 FTE Anatomical Pathologist will be rostered to work onsite at Campbelltown for advice and consultation. One office space with a large workstation and (in the interim) a microscope will be required.
- c. Genetics based somatic analysis will also be increasingly used for cancer diagnosis and treatment and may mitigate growth rates in Anatomical Pathology activity.

31.2.1.8. Immunology

- a. Immunology will continue to be provided by Liverpool Pathology Laboratory with the proviso that the Immunology service at Liverpool Pathology Laboratory continues to provide access to Immunopathologist advice and to urgent processing and results such as:
 - i. anti-neutrophil cytoplasm antibody (ANCA) testing
 - ii. anti-glomerular basement membrane antibody (GBM) testing and
 - iii. anti-double stranded DNA antibody (dsDNA) testing
 - iv. antinuclear antibody (ANA) testing.
- b. The investment required to set up a separate immunopathology laboratory would be substantial, and there are concerns about being able to establish economies of scale in a satellite unit at Campbelltown.

31.2.1.9. Chemical pathology

- a. The majority of Chemical Pathology test menu at Campbelltown will be able to be processed in the core laboratory analysers. In addition, there will be a need for a small Chemical pathology specialist zone located off the main laboratory. This space will require two fully adjustable benches, a workstation and bench top equipment such as that relating to blood gas measurements, HbA1c and other low volume urgent testing. It is likely that Campbelltown will develop laboratory expertise to complement areas of clinical interest such as pre-eclampsia testing.

31.2.1.10. Point of care technology satellite laboratories

- a. PoCT devices currently provide on-site analysis for blood gases, glucose, lactate, foetal lactate, haemoglobin, electrolytes, creatinine, urea and HbA1c tests. PoCT devices are not intended to replace routine laboratory services.
- b. The role of PoCT devices in performing urgent testing will continue to expand. It is expected that the current high cost of consumables and maintenance will decrease as the technology evolves. More test types will be available and test results will be provided more rapidly. In the future, more Microbiology Point of Care Molecular Technologies will also be located in the satellite laboratories; in particular the current GeneXpert device (Influenza and other diagnoses) will be located in the Emergency Department.
- c. There will be a number of satellite PoCT laboratories collocated with clinical services. These will be located in the Emergency Department, Intensive Care, Operating theatres and the Special Care Nursery / Birthing Centre. The satellite laboratories should be a small, purpose built room each.
- d. The following additional PoCT devices will be required to support proposed growth:
 - i. To maintain turnaround times in the expanded Emergency Department, a small laboratory with bench top Blood Gas Analysers, a pneumatic tube station with barcoding, a workstation, space for testing, sample management, reagent storage and waste disposal. A remote release blood fridge would also be ideally located with this area. This room should be large enough for a lab technician to work in for a whole shift if required.
 - ii. Three bench top Blood Gas Analysers in the Intensive Care Unit.
 - iii. Three new bench top Blood Gas Analysers in the Operating Theatre complex. One of these will be located in the new procedure rooms. Equipment to complete Frozen sections (if not located within the new laboratory), a pneumatic tube station, and a remote release blood fridge.

- iv. Three bench top Diabetes Glucose Meters (Glycated haemoglobin testing) in the expanded Campbelltown Diabetes Centre.
- v. Birth Suites / Birthing Unit / Special Care Nursery - Bench top Blood Gas Analyser - includes blood gases, electrolytes, glucose lactate and bilirubin testing

31.2.1.11. Research, teaching and training

- a. Campbelltown Hospital will further develop research and training links with the Western Sydney University as part of the Campbelltown Health, Education and Research Precinct. In particular, strong links will be developed with the Macarthur Clinical School. NSW Health Pathology will support the expanded role of research; particularly translational research by supporting Clinical Academic Units externally recognised research contributions.
- b. The pre-analytical unit will co-ordinate and support internally and external initiated Clinical Trials. Pathologists within NSW Health Pathology will also initiate and manage research programs whilst developing strong links with researchers across the Clinical Streams within Campbelltown Hospital.

31.2.1.12. Post mortem services

- a. Coronial post-mortem pathology services will be referred to the Forensic and Analytical Science Service (FASS) based at Lidcombe. Non-coronial post-mortem pathology services will be referred to other NSWHP sites.

31.3. Operational Description

31.3.1. Operating Hours

- a. The Pathology service will be provider 24 hours a day, 7 days a week.
- b. Unit collections are currently completed between 6:00am and 2:30pm, 7 days a week. This is expected to expand to include and afternoon and potentially an evening service.

31.3.2. Specimen Collection Centres

- a. There will be one specimen collection centre in the Ambulatory Care Centre wing. There will be one additional collection room allocated adjacent to this collection centre. There are three ideally sized pathology collection rooms with access to toilet facilities. The waiting area is shared with other outpatient clinics.
- b. An additional specimen collection centre will be required in the expanded outpatient facilities for Oncology.
- c. Patients using Maternity, Haematology/Oncology Clinical Services will also require access to a specimen collection centre. Depending on the distance from the current Ambulatory Care wing, there will either need to be two additional specimen collection centres (with adequate adjacent waiting areas) located near Maternity [Glucose Tolerance Testing (GTT)] and Haematology/ Oncology OR the current number of rooms available within the centre will need to expand to ten available rooms. Either arrangement will have capacity for future specimen collection requirements to 2031. Up to six pathology collection spaces will be required for GTT patients and clinics will be working up to 12 hours per day and up to seven days per week.
- d. Campbelltown Laboratory also operates a Collections Centre at Camden Hospital. Opening hours are from 8am to 4.00pm. Pathology services are provided at Role Delineation Level 2. A range of urgent tests are available (including Troponin and Blood gases) by Point of Care Testing (PoCT) devices located in Camden Hospital Emergency Department. Blood and blood product storage in Camden Hospital ED is also maintained by Campbelltown Laboratory.

31.3.3. Home Collection Services

- a. There is also scope to provide a Home collection service to support the planned expansion of the Hospital in the Home program.
- b. This will be provided by Specimen Collection Services and will require:
 - i. Access to a pre-analytical workstation at the laboratory for uploading of data and some sorting of samples.
 - ii. Use of a tablet device to scan, print and store patient information for sample processing and results.
 - iii. Access to supplies appropriate for specimen collection
 - iv. Access to a NSW Health Pathology fleet car (and designated car space) to complete specimen collections.

- v. Access to a full range of clinically appropriate Point of Care Technology consistent with current and future NSW Health Pathology devices. Currently, a 'CoaguChek' (INR studies for blood coagulation) and an 'i-STAT' (Blood gases, blood chemistry, and lactate levels) PoCT device for low-volume samples have been endorsed.

31.3.4. Non-Clinical Support Services

31.3.4.1. Security

- a. The Pathology unit will be a staff only area and all staff will have access via a swipe card.
- b. Visitors to the Pathology unit during working hours will present to the reception area of the pre-analytical service. Reception staff will notify pathology staff within the office areas if they have a visitor. Visitors will then be collected. If after-hours, a video intercom will be used at the entry to the unit. Staff will release the door to allow access to the reception.
- c. Duress alarm systems will be required in a number of locations such as the reception and one or two locations in the core laboratory.
- d. It is expected that staff with a dedicated office workspace will be provided with a lockable solution to secure personal items.

31.3.4.2. Supply

- a. Pathology deliveries will be received through the loading dock. Deliveries will be made regularly by transport vehicles from external suppliers and couriers.
- b. Pathology consumables requiring refrigeration will required prompt delivery to the Pathology unit or stored appropriately at the loading dock.

31.3.4.3. Laundry

- a. The LHD will provide a clean gown for staff to wear within the laboratory areas. A laundry bay will be provided to accommodate these gowns nearby the staff entry of the laboratory.
- b. Linen skips will be provided for staff to dispose of used gowns on their way out.

31.4. Relative Location and Unit Configuration

- a. The Pathology Unit will be located close to the main entry to the hospital. The unit will have:
 - i. Entry / Reception / waiting area;
 - ii. Clinical support areas;
 - iii. Staff Support areas.
- b. The main external relationships will be:
 - i. Entry / patient pick-up and drop-off areas – direct access
 - ii. Mental Health Unit – ready but secure access
- c. Specimen Collection Clinic will require direct adjacencies to:
 - i. Cancer Therapy Centre
 - ii. Ambulatory and Day Medical and Outpatients
- d. The proposed locations of Point of Care Testing will be in:
 - i. Emergency Department
 - ii. Intensive Care Unit
 - iii. Operating Theatres
 - iv. Cancer Therapy Centre
 - v. Birth Suites and Special Care Nursery
 - vi. Diabetes Centre;
- e. The specimen collection waiting area may be shared with other outpatient clinics.

- f. Specimen reception will also be located adjacent to general reception for the main laboratory. A waist height window large enough to exchange packaged test samples to and from couriers and a sample prep and packing area is required containing a computer terminal, adequate storage for containers and package materials; also access to a centrifuge as required. The specimen reception area should be located adjacent to the Transfusion window.

31.5. Specific Design Requirements

31.5.1. General

- a. The core laboratory requires abundant access to natural light.
- b. Provision of hand hygiene via both basins and alcohol based hand rub delivery points will be required throughout the laboratory.
- c. Some benches may be height adjustable. Ideally, service poles will be used to feed power and data from the ceiling to benches. This will ensure cords are well organised.
- d. Power point and data outlets used for equipment such as fridges must be accessible without having to move large and heavy equipment.
- e. A designated car space will be required for a NSW Health Pathology fleet car to complete specimen collections.

31.5.2. Storage

- a. Limited consumables will be stored locally within areas such as the core laboratory. Instead, stock will be decanted daily from the central store.
- b. Central storage will be required for:
 - i. A large space for dry consumables, including a compactus.
 - ii. A walk-in cool room with facilities to separate reagents and pathology specimens.
 - Two may considered if there are efficiencies gained in laboratory configuration. Sufficient storage area and backup solutions for cold storage failure are also required.
 - iii. Separate flammable store for flammable and corrosive liquids.
 - iv. Dangerous goods cabinets to separate acids and alkaline products.
 - v. Storage for three years of slides and a range of records to meet the requirements of the National Pathology Accreditation Advisory Council and the Health Insurance Act. Additional storage for older slides will be located offsite.
- c. Ideally all trolleys (up to 16) will be stored in the pre-analytical area of the laboratory. If a second store is indicated, eight trolleys will be stored in a small area in the second planned acute services building. The second store area should be able to be secured and have dry storage facilities such as one floor to ceiling length cupboard and access to power to recharge unit carts, upload data and a pneumatic tube station.

31.5.1. Clean-up Services

- a. A small clean-up room will be required to wash and drain some equipment including glassware. Most of the equipment will be small and easy to handle. As commercial media is used, volumes are low so a sink and draining space is adequate.
- b. A pipette washer will be needed.

31.5.2. Staff

- a. Access to a staff room with lockers will be required.
- b. Access to emergency shower and eye wash in laboratory areas.
- c. Indicative office requirements will be considered in the context of activity-based working and will be informed by the workforce plan. These should allow for 6 pathologists and as a minimum, and additional workspaces/workstations in or adjacent to the pathology unit.
- d. The department will require access to a meeting room with capacity for 60 staff at one time

- e. Multi-purpose meeting rooms appropriate for teaching and multidisciplinary meetings will be required. One large meeting room (up to 40 people) and two smaller meeting rooms (up to 20 people each) will be required for staff meetings, pathologist / registrar teaching and multi-disciplinary team meetings. All rooms will have high quality digital and presentation facilities.

31.6. Technology

- a. All pathology services are ordered and reported using e-systems – currently Cerner eMR and Cerner Pathnet.
- b. Most instruments used for specimen analysis or to store samples and other products in fridges / freezers are networked and increasingly up to four data outlets per item is needed. Increasingly, this equipment is remotely monitored by outside providers with maintenance contracts. Equipment will also remotely monitored to ensure temperature ranges are maintained at effective levels.
- c. Barcoding systems are planned to be implemented
- d. Adequate mobile phone reception, a laboratory Wi-Fi system, PA system and at least two analogue phones are required within the laboratory.
- e. An automated digitally tracked specimen storage solution will be required that is flexible and will be able to handle samples with different storage requirements. Each specimen sample will be identified, stored by automated means and tracked for the required time of storage and for easy retrieval.
- f. Innovative facilities for research and training will be required within the laboratory at Campbelltown Hospital:
 - i. Multi-header microscopes will be replaced as a teaching tool by digital microscopy and scanning units. Specimens of interest will be projected onto large multi-media screens for review and discussion.

31.7. Change Management

- a. Consideration of alternative means of handling equipment failure/power loss – eg. the cost of lost consumables during equipment failure and or power loss if there is no alternative cool room storage capacity

32. STERILISING SERVICES DEPARTMENT

32.1. Scope of Service

- a. The scope, operational details and functional requirements of Sterilising Services Department (SSD) at Campbelltown Hospital is under development by the district.
- b. The Sterilising Services Department cleans, disinfects and / or sterilises reusable medical and surgical instruments and equipment. The SSD provides The Campbelltown Hospital with safe, controlled and appropriate sterilising services and technical advice.
- c. The SSD will provides service for a range of customers. It supplies services to:
 - i. All clinical units and departments on the Hospital campus
 - ii. Podiatry, Single use material and some equipment at Camden Hospital
 - iii. Dental Clinics
 - iv. Other future offsite facilities may be considered
- d. Endoscopies will be performed in the procedure rooms within the current General Operating Theatre complex. After-hours these may be performed in the new theatres. Endoscopy equipment will be processed within the SSD.

32.2. Model of Care

- a. The SSD will be a fully centralised area. Scopes will be processed within the unit and transported to the theatre complex
- b. Scopes, processes for ICU, endoscopy and Satellites to be determined
- c. Trans vaginal probes are currently performed in imaging with a trophon machine this is being reviewed
- d. TOE probes are currently cleaned in cardiac diagnostic unit and performed in a GUS machine this is being reviewed

32.3. Operational Description

- a. The anticipated volume and throughput for the departments is not yet finalised. It will however will service the areas listed above.
- b. The anticipated volume and through put for the departments is
 - i. 5 washers of 15 to 18 din capacity with the allowance to allow growth to 8
 - ii. 1 Cart washer with 2 to 4 cart capacity
 - iii. 4 full sterilisers with the allowance to go to 6 with capacity for 8 to 10 trays
 - iv. 3 low temperature variable platform sterilisers of between 2 and 4 trays with allowance to go to 4 sterilisers
 - v. 6 pass through Automated Endoscopic Repossesses (AERs) with capacity for 4 spare AERs
- c. All conventional and approved disinfection (HLD & Thermal means) & sterilizing (High & Low-temp) methods will be used.
- d. Automation & semi-automation should be used to reduce repetitious movement for staff relating to trolley & carriage movements.
- e. All sterilising methods will be used.
- f. Instrumentation from outlying areas will arrive into the unit rinsed. Transportation will comply with AS4187. The responsibility for cleaning and sterilisation remains with the SSD.
- g. Arrangements with private outside providers will clearly outline the responsibilities of each party.
- h. The bulk of the department's workload and its highest priority will be the reprocessing of internal Perioperative Unit, Birthing Suite, Endoscopy, Intensive Care Unit and the Emergency Department and Dental instrumentation and equipment.

- i. With the exception of the contained decontamination area, the unit should be designed as an open plan work area subdivided by benches and / or equipment into functional work areas.
- j. These work areas are to be linked by circulation space and arranged to allow for a progressive work flow that commences with a “dirty” entry and receiving area; proceeds to a cleaning, decontamination and drying area; into a sorting and packing area; through to a sterilisation and cooling area; to finish with sterile storage, distribution and exit areas. Work flows should prohibit the flow of non-sterilised items through areas where sterilised items are held or stored.
- k. Operating room sterile instruments and trays will be stored in the Perioperative Unit sterile store.
- l. Depending on design, sterile stock may be transported from SSD to the Perioperative Unit sterile store via a “clean lift” or hoist.
- m. The SSD will identify damaged or broken instruments in conjunction with theatre staff
- n. The theatre staff will arrange couriering for repair and tracking until it is returned and, following reprocessing, returning it to its place of origin.
- o. A fully enclosed system is utilised for contaminated instruments
- p. Clean instruments are transported and stored in wrapped instrument trays.
- q. Carts / containers for transporting contaminated instruments will be washed in the SSD in a cart washer

32.3.2. 1.3.1 Access

- a. The SSD should be conveniently located with direct access to the Perioperative Unit, and routine access to the loading dock and a drop-off area for loan equipment.
- b. There should be separate and distinct entry to the SSD well separated from other hospital traffic and located to avoid entry by unauthorised personnel. The Department should be sign-posted to allow staff from user departments and couriers controlled access to the reception area only.

32.3.3. Operating Hours

- a. The SSD service will operate 24 hours a day from Monday to Friday with potential reduced services on weekends.

32.4. Relative Location and Unit Configuration

32.4.1. Functional Relationships

- a. The SSD requires direct access (this could be vertical by dedicated clean and dirty lifts) to the Perioperative Unit if not on the same level. Access into the Perioperative Unit should be as central as possible to the areas requiring the services of the SSD. The following should also be considered:
 - i. Routine access from the loading dock will be required
 - ii. Routine access should include ICU, Birth Suites, Emergency Department
 - iii. Routine access for external agencies that send instrumentation for SSD processing – delivered directly to SSD.
- b. The entry to the receiving area / dirty area requires trolley access for Department returns as well as returns from the operating suite. These return entry points may be achieved by either controlled doors or vertical transport from areas outside SSD
- c. Both internal and external access to the sterilising plant room should be provided.

32.4.2. External Relationships

- a. Sterilisation Service Department - ready access to inpatient units.
- b. Sterilisation Service Department - direct access to the Operating Theatres for the high volume and timely processing of scopes
- c. Interventional Suites – direct access
- d. Dental Services – ready access

- e. Outpatient Services – ready access

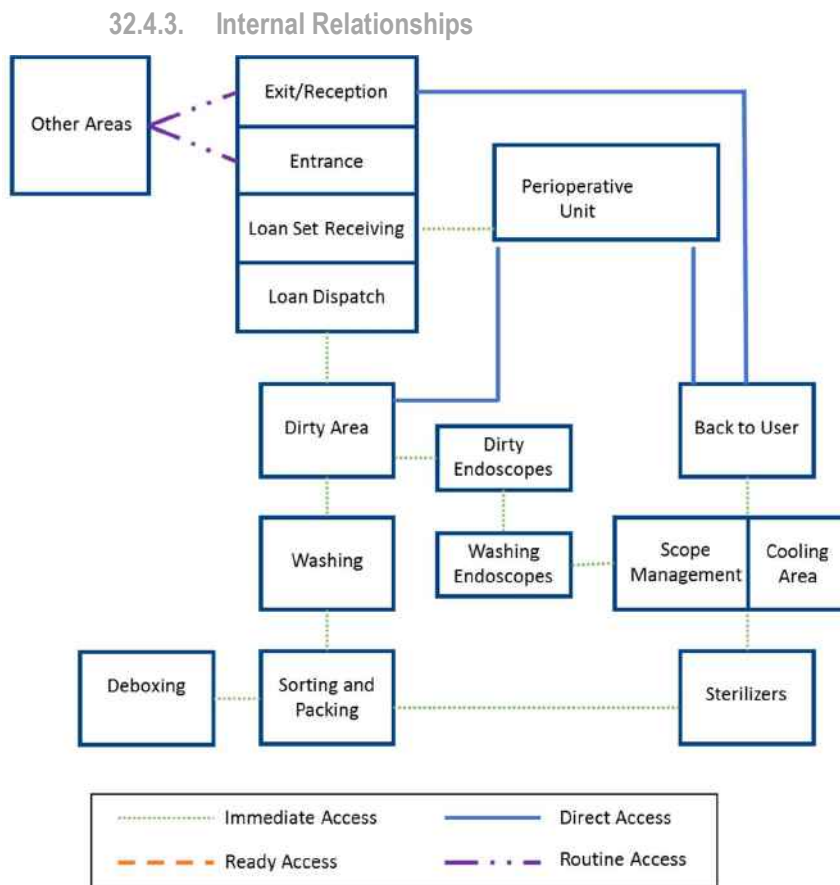


Figure 12 SSD internal relationships

32.5. Specific Design Requirements

- A fully computerised instrument tracking / bar coding system that tracks all sterilised items from the beginning of the sterilising process to the patient will be implemented. This system complies with the current legislative requirements of Australian Standard AS / NZS 4187:2014 and ideally should be linked to the theatre scheduling software, with a minimum use of paper records for both the SSD and their customers.
- Digital communication connection to the Perioperative Unit displaying the theatre schedule and the case progression will be required.
- Telephone and intercom systems will be incorporated into the design of the Department. The intercom needs to be connected to the dock and de-boxing area, and hands-free connectivity to the operating suite.
- RO water supply will be required to the Department to manage local water quality and to reduce the incidence of pitting on instruments related to not using RO water. RO water to the sinks for delicate hand-washed instruments.
- Height adjustable and ergonomic sinks benches and trolleys will be accommodated.
- Medical air and suction and water guns will be required to assist with the cleaning of instruments.
- The height adjustable work desk areas at all packing benches within the Department require a minimum of 6 power points, data points and must accommodate a magnification lamp, heat sealer, computer scanner and label printers.
- The hoists will be large enough to take trolleys and carts
- Hoist will enter the dirty area and leave the sterile area

- j. Transport technology will be required to transport the trolleys to, from and within the hoist.
- k. The de-boxing areas and receiving and dispatching areas will be adequately sized to accommodate a large amounts of equipment and cardboard boxes and storage for wraps.
- l. A separate room to the washers will be required to provide adequate space for automatic chemical dispensing systems (dimensions and access to this area needs to be considered - this can be in the plant area with the RO machine).
- m. 5 washers with 15D capacity with extra space for additional washers., including ultrasonic cleaner
- n. 1 Cart washer with 2 to 4 cart capacity
- o. 4 full sterilisers with the allowance to go to 5 with capacity for 8 to 10 Sterilising modules
- p. 3 low temperature variable platform sterilisers of between 2 and 4 sterilising modules with allowance to go to 4 sterilisers
- q. 6 pass through Automated Endoscopic Repossesses (AERs) with capacity for 4 spare AERs
- r. Areas for appropriate chemical storage and access for installation and maintenance of large items of equipment needs to be considered in the overall design.
- s. The decontamination area needs to be able to accommodate facilities for instrument etching.

32.5.2. Clinical and non-clinical support

32.5.2.1. Infection prevention and control

- a. Hand basins should be located in appropriate areas however locations must be such to ensure there is no possibility of splash contamination of clean, dry goods.

32.5.2.2. Education and Training

- a. A meeting / education room is required immediately adjacent to the Department for up to 15 people for in-service and education that is provided to staff on new equipment and loan equipment within the Department. This room needs to be accessible to both the Department and an external corridor. Depending on location this meeting room could be shared with the Perioperative Unit.
- b. All meeting rooms will be readily accessible through a centralised electronic booking system.

32.5.2.3. Storage

- a. The SSD has a large storage requirement for different types of goods and consumables. These areas will be confirmed during schematic design.
- b. Bulk storage areas should be located on the periphery of the Department so that deliveries of bulk, non-sterile, and commercially purchased sterile stocks are not delivered through the work areas, but wherever possible have controlled access from areas outside the Department into the storage area concerned.
- c. Storage needs can be divided into:
 - i. Non-sterile stock, both "in use" and "back-up" supplies
 - ii. Medical / surgical consumables that may be incorporated into case packs
 - iii. Packaging material (drapes, plastic bags etc.)
 - iv. Spare unsterilised instruments.
- d. Detergents, disinfectants and chemicals with high acidity or alkalinity should be stored in a chemical storage cabinet.

32.5.2.4. Waste

- a. Most items returned to the Department for sterilisation and reissue should have the sharps, linen and biological waste removed and sorted at source.
- b. Categories of waste within the SSD will include:
 - i. Plastic aprons, gloves, cleaning cloths and some sharps
 - ii. General office waste
 - iii. Packaging and cartons from bulk supplies stored in the Department.

- iv. A disposal room should be adjacent to the dirty area

32.5.2.5. Environmental

- a. Good ventilation is required in the sterilising area to remove heat and airborne moisture from the sterilisers, from trolleys cooling in front of the sterilisers and from washing and drying equipment in the Department.
- b. The following factors will be addressed:
 - i. Storage areas will be protected from steam penetration, especially the sterile stock store
 - ii. Positive air pressure is required in the "clean" areas of the Department to reduce air movements into these areas from the "dirty" areas of the Department
 - iii. Heat and vapour from sterilisers should be collected and exhausted without effecting the occupied environment.
- c. Natural light is highly desirable especially for the packing workroom.
- d. Artificial lighting should take into account bench layout and the occupational health and safety requirements of staff.
- e. Light fittings should be fully recessed and selected to prevent dust and insects from entering.

32.5.2.6. Occupational Health and Safety

- a. The SSD involves the manual handling of what can be very heavy instrument trays and attention must be paid to maximum allowed loads on sterilizer loading trolleys, storage systems and bench heights.
- b. The inclusion of mechanisation to move trays around the unit and through the various processes is to be included.
- c. The following must be addressed with regard to safety:
 - i. Choice of flooring particularly in wet areas
 - ii. Slippery or wet floors
 - iii. Protrusions or sharp edges
 - iv. Stability and height of equipment or fittings
 - v. Adequate drainage facilities in wet areas
 - vi. Fittings which should be well above floor level and / or waterproof.

32.5.2.7. Steam Supply

- a. Steam should be provided in accordance with the requirements of AS 1410 - Sterilisers-Steam-Pre-Vacuum.
- b. Supply pipework should be correctly trapped to remove condensate and fitted with appropriate strainers.
- c. Design needs to take into account of whether the steam supply will be electric or gas-fired generators.

32.5.2.8. Staff amenities

- a. If staff amenities and meeting facilities are not able to be shared with the Perioperative Unit due to the departments being on different levels then a separate change rooms with lockers, staff toilet and showers and a separate staff room are required as part of the Department.
- b. Staff offices / work spaces
 - i. An area will be required at the front of the unit for drop offs, pick ups, and reception. If possible the open office should be behind this area
 - ii. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan
- c. Approximately 20 staff at most will occupy the department at one time.

32.6. Workforce Issues

- a. Increased service - recruitment
- b. Training and education for new systems required

32.7. Technology

- a. A full instrument tracking system is required
- b. Theatre / procedure scheduling will be accessible within the department
- c. Centralised electronic booking system
- d. Automated conveyor belt
- e. Streamlined ordering and tracking - eg. Scrub Up App/ Scrubit App - which will also include compatibility to finance systems and tracking

32.8. Change Management

- a. Change to 24 hour service
- b. Significant increase in workload
- c. Departmental structure will be reviewed

33. CLINICAL INFORMATION DEPARTMENT

33.1. Scope of Service

- a. The scope, operational details and functional requirements of Clinical Information Department at Campbelltown Hospital is under development by the district.
- b. The Clinical Information Department is responsible for the maintenance, secure storage, retrieval, clinical coding and authorisation of release of clinical information and confidential patient records for Campbelltown Hospital.
- c. The regulation of records will be as per the relevant NSW Health Policies.
- d. The departments functions include:
 - i. Management of medical records processes, including patient administration
 - ii. Release of medico-legal health information with regard to subpoenas, Government Information Public Access Act 2009 information requests, chapter 16 A requests, adoption requests and other enquiries whilst maintaining the rights and confidentiality of patients and staff in accordance with NSW Health privacy legislation
 - iii. Clinical coding, classification and reporting of diseases and procedures for inpatient admissions, SNAP process to be confirmed
 - iv. Management of access to records and data for educational and research purposes
 - v. Tier 2 clinic set up and monitoring to be confirmed
- e. Campbelltown Hospital will be transitioning to a fully digitised system of medical records. This is to be fully operational prior to the completion of the redevelopment.
 - i. Cerner Content 360 is a document scanning and electronics management system which will enable a paperless system of records keeping.
 - ii. The scanning system will be prospective only and allow for scanning and digital storage of records for separations once the system is operational.

33.2. Model of Care

- a. The ideal model of care will provide a 24 hour solution with access to requests across the entire hospital site and beyond, with same day scanning of documents where required.
- b. Technology will facilitate access to medical records for all health staff at the point of care and remotely, and for patients upon their request and approval.
- c. Further detail currently under development by the district.

33.3. Operational Description

33.3.1. Operating Hours

- a. Hours to be confirmed for clinical coding, patients administration, research and medico-legal
- b. Records Control and Processing requires 24 hours access every day of the year to enable access to paper records kept on site for the Emergency Department and any other unplanned admissions to the hospital.

33.3.2. Clinical Coding

- a. Provides the translation of written clinical information and patient data into code format once the patient is discharged from the hospital. The information gathered is used to determine hospital funding.
- b. Clinical Coders require workstations with double screens and access to a phone or other communication system with medical officers as they are often required to contact the relevant medical officer to clarify clinical content.
- c. Consideration of impacts on staff of incorporating a fully electronic system – for example, increased screen time, visual requirements, increased break requirements. Operational and equipment solutions are under further development by LHD.

33.3.3. Medico-legal

- a. Provides documents and medical records as per the requests of patients, families and other relevant parties.
- b. The unit often receives up to 20 face-to-face patient information requests. This is not expected to decrease, however access to this service is currently under development by the district and technology enabled ways to request information are under consideration.
- c. Future integration between technology, reception and medico-legal staff will be further developed.
- d. Consideration for the use of electronic forms online or electronic forms at information kiosk is underway by LHD as part of a larger district approach to patient interaction, technology and record management.

33.3.4. Patient Administration

- a. Patient Administration provides the Patient Administration System which creates medical records and numbers for all new admissions to the hospital
- b. The unit provides document control for reconciliation of duplicate records and MRNs, as well as the updating of patient demographics as required
- c. Provide training to hospital wide uses of the PAS. This will require access to computer training rooms for groups which may be shared with wider hospital facilities, the potential for online training for staff, and one-on-one training over the phone or on the inpatient units.
- d. New technology implemented will include the capability for electronic signatures

33.3.5. Record Control and Processing

- a. Policy on paper record management is under development by the district.
- b. With the implementation of Cerner Content 360, will include of scanning of documents into the electronic records after separation.
- c. Storage of paper documents will be required with capacity for three months storage to enable auditing.
- d. Storage will be required for paper documents for three years after separation. The amount of space required will decrease after the implementation of the new system.
- e. Processes for scanning of paper documents for patients presenting to ED, ambulatory care and outpatients to be confirmed
- f. Storage and retrieval of medical records, as well as management and destruction will occur as per NSW Health Policies
- g. Currently unit staff organise records which are then picked up by unit clerks or other staff for inpatient, ambulatory care and outpatient admissions. Over time, the need for this function will decrease.

33.3.6. Research

- a. Currently there is a room for researchers to review paper documents. Future access, use, and scanning of retrospective records for research is being defined by the district.
- b. Functionalities such as coordinating proxy lists in the electronic medical records for researchers to view electronic records may be completed remotely.

33.3.7. Systems In Use

- i. eMR2 - FirstNet, SurgiNet and Powerchart
- ii. eMeds plus other electronic medication management systems
- iii. CHOC
- iv. MOSAIQ
- v. PACS
- vi. Pathology

33.4. Relative Location and Unit Configuration

33.4.1. Functional Relationships

- a. Proximity to ED is preferred for collection of paper files – ready access
- b. Accessibility to service throughout the campus and potentially beyond (GPs, home) via technology is ideal. Close locality to the hospital entrance for medical records will be required if access to service is not an automated and technology enabled system throughout the entire hospital.

33.5. Specific Design Requirements

33.5.1. Clinical Coding

- a. Clinical coders require quiet workstations with double computer screens and phone access
- b. Screens need to be such that meet the requirements of long computer viewing times
- c. Rest spaces will be required to facilitate breaks
- d. Technology for new processes such as requests for medical records, updating of patient demographics
- e. Information and communications infrastructure must be capable of supporting the expected increase in network traffic

STAFF AMENITIES INCLUDING EDUCATION AND OFFICE ACCOMMODATION

34. EDUCATION

34.1. Scope of Service

34.1.1. Teaching and Education

- a. Teaching and education facilities at Campbelltown Hospital will provide tertiary teaching and education services with referral from other sites.
- b. Clinical education programs will include:
 - i. undergraduate clinical placement for medical, nursing and allied health students conducted in partnership with the Western Sydney University (WSU) and other education organisations.
 - ii. postgraduate medical, nursing and allied health education including doctorates and fellowships conducted in partnership with the WSU and other education organisations.
 - iii. in-service education programs conducted by the various multidisciplinary teams, groups and clinical service units.
- c. General staff education programs will include orientation and mandatory training courses.
- d. In-service programs will be conducted by non-clinical service units in the Education Hub.
- e. The Education Hub will provide a range of flexible and multi-purpose meeting venues to accommodate a range of functions including:
 - i. lectures and presentations to large groups (more than 25 people)
 - ii. clinical skills development activities involving specialised equipment
 - iii. workforce development activities including orientation programs and mandatory training activities for large groups
 - iv. group-based computer training activities
 - v. hosting medical examinations
 - vi. departmental and multidisciplinary meetings which require seamless video-conferencing capability with other sites and stakeholders
 - vii. dedicated facilities for WSU Clinical School
 - viii. conference facilities for conducting state and national conferences.
- f. Staff computer training will be provided in a range of suitable settings including the Education Hub and the work setting.
- g. Patient education activities will be provided in the relevant patient care area. Patient education and health promotion will be supported by a variety of media including posters, information kiosks and web-based information.

34.1.2. Library Services

- a. Currently the library exists in the WSU space and does not will change

34.2. Model of Care

- a. A culture of clinical collaboration, learning and research will be fostered throughout the Campus
- b. Education will have a strong focus for developing and maintaining the competence of the workforce across all disciplines.
- c. A multidisciplinary and multidimensional approach will be used for training and consolidation of resources through the clinical school model in consultation with the Western Sydney University Clinical School (WSUCS).
- d. Teaching and education services will be closely aligned with health services provided across Macarthur and will support the development and up skilling of staff for new services and new models of care.

- e. Education and training will operate as a hub and spoke model and will maintain the integration of Campbelltown and Camden Hospitals to support and provide training activities and programs.
- f. The Education Hub will be managed by a Facility Management team with campus wide responsibility for function/meeting room bookings, room set-up, equipment management and catering arrangements.
- g. Teaching and education services will operate within an information technology focussed environment.
- h. The WSU Clinical School will provide some support such as access to an auditorium facility.
- i. Mandatory education will be delivered electronically and all staff will be required to complete this annually.

34.3. Operational Description

34.3.1. Access, Admission and Discharge/Transfer

- a. All education and meeting facilities on the campus will be able to be booked and will be coordinated by the Facilities Management team.

34.4. Relative Location and Unit Configuration

34.4.1. Functional Relationships

- a. Relationships TBC - depending on whether there will be a single area of education (centralised) or if it will be spread out and integrated into separate units/units.

34.5. Specific Design Requirements

34.5.1. General

- a. Shared training spaces will be accessible by all units and all health disciplines and will be provided on each floor (TBC). These spaces will be required to be flexible and wherever possible have the ability to expand into adjoining spaces.
- b. Clinical handover/resource rooms will be included on all inpatient units to support teaching which will occur as an adjunct to handover.
- c. A common room space will be designed to facilitate interaction between different research groups.
- d. Accommodation for visiting researchers will be provided to promote the high profile of the Research Hub.
- e. Meeting rooms and education spaces (including simulation rooms) will be provided in each department.
- f. An auditorium that seats approximately 240 people in a semi-tiered arrangement as a venue for regular lectures, significant guest speakers, and small conferences. Each seat will be required to support note taking. The presenter's areas will have AV and IT capabilities as appropriate.
- g. The Auditorium will be supported by a breakout space which will be a mix of small formal education and training spaces as well as informal areas suitable for event receptions, a foyer, and kitchen and preparation area for event catering.
- h. Education and Training Rooms:
 - i. A number of rooms ranging from 60 seat capacity (2 of) to 30 seat capacity (4 of)
 - ii. These spaces are flat floor, multipurpose rooms with video / teleconferencing, audio visual and data projection functionality as required to support the training and education activities of the hospitals and their university partners
 - iii. Storage will be required for roll in and roll about furniture and equipment to enable efficient and flexible use and reconfiguration of the education spaces.
- i. Informal Breakout areas suitable to provide:
- j. Reception for events including the ability to set up tables with power
- k. Space for informal mixing before, during, and after events that can be discretely partitioned from the Main Entrance if required.
- l. Furniture to include small standing tables, long benches for refreshments, receptions desks, soft seating.

- m. Appropriate storage for furniture not required for specific events.
- n. Amenities including:
 - i. A beverage bay with hot and cold water and a refrigerator will be required adjacent the education and training rooms.
 - ii. A kitchenette with beverage making, food reheating and plating and refrigeration facilities

34.6. Technology

- a. A limited in-house audio-visual service will provide technical advice and support on audio-visual related issues and equipment including internal and external video and teleconferencing.
- b. Facilities will also be provided for the recording, editing, storage and production of audio-visual material.
- c. Storage of audio-visual material will be provided by the Library Service.
- d. Video-conferencing and IT links will be provided in the hospital to support video-conferencing activities and to allow seamless audio-visual communication with the WSUCS library and other external sites including other health facilities and patient's homes.
- e. Education services will require an audio-visual service with the capacity to support video-conferencing including the editing of audio-visual material.
- f. ICT systems and networks must be capable of handling and storing large volumes of data.
- g. Space will be required for computers and laptops on units for self-directed learning online education and training.

34.7. Change Management

- a. The increase in capacity for Education will require an increase in qualified staff and a review of governance and management structures.

35. PASTORAL CARE AND MULTI-FAITH SERVICES

35.1. Scope

- Pastoral care focuses on caring for patients' and carers' spiritual, emotional and social needs.
- Chaplains and pastoral care workers will visit units and clinical areas, support pastoral education, arrange and conduct services and ceremonies and offer support in times of grief, loss and bereavement to visitors and staff.

35.2. Operational Description

- The spiritual care multi-purpose room will be accessible 24 hours every day of the year. The pastoral office will primarily operate Monday to Friday from 0700 to 1700.
- Pastoral care workers, hospital chaplains and local clergy will be readily available to patients, families and staff. They will visit regularly and can be contacted when required.
- Patients, visitors and staff will visit the multi-purpose room and offices as needed and will require access for wheelchairs and trolleys.

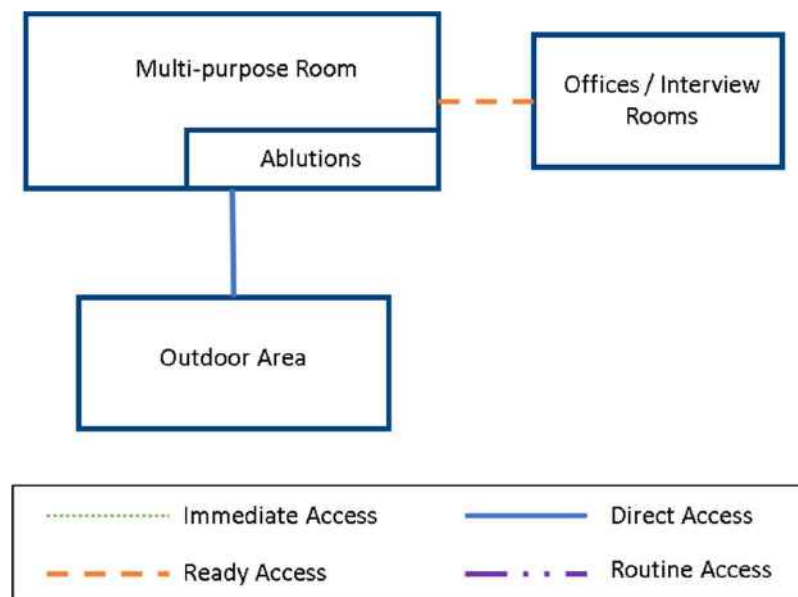
35.3. Functional Relationships

- Ideally, the multi-faith centre to be accessible near a main entry.
- The multi-purpose room will have immediate access to an outdoor area and be in the vicinity of the main entry. Way finding to the multi-purpose room will be intuitive and enable easy access by visitors without traversing other departments. The outdoor area will include a shaded seating area with water.

35.3.2. Key External Relationships

- Main entry – ready access
- Pastoral Care Office – ready access

35.3.3. Key Internal Relationships



35.4. Specific Design Requirements

- a. A welcoming non-denominational, multi-purpose room will be provided for quiet prayer, meditation or reflection. An ablutions area will be required within this space for the washing and drying of feet.
- b. Separate male and female public toilets should be adjacent to the area
- c. The design of the multi-purpose room must incorporate access to natural light.
- d. The multi-purpose room must be designed to be a welcoming place of quiet reflection.
- e. Consideration must be given to the requirements of all faiths.
- f. The pastoral care office consisting of two workstations will be adjacent to the multi-purpose room.
- g. There will be an adjoining outdoor area to the multi-purpose room. This area should be wholly or partially covered by a roof or shade cloth.
- h. Interview rooms in the main entry will be available for private meetings and discussions with families in distress.
- i. Lockers will be required for pastoral care workers.

35.5. Workforce Issues

At present the pastoral care workforce is voluntary. This may become a permanent or part time position.

36. ABORIGINAL LIAISON SERVICE

A.1 Scope and Model of Care

- a. An Aboriginal Liaison Service will be provided to patients, families and carers. Aboriginal Liaison Officers will provide advocacy and support for clients and hospital staff.
- b. Aboriginal Liaison Officers will utilise spaces within the hospital as required, including interview rooms in the main entry, ambulatory care and clinical units.

36.2. Operational Description

- a. Aboriginal liaison officers will operate 0800 to 1700 Monday to Friday.
- b. In line with policies, line staff will undergo Aboriginal and Torres Strait Islander cultural awareness training as part of the mandatory education and orientation programs.

36.3. Functional Relationships

- a. Aboriginal liaison officers will be collocated with multicultural liaison officers and social workers in the office accommodation area.
- b. Ideally a culturally sensitive space should be accessible on the ground level
- c. The Uncle Ivan Room needs to be located close to an entry point.
- d. Access to an outdoor area will be required.

36.4. Specific Design Requirements

- a. 4 workstations will be required for Aboriginal Liaison Officers in the office accommodation area.
- b. The design of waiting rooms / family rooms and external areas throughout the hospital are to be mindful of the needs of large families that travel long distances to visit relatives admitted to hospital.
- c. The interior design of the facility is to accommodate the history and tradition of the Dharawal people including acknowledgement of the contribution of the Aboriginal and Torres Strait Islander community. This may include local ochre, and earth tones sensitive to Aboriginal culture, art or other artefacts being included in both the design and fit out.
- d. All waiting areas are to include electronic information for general education, information or resources, as well as specific information catering for Indigenous patients or visitors. Other displays will occur as appropriate.
- e. Given the relationship of the Aboriginal and Torres Strait Islander peoples to the outdoors, outdoor areas are to be designed to cater for this need. This may include a seating area / shaded / garden area with access to water.
- f. Inclusions of local Aboriginal and Torres Strait Islander significant designs or totems are to be included in landscape and / or external facades.
- g. Shower, toilet, sink / kitchenette / Beverage bay / zip tap and patient lounge will be required in the Uncle Ivan room
- h. An outdoor area to accommodate around 20 to 30 people comfortably with circular area with seating in outdoor area adjacent to the Uncle Ivan room
- i. No medical gases and panels will be required in the Uncle Ivan room and this should have a home like feel. Vinyl flooring is essential but should be home like.
- j. A meeting room and interview room will be required to be adjacent to the Uncle Ivan room
- k. Access to wireless internet connection will be required

36.5. Workforce Issues

- a. Current staffing profile is 2 staff - this will potentially increase

37. VOLUNTEERS

37.1. Scope of service

The Volunteers Services provided at Campbelltown Hospital are provided by:

- a. Campbelltown Auxiliary
- b. Kids Macarthur
- c. Blue Ladies
- d. General Volunteers
- e. Services include:
 - i. concierge services at the main entry
 - ii. wayfinding
 - iii. assistance with flowers
 - iv. some patient type service which involves assistance with meals or and on-site and provide magazines and books

37.2. Operational Description

- a. The volunteer service will operate from 0800 to 1700 Monday to Friday with possibility of extension to weekends.
- b. There will be two functional areas for volunteer services, one in the main entry providing concierge / way finding and retail services, and a base station for day to day operations and management of volunteers.
- c. Volunteers numbering up to 30 per shift will sign on at the base station and be tasked on a shift by shift basis. Volunteers routinely use trolleys to move goods and equipment throughout the hospital.

37.3. Relative Location and Unit Configuration

- a. Base station for all volunteers in a front of house locality, with a locker room and workstations and storage space.

37.3.2. Functional Relationships

- a. The base station will be located centrally within the hospital close to a lift as volunteers travel widely and frequently throughout the hospital.
- b. Sales area will be adjacent to an ATM

37.4. Specific Design Requirements

- a. In the main entry there will be a mobile concierge station
- b. There will be 2 areas, one will be directly for volunteers and one will be a bookable space if needed for special or additional retail type requirements.
- c. The base station will ideally include the following spaces:
 - i. Open work area / shop type area with counter for sales
 - ii. 3 Single office for managers
 - iii. Locker area for 60 people - quarter lockers
 - iv. Access to staff only toilets for men and women

- v. Trolley / buggy parking area
- vi. General storage for admin support, clothing storage, lollies
- vii. The entry door to the volunteer base station will require access suitable for movement of trolleys i.e. 1½ doors.

38. EMPLOYEE ASSISTANCE

38.1. Scope of Service

Employee Assistance will provide general advice and counselling services available to all staff

38.2. Model of Care

- a. Discreet accommodation for purpose of counselling and confidentiality.
- b. Internal or outsourced model to be determined. An outsourced model could be off site

38.3. Operational Description

- a. Employee Assistance services provides a variety of staff support functions and primarily ensures and independent and confidential staff service. Day to day counselling and general support functions

38.3.2. Operating Hours

- a. Operating hours 9.00am to 5.00pm

38.4. Relative Location and Unit Configuration

38.4.1. Functional Relationships

- a. Ready access with Human Resources Unit

38.5. Specific Design Requirements

- a. Discreetly located interview room away from a central location
- b. One interview room with lounge

39. GENERAL STAFF AMENITIES

39.1. Scope of Service and Model of Care

- a. The design must assist staff to perform their tasks safely and efficiently in an appealing environment.
- b. The design must incorporate innovative approaches to units staff respite throughout the internal and external environments of the Facilities.
- c. The facility should have education spaces embedded in clinical areas such as meeting rooms and tutorial rooms

39.2. Specific Design Requirements

- a. The following key aspects of staff friendly working environments must be included:
 - i. a safe physical environment that is free of clutter and easy to navigate
 - ii. a design that supports the operational practices of staff within the Facilities and does not hinder the provision of care and service.
 - iii. easy access to materials and equipment required by staff to perform their tasks
 - iv. minimised travel distances
 - v. logically planned and organised spaces
 - vi. standardisation for repetition and familiarity
 - vii. acoustic treatments for clear communication and reduced noise interference from plant and engineering services
 - viii. specialised acoustic treatments and soft furnishings to facilitate relaxation and comfort in staff rest areas.
 - ix. safe storage of personal property, which is accessible from within their unit
 - x. natural light throughout the units
 - xi. direct access to external views of nature must be provided in working areas where repetitive or monotonous tasks are carried out
 - xii. access to green space and areas for relaxation away from the unit
 - xiii. access to opportunistic learning spaces which are close to their units.

39.2.2. Functional Relationships

- a. The location of any staff amenity must be convenient, logical and relative to its function. Staff amenities will include:
 - i. end of trip facilities
 - ii. staff memorial garden
 - iii. staff rooms
 - iv. combined public and staff commercial dining facilities
 - v. on call rooms
 - vi. staff property / locker bays
 - vii. parenting and breast feeding rooms
 - viii. personal hygiene areas.

39.2.3. Office Accommodation

- a. NSW Health policy directive PD2005_576 Office Accommodation Policy - Public Health Organisations and Ambulance Service, 2005

39.2.4. Staff Dining Facilities

- a. Staff dining facilities must be provided away from the unit with the exception of those clinical units where staff may be required to return at short notice.

39.2.5. Staff Stations

- a. Staff stations may be provided as a hybrid model of centralised staff stations and decentralised staff bases.
- b. The centralised staff station is an open collaboration hub facilitating overall unit coordination and multidisciplinary interactions.
- c. The multidisciplinary clinical workroom must be adjacent with the staff station.
- d. The decentralised staff base minimise travel distances and bring staff closer to the patient.

39.2.6. Clinical Support - Storage

- a. Opportunities for standardising the design of all storage areas within like units are to be maximised.
- b. Store rooms are to be of a regular shape with no curves allowing for maximum flexibility and efficient space utilisation.
- c. Store rooms are to maximise vertical space and elongation to enhance storage between hip and chest height.
- d. Sterile stock rooms must provide storage between 250mm above floor level and 440mm below ceiling fixtures and protected from direct sunlight. The area should be cool and dry and not at risk of moisture ingress.
- e. All shelving is to be height adjustable.
- f. Open mesh shelving is to be used in clinical storage areas to minimise dust collection.
- g. Where equipment is stored on shelves, dedicated space must be allocated within for hydraulic operated transfer trolleys or platforms.
- h. Where equipment is stored on shelves, dedicated space must be allocated within for hydraulic operated transfer trolleys or platforms.
- i. Larger equipment store rooms are to have double door entries.
- j. Closed store rooms must be securable.
- k. Equipment bays are to have a broad frontage and less depth to provide unencumbered access and removal of equipment.
- l. Mobile equipment bays are to house equipment close to point of use.
- m. Cupboards storing equipment must be able to facilitate roll in roll out equipment or trolleys.
- n. All storage rooms and equipment bays are to have multiple power outlets to support recharging of electronic equipment.

39.2.7. General

- a. internet kiosks
- b. staff property / locker bays
- c. staff change and showers
- d. parenting rooms
- e. personal hygiene areas.

39.2.8. Public Amenity including Visitor and Family Facilities

- a. Public spaces in the new building should be family friendly
- b. Restrooms are to be provided at all arrival points into the Facility and within the arrival areas to publicly accessed units
- c. The distribution of restrooms must provide for the following:
 - i. gender separation
 - ii. parenting rooms incorporating feeding, baby change, and children's toilets
 - iii. carers rooms including areas for attending to hygiene needs of older persons including a shower facility and comfortable lounge within a low stimulus environment
 - iv. accessible toilets
- d. sharps disposal units.

- e. Entries to the restrooms must provide clear visibility for those entering and exiting and must not be located in isolated areas.
- f. Restrooms must be accessible 24 hours a day, every day of the year.
- g. Members of the public will share access to commercial dining spaces.
- h. Access to outdoor spaces must be provided as part of the landscaping strategy.
- i. Civic space must provide access to weatherproof walkways leading to the main entrance of the Facilities.

39.2.9. Staff Lounge

- a. A staff lounge and beverage bay will be included in every inpatient area and shared elsewhere throughout the hospital.
- b. A dining room will be provided for staff adjacent to the retail area

39.2.10. Medical Staff Accommodation

- a. There will be a medical staff lounge with adjacency to Overnight "on call" rooms for medical staff.
- b. Overnight "on call" Rooms will have easy access to a lift
- c. Overnight rooms must have close proximity to the Medical staff lounge Theatres, ICU and ED
- d. Paediatrics, Surgery, Medical (Adult) including Cardiology, ICU, ED, SCN, Mental Health, and Anaesthetics all require on call overnight room capacity
- e. 8 overnight rooms with shared ensuite will be required. It has been suggested this should be 12
- f. The overnight rooms will be within ready access to clinical areas
- g. Junior Medical staff require 1 large lounge separated with a quiet separate study space to hold 8 to 12 spaces.
- h. Surgical Registrars require an area away from the clinical areas with computer access for education and training purposes as part of their training program.
- i. Further information in relation to registrars is required, including training requirements for surgical specialty registrars.

39.2.11. Breast Feeding Rooms

- a. Private Breast feeding rooms will be specifically provided, preferably access is to the Front of House and in the Special Care Nursery and end of trip facility. The rooms must have suitable chairs and table as well as a quiet and comforting design.

39.2.12. End of Trip

- a. 3 showers and 3 toilets with room for 20 lockers will be required at End of Trip
- b. Bike racks for 40 bikes will be provided
- c. Adjacent to retail space or built carpark

39.2.13. Child Care Centre

- a. District to consider outsourcing child care services

40. FRONT OF HOUSE

40.1. Scope of service

- a. The New Facility must be designed to facilitate easy and effective access to and throughout the whole of the hospital, recognising there will be multiple access points for the building. However, the entrance will be pivotal, and will therefore be the predominate access and meeting point for the hospital and precinct.
- b. The design of this space must be welcoming and provide a distinct sense of arrival and provide a launch point for the hospital for visitors, patients and staff.

40.1.2. Services

- a. The following services are to be located within the Front of House area:
 - i. Main Entrance and Foyer, including reception and information desks, a waiting lounge, wayfinding, a volunteer station, wheelchair storage, front entrance and airlock, and infection control (hand rubs),
 - ii. Admissions Unit, including admissions desk, workspace, self-register kiosks, and interview rooms (tbc)
 - iii. Administrative Office Space, including Switchboard, Bed Managements, Patient Liaison Officers, Public Complaints and other administrative services
 - iv. Cashier functions
- b. Retail, including commercial food and beverage outlets, Vending machines, other retail, ATMs, suitable seating to support the general public waiting areas,
- c. Exhibition Space, including 'pop up' public health and community information activities and other public events including videos, posters, interactive displays, staffed kiosks/booths and the like, art display
- d. Access, including drop-off/pick up, temporary parking, and disabled parking.
- e. Public Amenities, including public male and female toilets, including unisex disabled access toilet, parenting room with change rooms and baby feeding facilities, vending machines, cold water fountain, public telephone.

40.2. Operational Description

- a. The Front of House will encapsulate the ethos of the Model of Care by recognising the patient and carer in the delivery of health care, through the provision of appropriate environments, effective way finding and information delivery.
- b. The Front of House will provide a tangible profile of the hospital as a leader in the provision of health care services through health promotion and community education programs. This will be through visible education and research activities (e.g. promotion materials, education events etc.), as well as changing public education campaigns in 'pop up' locations within the Front of House. .
- c. The Front of House will provide a drop-off and pick up areas for patients and visitors, as well good access to the car park will also be required.
- d. Inpatients who arrive at the Facility on the day of admission will have already been through the pre-admission process but will finalise this process at the Admissions Desk. They will then receive directions to how they reach their destination.
- e. Wayfinding will be through signage and/or technology.
- f. The waiting lounge will be used predominately for people waiting to be joined by the person who dropped them off, or waiting to be picked up. It is presumed that the Retail areas will provide more appropriate space for people otherwise waiting.
- g. Food and beverage, and other retail experiences will be provided within the Front of House footprint, providing a source of distraction for those waiting.
- h. The Front of House will accommodate a significant number of administrative staff, including Switchboard and some Admission Staff. These staff will engage with the inpatient and other visitors about general matters, which can be dealt with across an enquiries or similar counter, and confidential matters, which will require appropriate enclosed meeting spaces.

- i. Security offices should be considered in this area
- j. There will be direct access to public car parking, drop-off and pick up zone and taxi rank.
- k. No goods deliveries will be made or accepted via the main entry.
- l. Commercial vendors will have access to their spaces during main entry hours of operation
- m. The Front of House will be open from 6:00am to 10:00pm, 7 days a week. After-hours access to the Facility will be controlled by Security and it is envisaged that the entry point will be via the main entrance.
- n. Bus access and taxi rank should be considered at the front entry
- o. Signage for non-smoking must be provided around all entrances

40.2.2. Functional relationships

40.2.2.1. External Relationships

- a. All weather drop-off and pick up areas and all weather access to car parking.
- b. Direct adjacency to the ED.
- c. Direct access to volunteer services
- d. Front of House configuration includes:-
 - i. Entry/ reception/ sub waiting area
 - ii. Retail areas
 - iii. Education/Public Events space
 - iv. Interview and meeting space
 - v. Flexible office space
 - vi. Support areas
 - vii. Switchboard.
 - viii. Cashier

40.3. Specific Design Requirements

40.3.1. General

- a. Utilise appropriate finishes, furniture, signage and art to reflect the public function of the space.
- b. Creates a sense of welcome for all members of the community, spaciousness, with access to natural light and external views if possible.
- c. Accommodate peak loads of visitors and patients
- d. Use durable finishes to accommodate the high foot traffic anticipated
- e. Promote efficient connectivity and wayfinding through the building
- f. Way finding systems and signage design will be required to direct people around the hospital, through a combination of signage and technology solutions (maps on smart phones).
- g. Visitors and the public will access the Front of House during operational hours.
- h. Out of hours access for the Public will be via ED and managed by Security
- i. Out of hours staff access will be controlled by electronic proximity access card (or similar)
- j. CCTV should be considered in the corridors and entrances/exits.
- k. Fixed and mobile duress alarms will be provided for staff in accordance with risk assessments.

40.3.2. Main Entrance and Foyer

- a. Reception and information desks:

- i. A combined welcoming reception and information desk to support general enquiries and requests.
 - ii. Will be prominent and easily recognised by visitors as the first point for assistance having entered the Hospital.
 - iii. Have the capacity to accommodate staff and associated paper and file storage, as well as ready access to a multi-functional device
- b. To be separately located to but nearby the volunteer station
- i. Should be collocated with the Administrative Office Space to support easy access for other staff (e.g. Public Complaints) to answer general public enquiries
 - ii. A section of the desk must be designed to accommodate disabled access,
 - iii. The security of the desk will be determined as part of the overall security assessment, and the depth and height of the desk should reflect this assessment.
 - iv. The desk should have two fixed and discrete duress buttons and direct electronic communication to security staff.
- c. Waiting lounge
- i. Providing short term waiting space for people in appropriate seating.
 - ii. Located immediately at the entrance to facilitate drop-off/pick up by carers.
- d. Wayfinding
- i. In accordance with hospital/precinct wide approach.
 - ii. Consider self-service kiosks that provide location and wayfinding information.
 - iii. Lifts, lift lobbies and stairways must be easily identifiable and accessible as part of the wayfinding strategy that includes signage and supported by technology such as kiosks or apps on smart phones.
- e. Volunteer station
- i. Create as a standalone location nearby to the information desk
 - ii. Needs to provide space for volunteers to congregate if not assisting patients/visitors to the hospital
 - iii. Provide as a separate location, within the retail precinct, as a break room and for storage of personal items, that is easily identifiable as a source of information and help.
- f. Appropriate storage for wheelchairs and bariatric wheelchairs.

40.3.3. Admissions Unit

- a. A combined admissions desk that supports admitting inpatients, as well as assistance with Outpatient arrivals
- b. Have the capacity to accommodate staff, with provision for associated paper and file storage and ready access to a multi-functional device
- c. Should be collocated with the workspace to support easy access
 - i. A section of the desk must be designed to accommodate disabled access,
 - ii. The security of the desk will be determined as part of the overall security assessment, and the depth and height of the desk should reflect this assessment.
 - iii. The desk should have two fixed and discrete duress buttons and direct electronic communication to security staff.
 - iv. The design of the desk should be open and welcoming but also preserve patient privacy through physical separation. The placement of computer monitors should allow both staff and patients to discretely view the screen if required.
- d. Providing short term waiting space for 10 people in appropriate soft seating.
- e. Workspace to be integrated within Administrative Office Space, or if stand alone, aligned with the same design requirements.
- f. Self-register kiosks
- g. Appropriate meeting and interview rooms will be immediately adjacent, located with access to the public concourse, with a discrete duress button and direct electronic communication to security staff.

40.3.4. Workplace Design

- a. Indicative office requirements will be considered in the context of workplace design principles. Please refer to 3.2.3 Workplace Design.
 - i. The following staff establishment may be considered
 - ii. Management (10 staff)
 - iii. Admission Staff (3 staff)
 - iv. Switchboard and outpatient centralised phone hub (12 staff)

40.3.5. Mail Services

- a. The courier and mail service coordinate the distribution of hard copy mail received in and out of the hospital.
- b. Mail and parcels will be generally delivered via the loading dock and passed on to the mail room nearby.
- c. It is anticipated that the demand for scanning will increase. Bench top multifunction devices will be available in most units however access to freestanding multi-functional devices (MFDs) with rapid scanning capability will be limited throughout the facility. Volunteers working in the mail room also do binding and assembly of reports and documents.
- d. The service will operate from 8.30am to 4.00pm.

40.3.6. Commercial/Retail

- a. Retail, including commercial food and beverage outlets, and other services.
- b. Consideration should be made for a private pharmacy.
- c. Volunteer Shop, staffed by volunteers and raises money to support research and the hospital.
- d. ATMs

40.3.7. General Public Waiting areas:

- a. Suitable for seating people who will wait in this location rather than within sub-waiting areas within the Clinical Footprint from the Main Entrance if required.
- b. Furniture to include small standing tables, long benches for refreshments, reception desks, soft seating.
- c. Appropriate storage for furniture not required for specific events.

40.3.8. Amenities including:

- a. A beverage bay with hot and cold water and a refrigerator will be required adjacent the education and training rooms.
- b. A kitchenette with beverage making, food reheating and plating and refrigeration facilities

BACK OF HOUSE SERVICES

41. FOOD SERVICES

41.1. Scope of Service

- a. The Food Service will be provided by HealthShare NSW and will provide food and beverages to:
 - i. Campbelltown and Camden hospitals inpatients and outpatients
 - ii. These will be Receiving kitchens only
 - iii. The kitchens will provide limited internal event catering
- b. Food will be prepared offsite (cook chill) and supplied by HealthShare
- c. The kitchens at Camden and Campbelltown campuses will receive bulk chilled meals via a refrigerated truck, will assemble meals, and re-thermalise food within the kitchen (i.e. no re-thermalisation on the inpatient units).
- d. Receiving areas will be located on the inpatient units for trolleys comprising of parking space within a designated alcove with no requirement for power or docking station.
- e. Onsite food preparation will be decreasing as pre-packaged (My FoodChoices) foods increase.
- f. Meal trays will be assembled on site albeit an increase in pre-packaged items.
- g. Meal Times for IPUs will be:
 - i. Breakfast – 0715
 - ii. Mid meal service – 1000
 - iii. Lunch – 1230
 - iv. Mid meal service – 1400
 - v. Dinner – 1730
 - vi. Mid meal service - 1900
- h. Retail catering services (comprising onsite staff and public cafeterias with food-fair and coffee shops; functions and events catering; and vending machine catering) will be outsourced to the private sector.
- i. The Patient Catering Manager will set the min/max inventory levels (2-days of supplies on-site), stock take frequencies (monthly); rotation rates (FIFO), and refreshes rates (daily from Monday to Friday).
- j. Patient Catering Manager will set the min/max inventory levels (2-days of supplies on-site), stocktake frequencies (monthly); and refreshes rates (daily from Monday to Friday).
- k. All dry goods/milk/bread/fresh fruit/dairy will be purchased externally and delivered to the main kitchen to be distributed as required.
- l. Special diets and oral fluids will be supplied as required from the kitchen.
- m. Snacks will be prepared in the kitchen by catering staff and transported to inpatient areas by trolley.
- n. Retail catering services (comprising onsite staff and public cafeterias with food-fair and coffee shops; functions and events catering; and vending machine catering) may be outsourced to the private sector.

41.2. Model of Care

- a. Food will be prepared offsite (cook chill) and supplied by HealthShare
- b. The kitchens at Camden and Campbelltown campuses will receive bulk chilled meals via a refrigerated truck, will assemble meals, and re-thermalise food within the kitchen (i.e. no re-thermalisation on the inpatient units).

41.3. Operational Description

- a. HealthShare NSW services will manage the procurement of food and groceries through an electronic menu system
- b. All new inpatient units will have access to a bedside electronic menu ordering system.
- c. Diet Assistants (menu monitors) will support the food service and will be located in a work space in close proximity to the allied health.
- d. Patient catering at Campbelltown Hospital will use predominantly cook chill methodology with minor cook/freeze (e.g. soups, gravies, and vegetarian dishes) whereby food preparation and delivery will be outsourced to external providers. Fully cooked/chilled and cooked/frozen food will be delivered Monday to Friday to the hospital catering dock whereupon it will be centrally-plated, transported, and distributed to patients by in-house catering staff using rethermalising/chiller trolleys and electric tug-carts/motorised trolleys via unit pantries and service corridor.
- e. Child-friendly food and meals will be provided for Paediatric Services. Food in these areas will be stored in fridges and designated storage areas. These meals will be supplied by an external supplier
- f. Meals and sandwiches will be available for patients who miss the scheduled meal times.
- g. Mid meals will be provided for patients as required. Mid meals will be delivered from the central kitchen to the inpatient unit for distribution to the patients throughout the day and evening.
- h. Pre-packed special diet items and formula for babies produced offsite will also be provided.
- i. Drinking water for patients will be provided in recyclable bottles with cups depending on patient requirements.
- j. Space to store and charge the food delivery carts is to be provided in the central kitchen.
- k. Each inpatient unit will have a beverage bay with storage for mid meal items and for out-of-hours patient meals, dishwasher, microwave.
- l. Space will be required for parking and charging of two insulated food delivery meal carts (during meal times) and one mid meal food delivery cart.
- m. All patient trays will be collected and returned to the central kitchen by the appropriate HealthShare NSW staff.
- n. All washing up will be in the central kitchen. Any non-disposal dinnerware or cutlery used by patients will be stored in the pantry, any bulk food delivery or storage items, including serving utensils will be returned to the central kitchen for cleaning and storage
- o. Dinnerware and eating utensils will be recyclable.
- p. Commercial food outlets will be available for patients, staff, visitors and the public and will provide event catering.
- q. Deliveries of food and consumables for the food service will be made to a dedicated clean loading dock with direct access to the central kitchen.
- r. Storage requirements in the central kitchen must include large cool rooms, freezers, dry store and equipment storage rooms.
- s. Food and appropriate waste will be disposed in the central kitchen in line with hospital waste management policies. The waste will be removed from the kitchen via a dirty corridor outside the department to the waste hold area on the loading dock.
- t. Perishable foods will be received by staff at the receiving dock and on acceptance will be delivered directly to the food services stores. Packed chilled and frozen foods after temperature checking (disposable pre-plated and bulk chilled food) will be delivered to the receiving dock and on acceptance, transported to Food Services for holding in the freezer / cool rooms. Dry stores will be received by staff at the receiving dock and on acceptance will be delivered directly to the Food Services dry stores area.
- u. Handwash facilities will be provided at the food receiving dock.

41.3.2. Operating Hours

- a. Hours of service will be from 0530 to 2100 daily with possibility of extended hours.

41.4. Relative Location and Unit Configuration

41.4.1. Functional Relationships

- a. Key External relationships are all clinical areas of the hospital and the loading dock area dedicated to Food Services, including:
 - i. Direct access from the receiving dock is essential for receipt of food supplies.
 - ii. Direct access to the dispatch dock will be required for waste removal. Food delivery vehicles may require a raised loading dock.
 - iii. Quick, easy, and undercover access will be required to all areas of the hospital where food is delivered.
- b. Key internal relationships include:

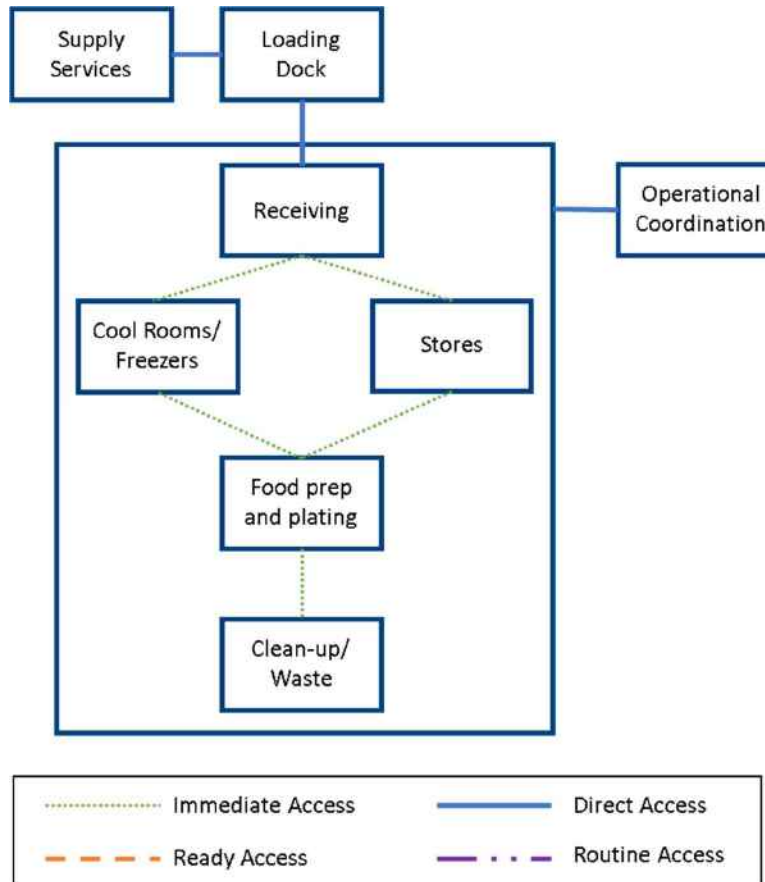


Figure 13 Food Services internal relationships

41.5. Specific Design Requirements

- a. An electronic (e.g. swipe card, finger print) sign-on area for food services staff and access to computers and printers for supervisory staff will be required.
- b. Food Services staff will share the staff meeting room with other operational services staff.
- c. Property bays are to be available for staff personal belongings.
- d. Proximity card access will be required to department.
- e. In accordance with current NSW Infection Control Policy, personal protective equipment (PPE) and hand washing facilities shall be installed as careful attention to hygiene is essential in Food Services. These facilities will be installed at all entry points to the kitchen and within five metres of food handling. Hand washing facilities should comply with appropriate Australian Standards; mirrors shall not be installed at hand washing facilities in food preparation areas where aseptic control would be lessened by touching hair.

- f. Natural light is desirable.
- g. Doorways to all areas must provide unhindered access for food trolleys.
- h. Access to freezer, dry store and cool room must accommodate pallet jacks.
- i. Air conditioning will maintain an ambient air temperature of 21-23 degrees Celsius.
- j. Emergency power supply will be required to the freezer, cool room, the trolley reheating bays and computers for tray tickets etc.
- k. Walls and ceilings will be impervious and easily cleanable are essential.
- l. Non-slip floors and floor drainage will be required.
- m. The preparation and plating area should be maintained within a temperature range of 18 to 22 degrees Celsius.
- n. Continuous alarm monitoring to the BMS of freezer, cool room, and preparation and plating area is essential.
- o. Ready access to a lift for distribution of patient meals is desirable (shared by service units within the hospital)
- p. Rethermalisation food carts require a secure parking space with three phase power within the food services unit.
- q. Rechargeable bays for up to 6 electronic tugs will be required.
- r. Work spaces will be required for 3 x diet assistants, 1 x manager, 1 x in food service stores.

41.6. Workforce Issues

- a. The staffing in the kitchen will be approximately 40 staff members, 24-30 of which are anticipated to be working at the one time.
- b. Training and education in new systems and technology

41.7. Technology

- a. An electronic ordering system will be utilised with staff taking orders at the patient bedside

41.8. Change Management

- a. The majority of change management to MyFoodChoices will have been completed prior to the implementation of any new build
- b. Centralised formula room

42. CLEANING SERVICES

42.1. Scope of Service

- a. The cleaning service will be responsible for maintaining a clean and sanitary environment across Campbelltown Hospital campus. The cleaning service will operate from a centralised location and will also have storage facilities within each unit.
- b. The cleaning service is operated by Local Health District staff
- c. The cleaning unit provides an in-house service, operating on NSW Health guidelines:
 - i. General cleaning
 - ii. Terminal cleaning of inpatient areas
 - iii. All special cleaning
 - iv. Carpet cleaning may be outsourced.
 - v. External cleaning will be done by contractors or by in house staff to be determined.
 - vi. Operating rooms will be cleaned by theatre assistants.
 - vii. Other specialised areas such as ICU may have a dedicated cleaner

42.2. Operational Description

- a. The in-house cleaning will be coordinated by a supervisor. It will comprise a roster allocation to each of the units within the facility associated with an on-call paging system or electronic allocation system. Night duty and evening shift will be covered by a multi-task role hospital assistant.
- b. A microfiber and steam system will be used. In future modalities may include hydrogen peroxide vapour systems for cleaning/decontamination.
- c. Cleaning service will operate 24 hrs a day, seven days a week.
- d. Unit managers will order cleaning and domestic supplies based on input from usage and supply levels held in Store on the Dock. Cleaning and domestic supplies will be delivered to the loading dock and delivered to the unit stores area by the supply unit store person.
- e. Cleaning staff will collect the supplies required for non-departmental areas as required from the cleaning unit stores area. Cleaning staff will collect waste from hospital units and place in the waste disposal rooms.
- f. Cleaner's rooms and stores in each of the areas will be kept locked and accessed only by cleaning staff.
- g. A meeting room (20m²) space needs to be available in the back of house support services area. This space can be shared by all operational services staff.
- h. Change facilities can be shared with other back of house departments and lockers for all staff will be required.

42.3. Model of Care

- a. All areas will either have a cleaner's room or access to a cleaner's room. The maximum area serviced for a cleaner's room will be 1500M². If this area is larger consideration of either a larger cleaners room or a second cleaners room will be required.

42.4. Operational Description

42.4.1. Operating Hours

- a. Standard hours of service will be from 0500 to 2100 daily with coverage for the full 24 hours.

42.5. Relative Location and Unit Configuration

42.5.1. Functional Relationships

42.5.1.1. Key External Relationships

- a. Direct access to a loading dock for dry goods such as toilet paper and hand towels will be required for the main department
- b. Ready access to supply services
- c. Access to all areas of the hospital is necessary.

42.5.1.2. Key Internal Relationships

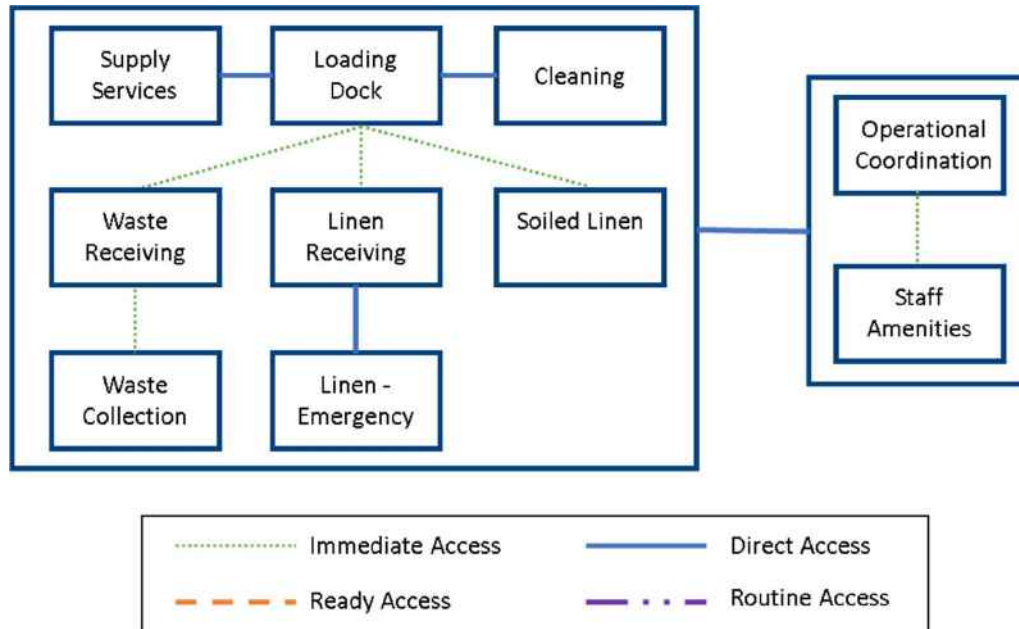


Figure 14 Cleaning Services Internal Relationships

42.6. Specific Design Requirements

- a. Hospital-wide requirements
 - i. Cleaner's rooms should be able to accommodate a clinical hand wash basin, two mobile cleaner's trolleys, equipment (e.g. vacuum cleaners) and locked storage cupboard for chemicals and other consumables.
 - ii. Disposal rooms will be used for the temporary holding of full soiled linen bags and waste prior to collection. Disposal rooms will be provided in accordance with Australasian Standards.
- b. Shared operational coordination and support. The following areas will be shared between cleaning, linen and waste services:
 - i. A central sign-on bay
 - ii. Staff property bays
 - iii. Meeting rooms
 - iv. Staff amenities will be centralised and shared with other back of house services
 - v. Staff room
 - vi. Change rooms
 - vii. Toilets
 - viii. Offices and work spaces: indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

- c. The cleaning unit will consist of the following internal functional areas:
 - i. workstations for a range of supervisory staff (in shared clinical support area)
 - ii. storage area for bulk cleaning materials and consumable supplies
 - iii. equipment storage with parking and charging bays.
- d. Ease of access between the washing and drying area will be required to the storage area for microfibre
- e. Some large equipment needs to be stored such as commercial scrubber's and platform ladders. A central location is preferable. There is a requirement for chemical storage near the loading dock.
- f. Store rooms require direct access from the hospital corridor.
- g. Mobile equipment bays require direct access from the hospital corridor.
- h. The staff (electronic) sign-on bay should be located in a recessed, discrete area with ready access to staff entry area and circulation corridor - shared by food service and cleaning.
- i. A microfiber laundry will be required with 3 washers and 3 dryers.

42.7. Workforce Issues

- a. Training and education to support new systems and technologies
- b. Increased workload - recruitment
- c. Ageing workforce and recruitment strategies to attract varying staff

42.8. Technology

- a. Consideration of new technologies in cleaning such as robotic cleaners in large areas and peroxide cleaning may be utilised in future
- b. Consideration of electronic job allocation and management system

42.9. Change Management

- a. Primary change management will result from any new cleaning technologies such as robotic cleaners, electronic allocation systems and MyFoodChoices
- b. Increased number of required single rooms impacts cleaning time
- c. The majority of change management and reviews should be completed prior to the build

43. LINEN SERVICES

43.1. Scope of Service

- a. Linen will be managed according to NSW Health Policies and Guidelines and relevant Australian Standards.
- b. Linen will be supplied by HealthShare NSW.
- c. The District Service internal linen staff will manage inventories via linen imprest on each unit by using handheld barcode readers and physical counts.
- d. District Service Linen staff will:
 - i. receive clean linen on trolleys from the contractor;
 - ii. record quantities received;
 - iii. hold 2-5 days' worth of linen supplies on-site;
 - iv. facilitate receipt of soiled linen (to separate area);
 - v. use barcode scanners to read imprest levels in units and departments;
 - vi. download scanners to produce quantities of linen required;
 - vii. distribute required linen using trolleys;
 - viii. distribute theatre attire to secure change rooms;
 - ix. remove soiled theatre attire to soiled linen room;
 - x. stock emergency stock room (for after-hours shortages);
 - xi. design, cut and make items, such as curtains, as necessary;
 - xii. generally manage the functions of the Linen Service.

43.2. Model of Care and Operational Description

- a. Linen will be delivered on trolleys to the loading dock and then to clinical units on a daily basis.
- b. A focus on reducing manual handling risks associated with double handling of items will occur as part of the design process.
- c. The linen service will include a roll on roll off laundering solution including an exchange trolley process. Space will be required for storage of linen trolleys in all clinical areas.
- d. The separation of clean and dirty flows must be achieved in the back of house area.
- e. Some linen may have special requirements for separate processing (slide sheets etc.). These will be sorted separately. All linen will be handled according to infection control and work health and safety guidelines.
- f. Dirty linen will be removed by linen services staff according to demand, multiple times a day. Prior to removal, contaminated linen and sharps waste will be stored in the disposal room in the inpatient unit and departments.
- g. Future technology may include 'tugs' to reduce manual handling injuries and fingerprint technology.
- h. Clean and used linen trolleys will utilise the same pathways as other supplies and equipment.
- i. Clean linen trolleys will be distributed throughout clinical units to avoid unnecessary staff travel.
- j. An investigation of linen models is still required and the practicality of "Full Roll On/Roll Off and Disposable" Linen methodologies is to be explored

43.2.2. Operating Hours

- a. The linen service will operate on-site from 05.30 to 22.00, 7 days a week.

43.3. Relative Location and Unit Configuration

43.3.1. Functional Relationships

- a. Key prioritised external relationships include:
 - i. Clinical Services
 - ii. Supply Department – direct access
 - iii. Loading Dock – direct access
- b. Key internal relationships include:

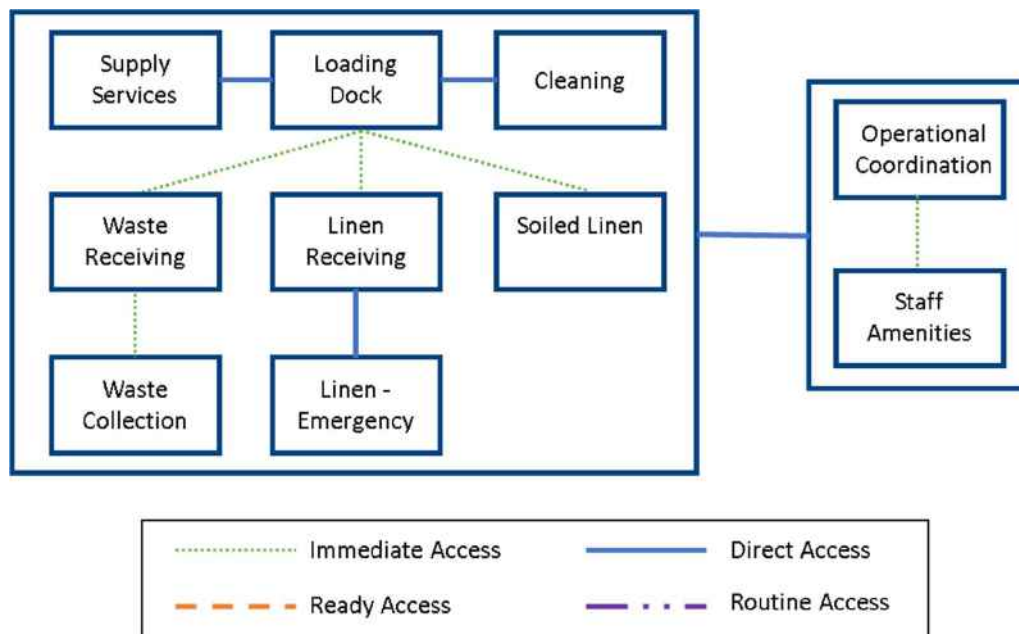


Figure 15 Linen Services internal relationships

43.4. Specific Design Requirements

- a. Shared operational coordination and support. The following areas will be shared between cleaning, linen and waste services:
 - i. A central sign-on bay
 - ii. Staff property bays
 - iii. Meeting rooms
 - iv. Staff amenities will be centralised and shared with other back of house services
 - v. Staff room
 - vi. Change rooms
 - vii. Toilets
 - viii. Offices and work spaces: indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan
- b. There will be a clean linen storage space large enough to hold 15 trolleys with direct access to the loading dock to facilitate load / unload within 30 mins.
- c. Linen trolley storage will be stored in accordance with infection prevention and control requirements.
- d. A separate dirty linen storage area will be required adjacent to the waste area / dirty dock.
- e. An emergency linen store will be required.
- f. Standard linen trolley bays will be provided in clinical units designed to allow easy and minimal handling. These bays will be enclosed and the enclosed trolleys located in low activity/low traffic areas.

- g. Linen will be delivered and picked up by internal Hospital Transport Staff/ Wardspersons.

43.5. Workforce Issues

- a. Increased services and workload
- b. Changes in operational processes (eg. in future will deliver food to patients in ED)
- c. Training and education in new systems and technology

43.6. Technology

- a. Automated imprest ordering and counting of stock may be considered in future.
- b. Electronic job allocation may also be considered.
- c. Compatibility with portable devices as decided by hospital wide processes is also a consideration

43.7. Change Management

- a. Retraining implications of implementing new electronic solutions for tracking and ordering stock
- b. The majority of change management should be completed prior to the delivery of a new build.
- c. Physical, operational and workforce implications of Full Roll On/Roll Off and Disposable model - TBC model

44. WASTE MANAGEMENT

44.1. Scope of Service

- a. Waste handling is the responsibility of District services staff and a component of environmental services.
- b. The waste handling unit is responsible for the safe removal, containment and disposal of waste from the campus. Waste handling will be responsible for collection of segregated waste at the point of waste generation, and soiled materials.
- c. Removal of waste from the site is the responsibility of contractors
- d. The Campbelltown Hospital will be responsible for implementation of waste minimisation and recycling procedures.
- e. Scope of segregation of waste at source is for clinical, cardboard, general, sharps and cytotoxic waste.
- f. Within inpatient and clinical departments, waste disposal (with the exception of sharps disposal which will occur at point of use and cytotoxic waste which will only be available in certain areas), will occur in dirty utility rooms and will then be transferred to a central disposal holding area on each floor prior to being transferred at regular intervals to the appropriate holding area adjacent to the loading dock.
- g. Waste management staff will collect and replace waste bins and containers, and deliver them to designated bin holding areas or consolidate waste in compactus located at the loading dock.
- h. Recycling and other waste segregation will be done at the point of source e.g. inpatient unit, in colour-coded bins. This segregation of waste will require an extensive receptacle system with holding spaces in the kitchen, kitchenettes, beverage bays, pantries, public areas and disposal rooms and loading dock for the separation of waste.

44.2. Model of Care and Operational Description

- a. Servicing of waste storage areas will be undertaken via thoroughfares that avoid regular public, patients, and staff facilities.
- b. Segregation is at point of source in colour coded 120 to 660 litre bins in disposal rooms. Separate bins will be supplied for secure document waste. Bins will be taken to the compactors located next to the loading dock. A separate system is utilised for sharps containers
- c. All clinical waste and sharps containers are to be stored in secure areas until removed from the site.
- d. Waste services staff will share sign on, amenities and the staff meeting room with other hotel services staff.
- e. Bin washing will be undertaken daily for food and other services, and in line with departmental operational policies. This activity will be performed as close to the storage area for bins as possible. Adequate drainage and water will be provided compliant.
- f. Trade waste will be the responsibility of the area facilities management unit.
- g. External contractors will collect some specialised waste directly from areas within the hospital including:
- h. Confidential materials will be collected directly from administrative areas within the hospital.
- i. Sanitary bins.
- j. Cytotoxic and clinical waste bins will be cleaned by an external contractor.
- k. General bins will be washed using a designated trolley wash.

44.2.2. Operating Hours.

- a. The waste handling service will operate between 05.30 and 22.00pm, seven days per week, and after-hours as required

44.3. Relative Location and Unit Configuration

44.3.1. Functional Relationships

- a. Waste handling is to be located adjacent to but separate from the main receiving dock, should be located away from food and clean storage areas and located close to all functional areas.
- b. Disposal rooms will be on each floor close to back of house lifts, and located without will traverse clinical and non-clinical units and preferably using staff only pathways.
- c. Key external relationships will include:
 - i. Loading Dock immediate - immediate access
 - ii. Supply Department - direct access
 - iii. All Clinical Services - routine access
- d. Key Internal Relationships will include:

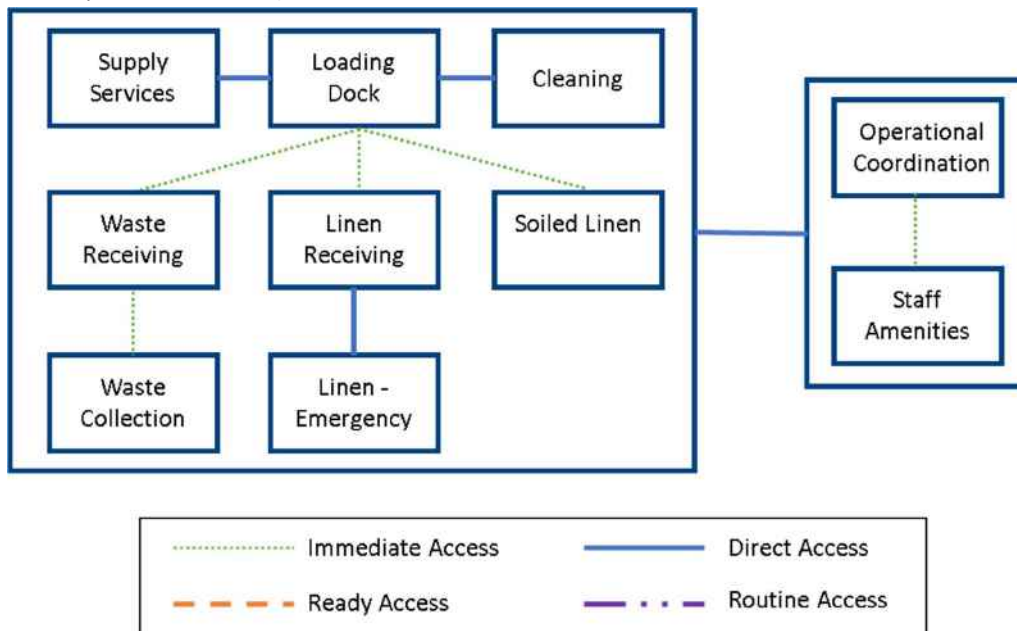


Figure 16 Waste Management internal relationships

44.4. Specific Design Requirements

- a. Shared operational coordination and support
- b. The following areas will be shared between cleaning, linen and waste services:
 - i. A central sign-on bay
 - ii. Staff property bays
 - iii. Meeting rooms
 - iv. Staff amenities will be centralised and shared with other back of house services:
 - v. Staff room
 - vi. Change rooms
 - vii. Toilets
 - viii. Offices and work spaces: indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan
- c. Waste management should be designed to secure the material, reduce organic decomposition, contain odours and allow hygienic cleaning of storage areas and carts.
- d. Doors and openings to all areas must allow easy trolley access.
- e. Entry of vermin and birds must be precluded.

- f. Adequate ventilation or exhaust is essential.
- g. External lighting will be required for night waste pick-up by contractors.
- h. Level or ramped access to external loading areas will be required.
- i. Location of the waste handling unit within a secure area is desirable.
- j. Specific areas in the waste handling area include:
 - k. A bin wash area or Bin Washer area will be adjacent to the dock compliant with policy, standards and EPA legislation. This should be located near the general waste collection area.
 - l. A clean bin holding area will be located near the bin wash area.
 - m. An external, covered general and cardboard waste collection area will be required with a compactor or bailer.
 - n. A clinical waste collection area will be required. This must be vented, air conditioned and include a freezer for anatomical waste.
 - o. A cytotoxic waste collection area will be required. This may be collocated with or adjacent to the clinical waste collection area. It is recommended that the specific requirements for the cytotoxic waste collection area are developed further.
 - p. A sharps collection area will be required
 - q. Walls and floors in areas used for bin storage should be impervious and sealed to allow daily hosing and cleaning of spills. A graded floor with drainage should be provided.
 - r. Hand washing facilities should be located adjacent to the waste collection area.
 - s. Rechargeable spaces for approximately 4 tugs will be required.

45. SUPPLY SERVICES

45.1. Scope of Service

- a. This should be read in conjunction with the loading dock brief.
- b. Supply Services will be responsible for materials management including supply of goods and services, management of onsite logistics and loading docks and the movement of goods and materials around Campbelltown and Camden Hospitals
- c. Goods will be received by supply department and will each have loading docks for receipt of goods and stores based on just-in-time delivery.
- d. Supply Services will manage deliveries and redistribution of goods, equipment and supplies including management of the following:
 - i. loading dock and receipt of goods
 - ii. stores and supplies
 - iii. delivery of goods to departments
 - iv. designated bulk store for pharmacy
 - v. medical gases - portable
 - vi. wardspersons to transport
 - vii. mail
 - viii. equipment both new purchase and on loan
 - ix. central sterilising service goods
 - x. clean and dirty waste stores and compactors
 - xi. transfer of dirty and clean linen and waste across the dock.
- e. Pharmacy stores are currently managed by pharmacy. Waste and linen are managed by domestic services.
- f. An imprest system for supplies and consumables will be in place for all departments in addition to specialised orders for specific departments such as central sterilising services department, operating theatres, pathology, pharmacy and medical imaging.
- g. A Central Clinical Equipment store will be provided for the management of hospital wide clinical equipment such as intravenous pumps, syringe drivers, pressure relieving mattresses and the like.
- h. Goods flow principles are as follows:
 - i. All goods will be received on the loading dock. Vehicle access to the loading dock must be capable of being secured. Secure access for goods awaiting distribution from the dock will be required
 - ii. Goods will be delivered throughout the Campus via clean pathways separate from the public and patients. A dedicated goods lift must be provided
 - iii. Access to goods delivery pathways will only be given to hospital and District staff and authorised visitors (e.g. medical imaging technicians)
 - iv. Food service delivery must have dedicated clean access into the kitchen stores including cold store
 - v. all forms of waste and dirty linen will be collected from holding rooms and departments and must be removed via a dirty pathway.
 - vi. Goods and waste management service flows will avoid unnecessary travel through clinical areas
- i. A variety of methods are used to procure goods and services. Some stores will be ordered, packaged and delivered on a point of use basis and transferred from the loading dock to clinical and non-clinical departments by supply staff. Some stores will be ordered in bulk and require decanting in the dock supply store.
- j. Some stores such as fluids are ordered and delivered to the point of use by the supplier / vendor.
- k. There will be a requirement for bulk store of some items.
- l. The mail centre location is to be determined, however, could be collocated with the supply department.

45.2. Model of Care

- a. The model of service will enable the implementation of a lean, highly efficient supply chain to all parts of the Campus, which is aimed at minimising cost while also meeting State targets for reduced greenhouse emissions and ensuring environmentally sustainable purchasing practices.
- b. Work practices will comply with Workplace Health and Safety legislation, policy and guidelines including NSW Health: Manual Handling Incidents – NSW Public Health Services Policy / Best Practice Guidelines Prevention.
- c. Goods and services will be procured by staff on all Campuses according to policy and through an electronic system managed by the materials management service.

45.3. Operational Description

- a. The District will take responsibility for the delivery of some equipment and goods operating from 0600 to 1730 Monday to Friday.
- b. Stores staff will receive deliveries during operating hours and transfer it to departments.
- c. The supply staff will work as part of the integrated District on-site team and will be based within the loading dock workstation area.
- d. Department level consumable stores will be located in the clean utility room or general store room.
- e. At department level, stock will be stored in compliance with regulatory requirements and consider occupational health and safety issues in relation to delivery, manual handling and decanting. The preferred option of storage is to use mobile wire basket systems that comply with cleaning, infection prevention and control and occupational health and safety requirements.
- f. Department base stock levels will be established in consultation between supply staff and hospital units. Stock levels will be checked twice weekly and replenished by suppliers or stores staff.
- g. Department base levels of intravenous fluids will be established. Supplier staff will be responsible for twice-weekly restocking and daily replenishing of intravenous fluids.

45.4. Relative Location and Unit Configuration

45.4.1. Functional Relationships

- a. External functional relationships will include:
 - i. The supply stores will be adjacent to the loading dock with immediate access to the back of house corridor
 - ii. Refer also to Loading Dock Brief
- b. Key internal relationships will include:

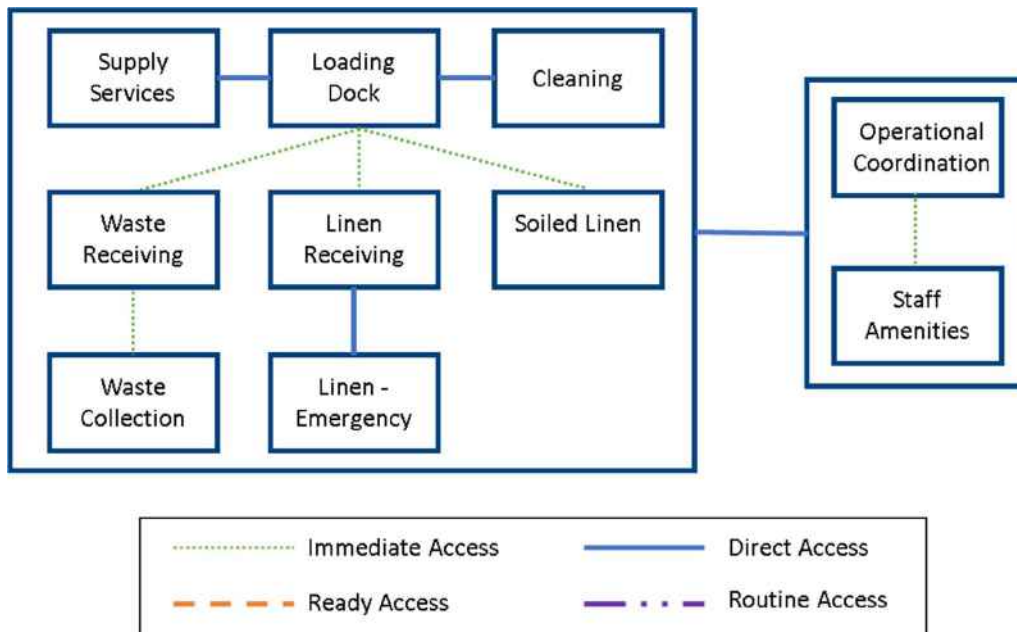


Figure 17 Waste Management internal relationships

45.5. Specific Design Requirements

- a. An area will be required for recharging of up to 4 x tugs / motorised trolleys.
- b. Bar coding capacity will be included in the design of stock areas.
- c. Back of house lifts will be sized and capable of carrying pallet sized loads.
 - i. Unit and department level stores will be in accordance with AusHFG
 - ii. Supplies will be moved along staff only access routes and lifts
- d. Unit and department level stores will be in accordance with AusHFG
- e. Supplies will be moved along staff only access routes and lifts
- f. Specific stores areas required include:
 - i. Archive for administrative records (see Administration section)
 - ii. Bulk store
 - iii. Flammable liquids
 - iv. Gas bottle store
 - v. IV fluids store.
- g. Shared amenities with Back of House including:-
 - i. A central sign-on bay
 - ii. Staff property bays
 - iii. Meeting rooms
 - iv. Staff amenities will be centralised and shared with other back of house services:
 - v. Staff room
 - vi. Change rooms
 - vii. Toilets.
- h. Staff work spaces will be required in the bulk store / receivables area.

- i. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

45.6. Technology

- a. RFID tracking and other tracking modalities will be essential and software to assist with Asset Management practices must be considered.
 - i. Workforce training
 - ii. Software to assist

45.7. Change Management

- a. The Central Equipment Store and Equipment Loan Store will result in significant change management for the Supply Services
 - i. Workforce
 - ii. Education/operational processes
 - iii. Technology and ordering processes

46. LOADING DOCK

46.1. Scope of Service

- a. The main loading dock will be the primary operational services entry and exit access point to the hospital. The loading dock will have both raised and level areas and be weather protected. The compound will be secure, access controlled and managed.
- b. The services utilising the loading dock compound regularly will be linen, waste, supply, food services, medical gases, pharmacy, pathology (may be separate loading dock), clinical technology service, engineering, information services, postal services, retailers, cashiers and the Sterilising Services Department. Ideally, couriers will also share the main loading dock.
- c. Pathology will require direct and easy access by couriers, capability for large equipment replacement and delivery and storage of multiple pallets and may require a separate loading dock and courier parking. Ideally pathology will share the main loading dock. The pathology chapter should be cross referenced for loading dock requirements.
- d. The loading dock will be a high flow, high volume traffic area with large rigid trucks requiring access for kitchen, linen, waste, and stores and contractors. Activities undertaken within the loading dock area will be coordinated, supervised and managed by the loading dock manager. The Engineering chapter should be cross referenced for requirements.
- e. There will be separate flows for dirty and clean goods, and a separate food receiving dock area.

46.2. Model of Care

- a. There will be a main loading dock facility which will include provision for delivery and receiving of food and other goods and supplies.
- b. Engineering services require a loading dock facility. This will be shared with main loading dock if possible.
- c. While the term 'dock' is used as a general descriptor, some spaces will be bays rather than raised docks as specified below.

46.3. Operational Description

- a. Traffic flows to, from and within the area will be carefully planned into the site management traffic plan, supporting unlimited access from 6:00am to 3.30 pm daily, and restricted access after-hours. Scheduled after-hours users of the dock will have secure access by protocol. By preference, users of the dock will be responsible for deliveries within the hospital and will not rely on dock staff for movement of goods.
- b. There must be a separation of public and staff access to the site from vehicle access to the loading dock area.
- c. A large open area directly off the dock will be used for receiving and sorting of goods. Goods requiring secure storage, testing / tagging will be transferred to dedicated spaces in the loading dock area.
- d. A ramp from the raised loading dock will be used to move goods on wheels. Fork lifts and pallet movers will be used on the dock.
- e. Pharmaceuticals must not be left on loading dock but transferred immediately to a secure area and for this reason there will be a bulk store directly attached to the pharmacy. In particular, drugs of addiction must be transferred immediately to the pharmacy drugs of addiction store. The storage of bulk IV and dialysis fluids do not present the same security concerns as do pharmaceuticals.
- f. Several pathology couriers will make frequent deliveries and pickups daily over extended hours. Pathology will also receive bulk goods.
- g. The loading dock will not be used for mortuary purposes.

46.4. Relative Location and Unit Configuration

46.4.1. Access and Functional Relationships

- a. The dock will be adjacent to the highest users of the area, primarily the back of house departments. It will be linked via code compliant egress routes to all other departments. The service route from the goods lift will accommodate the transport of large items. Transport of some items may require a pallet.
- b. The loading docks will be located for easy access by service vehicles and able to accommodate high flow, high volume activities and be separate from public entrances to the building, and public spaces. Turning circles and vehicle accommodation will be modelled on a variety of vehicle sizes including large rigid and articulated vehicles.
- c. Supplies will be moved along staff only access routes and lifts.
- d. There will be direct loading dock access to food supply cool stores and freezers.
- e. The supply stores will be adjacent to the loading dock with immediate access to the back of house corridor.
- f. There will be a secure route from the loading dock for pharmacy and cashiers.
- g. Unit and department level stores will be in accordance with AushFGs.
- h. External Functional Relationships will include:

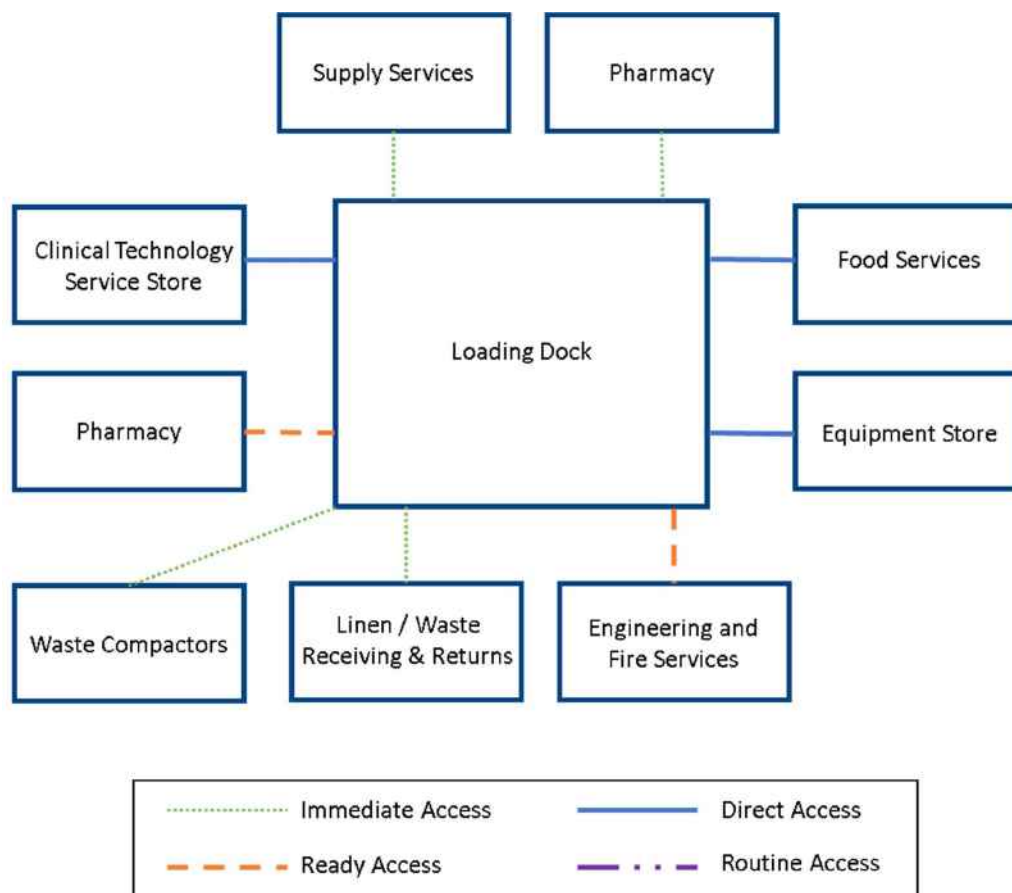


Figure 18 Loading Dock external relationships

46.5. Specific Design Requirements

- a. Reference should be made also to Supply Services
- b. A separate clean area will be required on the dock for deliveries including food and catering products, sterile supplies and consumable stock, clean linen, equipment and pharmaceuticals.
- c. The dock must have segregated and separate clean and dirty areas.

- d. 4 x bays should be provided at the dock to accommodate large trucks subject to confirmation of truck numbers. The dock needs to cater for both side loading and end loading capacity. Adequate space for entry and exit manoeuvres needs to factor into the side loading area.
- e. Parking bays for normal vehicular traffic are also required in the loading dock area including pathology, engineering and contractors.
- f. A discreet area for undertaking dirty functions will be required such as waste removal including general, contaminated, and soiled linen removal.
- g. A secure loading dock manager's office will be located to enable clear line of site to the dock and compound.
- h. The dock area will contain the following rooms and facilities:
 - i. Access to staff amenities including toilets, water fountain, shower and change rooms
 - ii. Dock managers office
 - iii. 1 x dock leveller
 - iv. Equipment cage
 - v. Linen, waste, biomedical and store areas documented in separate sections of this document.
 - vi. The bulk store in the Supply Department should be located with ready access to the loading dock area.
 - vii. Physical barriers with separate pedestrian egress paths from vehicle access areas will be required.
 - viii. The design must take into consideration noise reduction measures.
- i. Other specific design requirements identified for the loading dock include:
 - i. perimeter fence
 - ii. secured, controlled, closed-circuit television
 - iii. well lit
 - iv. after-hours access mechanism (remote)
 - v. ground surface to support unhindered vehicular, forklift and other motorised equipment
 - vi. easy clean and robust surfaces
 - vii. clearly defined clean / dirty traffic flows within compound
 - viii. level dock that is supported by electric and powered forklifts
 - ix. provision of a safe environment for staff and external providers
 - x. decontamination shower access
 - xi. edge guards and dock bumpers
 - xii. high impact walls and fitments
 - xiii. adequate room for multiple vehicle movements

46.6. Workforce Issues

- a. New workforce requirements eg. Loading Dock Coordinator

46.7. Change Management

- a. Central Clinical Equipment Store may impact on Loading Dock work practices
- b. Technology improvements may have significant impact on Loading Dock management

47. MORTUARY

47.1. Scope of Service

- a. The mortuary will provide temporary body holding facilities and facilities for viewing of deceased persons by immediate or extended family.
- b. The unit provides a service for the needs of the Hospital and occasionally for other hospitals within the area.
- c. The mortuary will have capacity for holding 24 bodies in a cool room. Three additional bariatric spaces (over 200kgs) will be accommodated in this area on trolleys.
- d. Bodies are held within the mortuary for a short period only. If there are extenuating circumstances, occasionally bodies are held for longer and can be held for up to five days. This is usually due to circumstances such as complicated social circumstances and associated delays in arranging a funeral.

47.2. Operational Description

- a. The mortuary is managed by the Director Corporate Service and will operate 24 hours, 365 days a year. The body is transferred from the inpatient area to the mortuary by the wardsperson. The body will be received into the mortuary and entered into the register on arrival and on exit.
- b. Funeral directors and staff will follow procedures for release of the body.
- c. An intercom in the parking bay will be provided for funeral directors to call the security services when requesting collection of a body.
- d. Hospital end of life care and bereavement support and counselling services are closely connected to Mortuary services. Model of care will include counselling and support for bereaved families to facilitate health and normal grieving which will often include viewing, bathing and dressing of the deceased – particularly in the cases of stillborn, newborn or paediatric deaths.
- e. Viewing and subsequent counselling can be arranged for relatives through a senior nurse manager or social worker on request and will occur through mortuary facilities. In all instances a staff member, being either a senior nurse or social worker, will escort the family to the mortuary and will be present throughout the viewing.
- f. Secure undercover access with appropriate seating outside will be required for large groups of Aboriginal families for cultural reasons.
- g. Cleaning within the mortuary will be completed by the cleaning service.
- h. Linen, waste and supply services are provided by the hospital in accordance with hospital operational policy. There needs to be a bay to park the linen and supplies until they can be taken into the mortuary

47.3. Relative Location and Unit Configuration

47.3.1. Functional Relationships

- a. A discrete internal route to the mortuary will be required from all clinical units.
- b. Ready access will be required to an outdoor area for large family groups.
- c. Visitor access to the mortuary should not be via the loading dock area of the hospital or the body holding area.
- d. There needs to be appropriate access to the mortuary from the main entrance as this is where relatives will present if asked to come to the hospital to view the deceased.
- e. Separate entry / exit lobbies will be required for the public / visitors to the body / undertakers.
- f. Key prioritised external relationships will include:
 - i. External vehicle access – direct access
 - ii. ICU – ready access
 - iii. Perioperative Unit – routine access

- iv. Birth Suites – routine access
 - v. Emergency – routine access
 - vi. Inpatient Units, including Women’s Health, SCN and Paediatric Inpatients – routine access
- g. Key Internal Relationships will include:

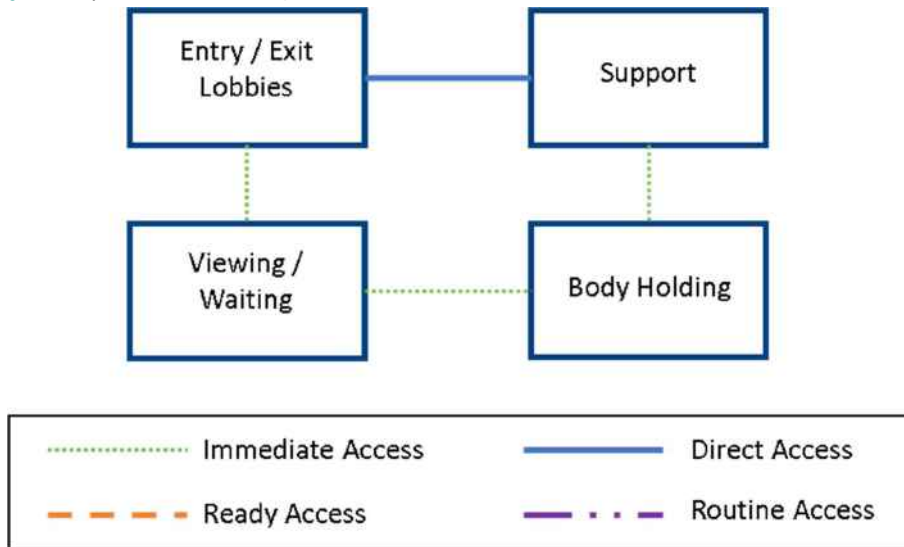


Figure 19 Mortuary internal relationships

47.4. Specific Design Requirements

- a. The mortuary is a controlled access space and requires swipe card access, intercom, phone and networked workspace.
- b. Access to a toilet, appropriate seating arrangements and a chilled water dispenser will be required.
- c. Consideration of manual handling hazards must be considered in the design of the area.
- d. The mortuary requires a discreet location, providing easy access for funeral director’s vehicles and ambulances with a covered access point where transport of bodies is not required to pass the main loading dock. Consideration to power requirement (UPS) in loading area will be required for disaster management purposes.
- e. Mortuary lifter and concealment trolleys will be used.
- f. The mortuary will have a dedicated loading area, cool room, write-up/documentation area and facilities for registering the movement of bodies into and out of the mortuary.
- g. Adequate provision of hand washing facilities to meet current infection control guidelines will be required.
- h. Waiting and viewing rooms will be separate to the mortuary holding area. The waiting area will be required to accommodate large families and group – up to 20 people – at a time.
- i. A viewing space will accommodate up to 10 people to allow for cultural, large family and religious uses and will be designed as a separate area with glass window and dimmable lighting in the room. Smoking ceremonies may also be performed, so access to an outdoor space is preferable.
- j. Décor in waiting and viewing rooms will provide a calm and reassuring environment, and will take into consideration multi-faiths, sound attenuation and containment. Duress alarms must be available.
- k. The viewing area will also include washing/bathing and dressing facilities for the deceased
- l. Viewing room must be capable of access from holding area and large enough to hold a bariatric trolley.
- m. Viewing room should have access to a toilet
- n. Emergency power is required to body holding area.

- o. Storage room requirements are as follows:
 - i. Security access controlled room
 - ii. Cool store temperature is to be at 4 degrees Celsius
 - iii. Continuous monitoring of temperature control via BMS, including alarms connected to emergency power
 - iv. Air conditioning, heating and ventilation
 - v. Ventilation to minimise spread of airborne pathogens and isolated from other ventilation systems
 - vi. Provision of electric body lifting hoists
 - vii. Storage cupboard

47.5. Workforce Issues

- a. The new hospital expansion may warrant the consideration of a full time Mortuary Attendant

47.6. Technology

- a. Electronic monitoring of bodies and tracking to the back door eg. Electronic Bed Board
- b. Training considerations
- c. New systems compatibility with existing hospital systems

47.7. Change Management

- a. Consideration of outsourcing of some or all of this service
- b. Viewing and grieving considerations

48. BIOMEDICAL ENGINEERING

48.1. Scope of Service and Model of Care

- a. The Biomedical Engineering Service (BES) will be responsible for equipment repair and management as defined in the services agreement between the District and Biomedical Engineering
- b. BES will be responsible for the testing, maintenance and repair of medical equipment. This will include preventative maintenance as well as breakdown response.
- c. BES will be responsible for receiving and holding equipment awaiting repair by outside contractors.
- d. The Service will manage external biomedical contractors.
- e. A number of clinical equipment items will be out of scope for Biomedical Engineering and likely to be managed by contracts elsewhere. These include, but not limited to Medical imaging and nuclear medicine, pathology equipment as well as beds, theatre tables, tables, instruments, FF&E, rehab and physical therapy equipment, renal equipment and dental equipment
- f. The Service will be provided to Camden Hospital and Bowral Hospital.

48.2. Operational Description

- a. On-site, faulty equipment will be tagged, have a work order raised and delivered from the relevant clinical area to the BES workshop area. The work order will be signed by the department and cleaned and decontaminated by that department. The equipment will be fixed on site, if possible. Alternatively, the equipment will be sent to the appropriate service provider for repair.
- b. Following repair or maintenance, the relevant clinical area will be notified and return to the relevant clinical area.
- c. Where equipment cannot be taken to the store area (e.g. if it is too large), Biomedical Engineering staff will go to the clinical area to provide the maintenance / repair service.
- d. The BES is not responsible for the cleaning of any equipment
- e. BES will house a workshop for the on-site servicing and repair of biomedical / clinical equipment, equipment cleaning facilities (adjacent in Central Equipment Store) and office space for the biomedical engineering staff. Dirty and clean equipment will be handled and stored separately in line with Infection Control guidelines.
- f. Servicing and maintenance of all high end technology including linear accelerators, imaging modalities etc. will be provided by the equipment supplier under a maintenance contact. These contracts will be oversighted by Biomedical Engineering staff.
- g. The Biomedical Engineering Service Coordinator will be responsible for managing biomedical services, overseeing contractors and supporting research and development initiatives.
- h. Space will be provided within the BES within the interventional and procedural suites, Emergency Services, Paediatric Services, and ICU/HDU for use by contractors servicing equipment and undertaking routine maintenance and minor repairs on-site.
- i. All equipment will be bar coded / RFID / RTLS tagged to facilitate tracking and preventative maintenance programs. A centralised database will be available to monitor all functions of the service and to relay information to other service providers.
- j. BES will have a close relationship to the Central Clinical Equipment Store.
- k. The Central Equipment Store will centrally store, track, evaluate, clean and maintain high use medical equipment used in the delivery of clinical services including infusion pumps, haemodynamic monitoring equipment, oxygen therapy equipment, bariatric equipment etc.
- l. Biomedical equipment not considered part of the core inventory required by a clinical unit will be held in the Biomedical Equipment Pool.
- m. Through the Central Equipment Pool and Central Equipment Store, BES will provide a package of services including:
 - i. regular audits of equipment; servicing of equipment as part of a Preventive Maintenance Program;

- ii. education of clinical staff on equipment use through induction programs, short courses, bed-side support and in service programs; trial and evaluation of equipment prior to purchase.
- n. Wardspersons will assist in the cleaning and transfer of equipment.
- o. BES will work closely with infection control and finance.

48.2.2. Operating Hours

- a. BES will operate between 0700 and 1600 Monday to Friday. An after-hours service may also be provided on a call-out basis.

48.3. Relative Location and Unit Configuration

48.3.1. Functional Relationships

- a. BES will required ready or direct access to operating theatres, ICU and critical care areas, as well as CSSD.
- b. BES will continue to operate a satellite workshop in operating theatres and in the dialysis unit.
- c. BES will require routine access to the loading dock.
- d. Proximity to Clinical Equipment Support Services (CESS)/Health Technology Unit is considered desirable.
- e. Key prioritised external relationships will include:
 - i. Central Equipment Store – direct access
 - ii. ICU – direct access
 - iii. Perioperative – direct access
 - iv. Emergency Department – ready access
 - v. Supply – ready access
 - vi. Loading Dock – ready access
 - vii. Other Clinical Areas – routine access

48.4. Specific Design Requirements

- a. A store area for the BES will be located within the Department.
- b. A workroom dedicated to the BES will be required next to the Intensive Care Unit and shared with the Perioperative Unit if adjacency to these areas cannot be obtained. This room requires a sink, medical gases, tool air, power and data points
- c. A further larger workroom is also required but can be located elsewhere in the build
- d. Garage for a van / adjacency to a parking area
- e. Reception / Waiting / signing area
- f. Adjacency to a staff room / lockers etc. Increased electrical and ICT infrastructure and security requirement to cater for the demand created by the new and additional equipment required throughout the hospital.
- g. Medical gases will be required with in the workshop for testing and calibration activities.
- h. Open, flexible work space for workshops, clean areas for calibration and office space.
- i. Appropriate benches and general storage (shelving, cabinets, lockers etc.) in a suitably sized workshop facility.

48.5. Workforce Issues

- a. Approximately 10 to 15 staff will be required in this area

48.6. Technology

- a. RTLS / RFID tagging of all equipment will be required. If RTLS, locators should be placed at the main entry of each department
- b. Remote monitoring of equipment and associated workforce

48.7. Change Management

- a. The new model of service delivery for the Central Equipment Store will result in significant changes for Biomedical Engineering Services
 - i. Workforce implications
 - ii. Operational processes changes
- b. Implementation of above IT strategies will influence workforce, training and education requirements, maintenance and operational process changes

49. ENGINEERING SERVICES

49.1. Scope of Service and Model of Care

- a. Campbelltown Hospital will promote an environmentally/sustainable environment. Measures to support this will include water harvesting from roofs, recycling of reverse osmosis treatment units, recycling of waste, etc.
- b. Maintenance works will be managed by the Engineering Services Department using a combination of in-house staff and contractors. The Engineering Services Department will utilise suitably experienced and qualified trades and planning staff to facilitate all necessary maintenance and repairs, including the scoping of works, appointment of external contractors and authorising payment.
- c. The department will consist of appropriate personnel and trades to perform maintenance and operational tasks. A number of workshops will be located on site to repair and maintain hospital equipment. This will include a repair workshop.
- d. A separate centralised storage for equipment including beds, mattresses, bariatric equipment etc. will be provided.
- e. An electronic tracking system will monitor equipment movement and preventative maintenance programs
- f. The Department will oversee the maintenance and support of engineering services on-site. On-site services include facilities management, day to day repairs and maintenance utilising workshops, grounds / gardens and external areas, management of external façade and repairing broken beds.
- g. Environmental Services look after External window cleaning, pest control
- h. The pneumatic tube system will be managed by Engineering Services.
- i. A building maintenance control system (BMS) will monitor critical alarms for Engineering Services.
- j. The fire indicator panel and emergency warning communications system will provide monitoring for the smoke thermal detection system installed to meet statutory requirements for public health facilities.
- k. All clinical services will operate in accordance with appropriate and relevant Environment Protection Authority requirements, including radiology, chemotherapy and cytotoxic waste.

49.2. Operational Description

- a. The service will operate from a centralised department made up of the BMS control room, workstations for staff and contractors, documentation centre and workshops as well as staff facilities.
- b. Calls go directly to Engineering Services during the day and after-hours nurse manager
- c. High value items, beds and maintainable items will be tracked using RFID technology.
- d. Medical Gases, associated alarms and isolation valve boxes will be managed by Engineering Services in consultation with nursing staff.
- e. Building Maintenance and repair work be carried out in an unobtrusive manner with regard to patient comfort and privacy. Asset management and maintenance requirements are electronically logged. .
- f. Area Facilities Management will manage external maintenance contracts in accordance with policies.
- g. Fire Services will comprise fire safety manager and fire safety officer / s operating during business hours Monday to Friday. After-hours fire training is done by negotiation.
- h. Fire response will be a combined responsibility of fire safety and engineering staff and hospital management.
- i. The department is responsible for ensuring all documentation including drawings (hard copy and electronic), operations and maintenance manuals, certifications, policies and standards are up to date, centrally controlled and stored for ease of access.
- j. All assets will be recorded including all necessary details relating to maintenance, operation, compliance and certification.
- k. Engineering office will manage loan cards to contractors. Contractors will be required to do an on-site induction.

49.2.2. Operating Hours

- a. The Building and Engineering Services will operate between 0700 and 1530 Monday to Friday. An after-hours service will also be provided on a call-out basis.

49.3. Relative Location and Unit Configuration

49.3.1. Functional Relationships

- a. The Engineering Services staff workstations and workshops will be co-located with the building management system control room and within ready access to loading and unloading facilities suitable for large equipment and materials transfer.
- b. A loading dock type facility should be close to the service
- c. 24 hour / 7 day ready access to the bed store will be required including an uninterrupted travel path between the bed store and the fitter's workshop will be required.
- d. Undercover access to the hospital and plant rooms is preferred
- e. The fire control room will be located close to the front entry with mimic fire panel in the engineering department.
- f. The internal relations within the unit will consist of a number of adjacent zones:
 - i. BMS control room or area
 - ii. Workstation
 - iii. Staff facilities - toilets, shower / change room and lockers, staff room
 - iv. Workshops and work areas- detailed under specific design requirements
 - v. Parking bay for trolleys and lifters
 - vi. Garage for van / utility vehicle
 - vii. Gardeners shed will be required for tractors etc., but this can be away from main Engineering Services
 - viii. Workshops and associated loading and parking bays can potentially be located with routine access to the rest of engineering spaces.
 - ix. Emergency shower / eyewash area should be provided

49.4. Specific Design Requirements

- a. Engineering unit design requirements
 - i. Reception and waiting areas / sign in area
 - ii. BMS control area
 - iii. 1 interview room
 - iv. A 10 person open area
 - v. A contractor's workstation
 - vi. Meeting room (incl. a beverage bay) for 12 to 15 people
 - vii. Staff room, preferably for engineering staff only
 - viii. On site workshops and store areas:
 - ix. Parking area for tipper truck.
- b. Car parking requirements are 4 x unit vehicles and up to 20 contractors, plus one car park and one rigid truck with access to the non-clinical end of the loading dock.
- c. Building design requirements are as follows:
 - i. There will be electricity sub-stations on-site.
 - ii. Stand-alone power generation on-site and n+1 redundancy will be required. Central energy plant is being investigated.
 - iii. Diesel generators will require a minimum of 2 day fuel storage capacity. Diesel generator backup to chillers and associated mechanical systems will be required for nominated areas e.g. pathology.

- d. Plant rooms will be:
 - i. accessed without traversing clinical spaces
 - ii. have wireless communications
 - iii. be accessed using proximity card as well as keyed
 - iv. be person height with capability to change bulky equipment.
- e. Dedicated pathway for roof access will be required.
- f. There will be centralised uninterrupted power supply for engineering and information communications technology with N+1 redundancy, located in a clean environment with one hour backup capacity.
- g. Plumbed reverse osmosis water supply will be required to Central Sterilising Department, Pathology and Renal Dialysis.
- h. Water redundancy with multiple feeds - uninterruptable water supply consideration
- i. Thermo static mixing valves (TMV's) will be required. These will be required to be monitored.
- j. Sensor taps on handwash basins Type B and other specified basins will be required.
- k. Pathology may have a dedicated plant room.
- l. All back of house lifts and doorways must be capable of carrying a bariatric bed.
- m. Potable water storage for 12 hours use will be required with direct access by a water tanker for refill.
- n. Landscaping and planting will utilise drought resistant plants and will respond to the will keep maintenance costs down by using native landscape principles. Irrigation systems as required.
- o. Central Sterilising Department will be supplied with gas powered steam and medical air pressure (separate line) suitable for pneumatic doors.
- p. Bulk oxygen storage VIE with will require direct semi-trailer access - sized to accommodate weekly refill.
- q. Medical gas storage will be on level ground that a forklift can access.
- r. High pressure tool air in operating rooms.
- s. Compressors and pressure vessels must be able to be registered with WorkCover.

49.5. Technology

- a. Communications mobility will be required - wireless network for RTLS, DAS for mobile phones, mobile phones connected to the network for engineering staff.
- b. Building Information Technology (BIM) should be applied to the new build to allow effective maintenance management. This should include tablet technology for trades and engineering staff.

49.6. Change Management

- a. New technology will present change management requirements

50. SECURITY

50.1. Scope of Service and Model of Care

- a. The Security Service will provide access control, physical and electronic monitoring and surveillance of all areas of the hospital campus including car parks and external landscape.
- b. All available means will be employed to ensure the safety and security of patients, visitors and staff on the health service precinct.
- c. Campbelltown hospital employs a dual staffing model of dedicated security staff and Health and Security Assistant (HASA)
- d. HASA will provide escorts to staff as required.

50.2. Operational Description

- a. During the day shift there will be up to 2 dedicated security staff on every shift with all other security staff being a combined role. This could be up to 10 on each shift in addition to the 2 dedicated security staff.
- b. Security will be monitored and facilitated through a central control room. This room will be manned at all times and act as the key contact point for all alarms (duress and intruder), phone and email requests, monitoring CCTVs and directing security staff.
- c. Security systems will be classified into three categories: electronic (CCTV, access system, etc.), physical (guards) and design (lighting, concealed areas etc.).
- d. The Task Management System needs to be located adjacent to patient flow to enable communication and allocation of jobs from this area.
- e. The Task Management System area needs to be located near the Patient Flow Unit.
- f. Security office will manage access card issue, metal keys and photo identification for staff in office / space separate to CCTV screening.
- g. CCTV review can be a separate area adjacent to the security office or adjacent to Fire Control Panels.
- h. The Security Services will have the ability to lock down the entire facility, individual levels or individual units electronically in emergency situations (CBR lockdown, terrorism, natural disaster etc.)
- i. Staff identification will be through a "smart card" system i.e. an integrated access control card, which will incorporate access control, access to parking etc. Identification cards will be issued through a security office which will also be responsible for access control, lost property and patient property storage. The "smart card" system will provide operate across the Macarthur Health Service and provide access to all facilities.
- j. A patient wandering and tracking system will be operational in high risk areas e.g. aged care, paediatrics, neonates etc.
- k. The Security Department will be responsible for responding to, logging and closing out all codes (red, black etc.).
- l. The Security Department will be responsible for clearing and securing the helipad during landings and take-offs, and ensuring emergency access is clear at all times
- m. Security staff will receive and respond to fire notifications.
- n. The security service will be provided in accordance with the NSW Health Protecting People and Property Manual.

50.2.2. Operating Hours

- a. Security and Security / Wardsperson (HASA) staff will be rostered over a 24 hour period.

50.2.3. Master Key System

- a. A single secured master key system will be utilised throughout the facility.
- b. The system will be maintained by the Security Department and any potential breaches will be reported and investigated.

- c. Staff members will be provided with keys to their door as required and where considered necessary. Staff will not be able to make duplicate copies of these keys by an external contractor.
- d. A key cabinet in cleaning will be considered

50.2.4. Electronic Access Control – Perimeter

- a. Security to the perimeter of all health buildings will be managed by access control entry points. Staff will be able to gain access via a card reader using their identification card.

50.2.5. Electronic Access Controls - Internal

- a. Electronic access control will be provided in areas where a risk identification process has been undertaken and has established a need. All staff amenities with access from a public corridor will be fitted with controlled access entry.

50.2.6. Public Access

- a. To maintain security, after-hours public access will be limited to one entry point i.e. the front entrance. All external doors will be locked electronically or manually by the Security Department.
- b. The security base will oversee the after hour public access point.
- c. The ED entrance will be the entry point for ambulances and the public accessing emergency services. The Ed entrance and ambulance bay will be monitored via video surveillance.

50.2.7. Site Patrols

- a. Regular site patrols will be undertaken by security staff.

50.2.8. Close Circuit System

- a. A closed circuit surveillance system will be provided within and external to the hospital including carpark and monitored by the security office.
- b. Management of aggressive situations will be via local emergency procedures, not directly by security maintaining watch of each area with CCTV.

50.2.9. Duress Alarm System

- a. Mobile duress will be available in high risk areas
- b. Fixed duress alarms will also be located in all areas where there is a level of risk of harm to staff, patients or visitors.
- c. The ED entrance and ambulance bay will be monitored via video surveillance.

50.2.10. Site Patrols

- a. Regular site patrols will be undertaken by security staff.

50.2.11. Functional Relationships

- a. The main security office will be located adjacent to the Emergency Department if possible and will control security activities for the entire campus.
- b. Security will have functional relationships with;-
 - i. All staff
 - ii. After-hours entrance
 - iii. Afterhours Nursing Management
 - iv. Fire Panels
 - v. Engineering

50.3. Specific Design Requirements

50.3.1. Staff Space Requirements

- a. A small reception area
- b. Staff area including xx workstations with visibility of a wall of monitors.
- c. Space provision for any servers required to be located in the vicinity of the office.
- d. Space for charging communications devices and 4 to 5 key cabinets.
- e. Space for issue of access cards and taking photos if required.
- f. Easy access to a meeting room.

50.3.2. Specific Security Service Requirements

- a. There will be a safe for patient valuables for after-hours to be sent to cashier the next working day
- b. The security service will require ready access to a car park.
- c. Security will be enabled through the identification of zones by their level of risk. The following safety and security practices will be included in the design of the facility:
 - i. Rationalisation of the number of entrances to the facility to the most practical minimum.
 - ii. Incorporation of Crime Prevention Through Environmental Design principles.
 - iii. Collocation of similar units with similar operation hours where appropriate.
 - iv. Location of reception areas at the main entrance, outpatients, Emergency Department and in inpatient units in close proximity to arrival locations. The route between arrival and reception must be clearly signed and controlled.
 - v. Provision of a secure perimeter with no unobserved access or egress routes.
 - vi. Provision of access to safe parking areas.
 - vii. A design that facilitates natural surveillance of external spaces including entrances, the building perimeter, parking areas and the loading dock.
 - viii. Location of buildings within the precinct in a manner that avoids the creation of unobserved areas and recesses.
 - ix. External lighting and landscaping that optimise natural surveillance and avoid hidden shaded areas.
 - x. Selection of landscaping materials and external furniture (litter bins and seating) that will be robust and difficult to move to minimise crime risk.
 - xi. Avoidance of external climbing features in locations that provide unauthorised access to roofs or vulnerable windows.
 - xii. Zoning of departments to limit travel through unoccupied departments.
 - xiii. Minimising entry points to all buildings.
 - xiv. Capability to quickly lock down the entire hospital perimeter electronically, plus paediatric units, women's units and Emergency Department individually.
 - xv. Lock down of the perimeter doors after-hours must be configured in a manner that does not contravene the requirements of the Building Code of Australia.
 - xvi. External access doors and stairs will have sensors capable of remote monitoring.
 - xvii. Fire stairs will have proximity card access and release on fire - specific provisions to be made for mental health units.
 - xviii. Plant rooms will have proximity card and key access.
 - xix. The key solution will be a robust i.e. twin high security restricted keying system.
 - xx. There will be a single internet protocol building access system supporting single sign-on technology - preference for standardisation.
 - xxi. The building will be divided into access levels for security access purposes.
 - xxii. Capability for controlled access to all clinical units will be required.
 - xxiii. access will be controlled to all staff and goods lifts.
 - xxiv. Internet protocol, colour, minimum 2 megapixels HD CCTV surveillance will be located at the main entry doors, lift lobbies and corridors and entry to high risk departments, to enable staff to visualise visitors or those presenting to the facility.

- xxv. Fixed and mobile duress alarms will be provided for staff according to risk assessments.
- xxvi. The following inpatient units will be secured at all times i.e. Entry will be locked, and will have video intercoms and remote lock / unlock function: Intensive Care Unit, Birthing Suite, Paediatric Inpatient Unit, Perioperative Unit, Special Care Nursery, Acute Mental Health Unit, Geriatric Unit. Capability to lock all units to contain wandering patients if required and all will be locked after-hours.
- xxvii. The loading dock will have a secure compound with remote controlled gate.
- xxviii. There will be intercoms at the loading docks, pathology, pharmacy, and mortuary and boom gates. Units should have intercoms for after-hours access and those that are secured at all times should have video intercoms
- xxix. The GP Access After-Hours service and Medical Imaging will be locked down to public access after 9pm each night.
- xxx. Staff education programs and alarm systems will be implemented to ensure no adverse practices hamper the secure integrity of the facilities e.g. propping open doors after-hours.
- xxxi. Areas where medications are stored will be access controlled in accordance with NSW Health and statutory requirements.
- xxxii. Safety in the external environment, including staff egress to car park must be provided.
- xxxiii. There will be capability for universal CCTV coverage.
- xxxiv. CCTV will be internet protocol with method of access to devices to be controlled from the head end or via LDAP (Lightweight Directory Access Protocol).
- xxxv. There will be a networked video recorder for mental health units as per mental health guidelines which is integrated with other systems.
- xxxvi. Mental health patient property will be stored in a locked patient property room in the units.
- xxxvii. Security and monitoring for child protection purposes will be required in the Special Care Nursery, Birthing Suite, Women's Health Inpatient Unit, Paediatrics and as required in the Emergency Department.
- xxxviii. The helpad will be secure and have proximity card access - crews will be escorted by hospital staff.
- xxxix. Lifts will have proximity card access to enable control by authorised staff and wireless communications.
- xl. The wireless duress network will be capable of location within 5 metres or according to NSW Health Protecting People and Property Policy and will be suitable for Real Time Location System and VOIP. A solution for handsets will be determined based on functional requirements.
- xli. Fixed duress will be as per AusHFGs and included in car parks and interview rooms.
- xlii. The cashier office requires back of house entry via the loading dock, as the main entry will not be used for transfer of cash due to amounts required for regulated mental health patients - cash deliveries escorted by a private provider.
- xliii. Lifts should have an override function for emergency response.

50.4. Workforce Issues

- a. Campbelltown hospital employs a dual staffing model of dedicated Security staff and Health and Security Assistant (HASA)
- b. Increased central monitoring workforce implications

50.5. Technology

- a. Centralised workflow system for contact, job allocation and reporting for security and wardspersons

50.6. Change Management

- a. Technology improvements and the expanded campus will require increased change management requirements
- b. Location of response areas
- c. Technology training
- d. Increased visitors hours and after-hours access

- i. workforce
- ii. operational processes

51. WARDSPERSONS SERVICE

51.1. Scope of Service

- a. This section should be read in conjunction with all operational services and in particular Security having regard to the dual wardsperson's role
- b. Wardspersons staff will provide internal patient transport and a variety of services including patient and non-patient transport and clinical equipment transfer.
- c. Wardspersons staff transport blood products and pharmacy items when the pneumatic tube is either unsuitable or unavailable
- d. The scope of the service and allocated tasks will be managed by centralised job logging electronic system.

51.2. Model of Care and Operational Description

- a. HASA and wardspersons will provide a variety of services including general assistance to patients, patient care, patient handling, patient transport and clinical equipment transfer.
- b. The operational system utilised by the wardsperson is yet to be confirmed but may include the option for a centralised job logging electronic system.

51.3. Relative Location and Unit Configuration

- a. Operationally, the Wardsperson service will be located close to other back of house functions for allocation of jobs and sign on and off areas. Security will be located in a more centralised location. Wardspersons will share amenities and offices with other operational staff
- b. The following areas will be shared between cleaning, linen, wardsperson services and waste services:
 - i. A central sign-on bay
 - ii. Staff property bays
 - iii. Meeting rooms
 - iv. Staff amenities will be centralised and shared with other back of house services:
 - v. Staff room
 - vi. Change rooms
 - vii. Toilets
 - viii. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

51.4. Specific Design Requirements

- a. The Wardsperson supervisor will have a workstation in back of house area and staff will share staff amenities.
- b. Wardsperson staff will sign on and initially be tasked from the Wardsperson/ Operational Services Control Room.
- c. A communications system will relay jobs to each Wardsperson during their shift.
- d. Emergency Department, Medical Imaging and Perioperative Unit will have dedicated Wardsperson allocated from central pool on a 24 hours basis.
- e. Wardspersons will move large clinical items such as beds and lifters between storage spaces such and clinical units. Use may be made of RFID tracking on clinical equipment.
- f. Capacity to recharge bed movement devices will be required in inpatient units.

51.4.2. Operating hours

- a. Wardsperson Services will manage and operate the unit orderly service 24 hours, 7 days a week with a centralised call service for job allocation

51.5. Workforce Issues

- a. Centralised call service for job allocation
- b. Management and governance of service

51.6. Technology

- a. Centralised call system and job allocation system for security and wardspersons
- b. Tracking equipment system
- c. Training for new systems

51.7. Change Management

- a. Technology changes would invoke change management issues
 - i. Education and training
 - ii. Reporting and operational processes

52. PATIENT FLOW AND TRANSIT UNIT

52.1. Scope of Work

- a. The development of a Patient Flow System provides a platform for the standardisation of practices and processes. Improving patient flow includes care coordination, standardised practice, variation management, demand escalation and capacity planning quality and governance. The Patient Flow Unit is the control hub that flows patients in and out of all areas across the Hospital.

52.2. Model of Care

- a. The Patient Flow Unit is a centralised control hub to provide clinicians with high level advice as to inter-facility transfers during operational hours. The Unit also works closely with the Patient Transport Service or Transit Unit to determine the mode of transport required for patients condition.

52.3. Operational Description

- a. The Patient Flow Unit and Transit Unit will be managed by Nurse Unit Coordinator's and will utilise discharge planners to manage the discharge of and movement of patients across the hospital and community.
- b. The Patient Flow and Transit unit will work together to determine the best mode of transport for a patient's condition
- c. The Patient and Transit Unit will be adjacent to the Hospital's Command Room
- d. Patient Flow will be managed after-hours by the After Hours Nurse Manager

52.4. Relative Location and Unit Configuration

52.4.1. External Functional Relationships

The Patient Flow Unit will ideally be located immediately adjacent to the Transit Unit. The Patient Flow Unit has other adjacencies to Security and Environmental Service

52.5. Specific Design Requirements

52.5.1. Operating hours

- a. The Patient Flow function is a 24 hour service
- b. The Patient Flow Unit is staffed by:
 - i. 1 demand manager
 - ii. 1 patient flow manager
 - iii. 1 data manager
 - iv. 1 discharge CNC
 - v. 2 CNS - part time (7 days)
 - vi. 2 ENs - one FTE
- c. After Hours Nurse Managers - 1 to 2 on each shift manage the service from 1430 to 0800.
- d. An electronic key cabinet and a drop box for drug keys would be required

52.5.2. Transit unit

- a. The Transit Unit currently has 3 bed spaces and 12 Chairs and will increase to 10 spaces.
- b. Adjacency to a front entry or pick up bay would be ideal
- c. The Transit unit is currently staffed by:-
 - i. 1 RN and 1 in EN
 - ii. After-hours CNC and CNS - 1430 to 2300 7 days per week
- d. Storage is a requirement to be further defined in design.

53. CENTRAL CLINICAL EQUIPMENT STORE

53.1. Scope of Service

- a. The Central Clinical Equipment Store (CCES) provides a centralised model for the management and tracking on identified key clinical equipment across the Hospital and District
- b. The model is as yet undefined but would likely manage standard "fleet equipment and potentially unit clinical consumables and supplies of a standardised nature.
- c. A Central Clinical Equipment store will manage hospital wide clinical equipment (fleet equipment) such as intravenous pumps, syringe drivers, pressure relieving mattresses, beds and cribs, and the like. The CCES could also manage standardise unit consumables. The range of equipment and consumables would will be determined.
- d. The CCES would work closely with Biomedical Engineering Services and Asset Management Services and contractors
- e. The CCES would be responsible for managing in and out agreed standardised equipment to units and departments that require repairs. Loan equipment may be required in stock to cover the absence of equipment on repair.
- f. The CCES would be responsible for coordinating and managing Australian Standards in conjunction with local departments to ensure the hospital meets these appropriate standards on fleet equipment
- g. The CCES would act similar to a library checking in and out equipment as required
- h. This should reduce the need for space on units and departments
- i. The CCES may not manage specialised areas and their equipment such as ICU and Theatres

53.2. Model of Care

- a. The model of care is yet to be determined and will require significant investigation. However the focus is on a centralised model and therefore will need easy access requirements for key customers and service groups

53.3. Operational Description

- a. The CCES would operate as a central location for standardised equipment which could be returned to the unit for repair and a replacement loaned to the local unit or department whilst the repair is conducted.
- b. CCES provides fleet equipment to all clinical areas through both an impress system and on demand delivery service. Six rounds of all clinical areas are performed each day to distribute and collect medical devices.
- c. The CEES would also work closely with the Central Loan Equipment store
- d. The CCES would be responsible for managing in and out agreed standardised equipment to units and departments that require repairs.
- e. The CCES would provide equipment replacements for standardised equipment whilst under repair. This effectively being a Loan equipment which would remain under the department or service area's cost centre
- f. Significant space to store equipment and consumables will be required may be required in stock to cover the absence of equipment on repair.
- g. The CCES would be responsible for education in conjunction with services areas any changes in standards or requirements for consumables and equipment.
- h. A hospital wide governance arrangement will be required

53.3.2. Operating Hours

- a. CCES will operate from 0800 to 1800, five days a week with after- hours access arrangements

53.4. Relative Location and Unit Configuration

53.4.1. Functional Relationships

- a. The Central Equipment Store will require external access to:
 - i. Biomedical Engineering Services - direct access
 - ii. Central Patient Equipment Loan Store (see below)
 - iii. Building, Maintenance and Engineering Services - direct access
 - iv. Supply and Procurement - direct access
 - v. Inpatient units and clinical areas - routine access
 - vi. Loading Dock - routine access
 - vii. Asset Management - routine access

53.4.2. Patient Loan Equipment Store

- a. The Patient Loan Equipment Store (PLES) is an Allied Health run service and provides outpatients with clinical consumables and equipment from their ongoing care at home after discharge. This can be for a short or extended period. A standardised set of equipment and consumables requirements will be available at the store. This may include but is not limited to wheelchairs, walking frames, crutches etc.
- b. The PLES will work closely with the CCES. PLES could be collocated with the CCES or alternatively be satellited near the foyer or an entrance exit for ease of customers and most likely be stationed in the foyers or near an entrance/exit. Adjacent to the CCESS is more desirable.
- c. This model currently exists within the hospital and its relationship to the new central store is yet to be determined

53.5. Specific Design Requirements

53.5.1. General

- a. CCES is both a multiple office area with meeting space but also includes a Reception Area for Visiting Company Representatives to sign in and out of the Facility.
- b. The reception area should include a stock check in and out area
- c. A large storage room with multiple power points and charging facilities will be required
- d. Shared training spaces should be accessible.
- e. Access to meeting rooms will be required.
- f. Amenities required including:
 - i. A beverage bay with hot and cold water and a refrigerator will be required adjacent the education and training rooms.
 - ii. A kitchenette with beverage making, food reheating and plating and refrigeration facilities
- g. Indicative office requirements will be considered in the context of activity based working and will be informed by the workforce plan

53.6. Technology

- a. Significant technology requirements including tracking and recording technology.
- b. Information technology or software programs must interact with the Finance Systems Asset Management module
- c. Linkages to patient data needs to be considered for patient equipment

53.7. Change requirements

- a. The increase in capacity for Centralised Equipment management will require
 - i. increase in qualified staff

- ii. increase in governance and management structures