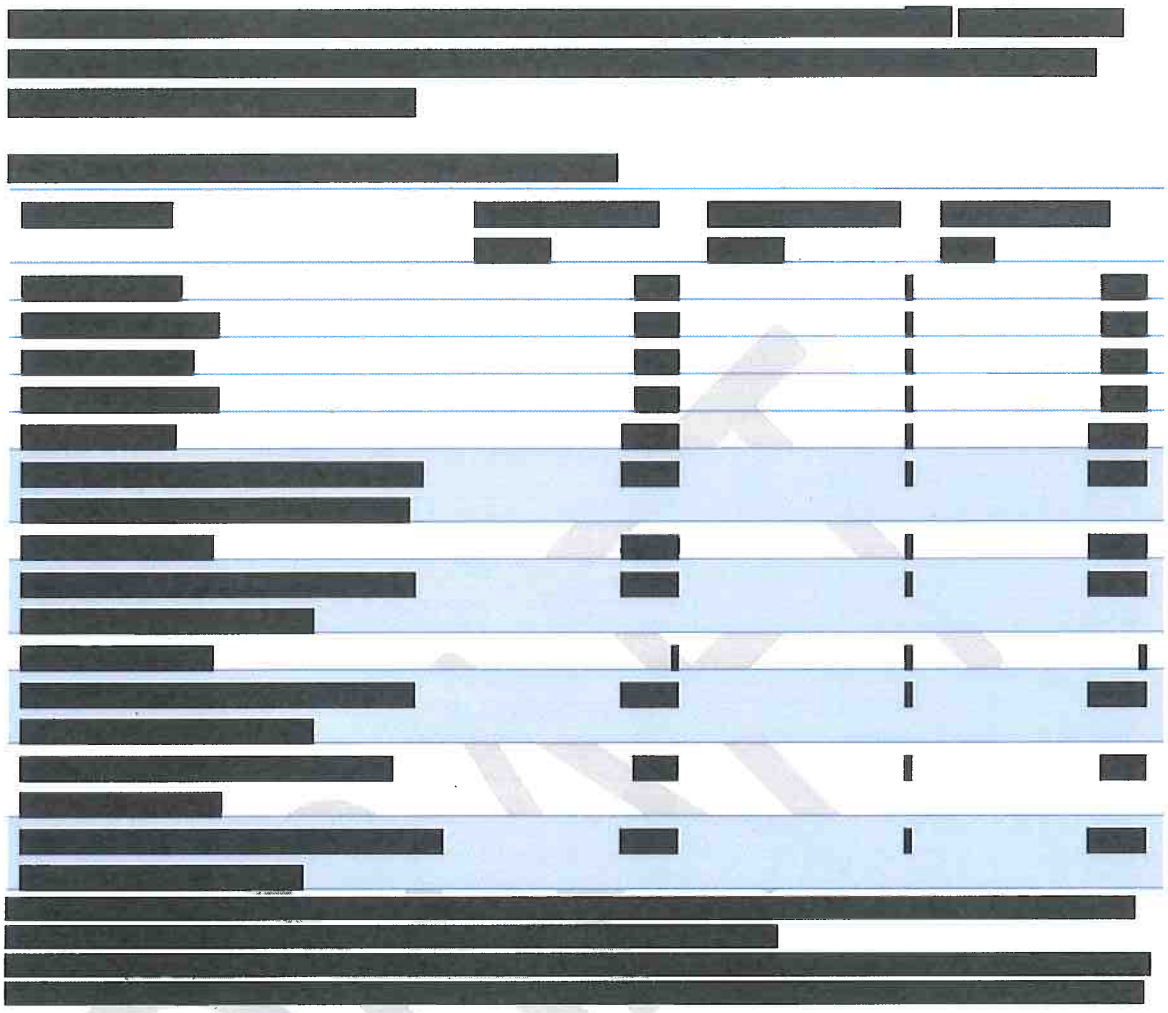

Key considerations for Option 4 are listed in Table 24

Table 24: Considerations for Option 4

Strengths	Weaknesses
- This is a moderately lower capital investment relative to all other options.	- There is further services planning work required to determine how a smaller hospital would work operationally for the broader network - This will not address current infrastructure issues nor other challenges identified - There are operational funding and capital inefficiencies associated with maintaining two hospitals - There may be impacts of the chosen operator on hospital services

[52] The applied methodology developed by Genus Advisory in consultation with MPC and ACHTHD has applied escalation on to Gross Construction Costs only. Escalation has not been applied to Other Project Costs, FFE, MME, ICT or Contingency.
[53] Capital costs for Project options provided by Genus (including deterministic contingency) with additional inputs for ACTHD / MPC costs and management costs provided by ACTHD and MPC.

Strengths	Weaknesses
	- A smaller sized hospital may limit the ability to provide the required level of services to meet the needs of the community - This option is not supported by ACT Health, CHS or ACT Ambulance Service - This would have significant workforce implications - There will be challenges in implementing this option due to the interfaces between CPHB and the new hospital (e.g. patient transfer between the hospitals, staffing) - There will likely be an increase in system inefficiencies - There may be equity issues in quality and access to healthcare - The challenges in this option would likely result in poorer patient outcomes.

5. Project and staging options assessment

5.1 Option assessment framework

An MCA framework was developed in accordance with the ACT Capital Framework (ACT Government, 2022) and Infrastructure Australia Assessment Framework (Infrastructure Australia, 2021) guidance on MCA. The MCA framework was applied to support the prioritisation of the project options and identify two shortlisted options to assess in more detail through the Business Case.

The MCA framework was developed and applied based on the following approach.

Step 1: Determine a set of appropriate evaluation criteria

A set of 13 MCA criteria was developed based on the problems and opportunities, benefits and project objectives identified through the ILW. Clear measures were established to underpin each criterion to ensure a transparent and consistent approach to analysis.

The MCA criteria were also mapped to the three strategic goals of *Accessible, Accountable, Sustainable: A Framework for the ACT Public Health System 2020-2030*[54], to demonstrate how the project options align to and support the broader objectives of the ACT health network.

Step 2: Assign a relative importance to each criterion

A relative importance, ranging from 'Low' to 'High', was assigned to each criterion based on the objectives and priorities of the Project. For example, a higher weighting assigned to a particular criterion indicated a higher relative importance compared to other criteria. For this Project, a 'High' rating was applied to all criteria.

Step 3: Provide a rating for each option against each criterion

An MCA workshop was undertaken with the new Northside Hospital project team to shortlist the project options. Each option was assessed against each criterion and scored using a scale of D (worst) to A (best). A description of each rating, as it relates to each criterion, was established prior to scoring, to allow a consistent approach and prevent options being scored relative to each other.

Step 4: Rank each option, review the results and provide a written justification

Each option was ranked based on the relative importance of each criterion and the rating of each option against the criteria.

5.2 Multi-criteria assessment of project and staging options

The outcomes of the MCA are presented in Table 25 and Table 26.

[54] ACT Government Health (2020), Accessible, Accountable, Sustainable: A Framework for the ACT Public Health System 2020-2030

Table 25: MCA outcomes (Base Case, Options 1A, 1B, 1C)[55]

	Objectives / benefits of Project	MCA criteria	Scoring Base Case	Option 1A Bruce multiple buildings in a single stage	Option 1B Bruce staged	Option 1C Single building
Access	Improve health and wellbeing for the ACT community	1) Meets current and future healthcare demand and reduces patient wait times	D The Base Case assumes no increase in capacity to meet future demand.	A Option 1A delivers increased capacity to meet healthcare demand to 2040-41. It will deliver 543 multi-day beds, 99 ED POC, 17 operating suites, 164 ambulatory spaces and supporting medical imaging across 109,687sqm.	A As per Option 1A.	A Option 1C delivers increased capacity to meet healthcare demand to 2040-41. It will deliver 543 multi-day beds, 99 ED POC, 17 operating suites, 164 ambulatory spaces and supporting medical imaging across 109,426sqm.
		2) Provides appropriate health services in a location of population growth	C- The Base Case assumes no further capital investment to change the current mix of services to meet the changing needs of the community e.g. no maternity day only beds, allied health, ambulatory procedure and outpatient spaces. However, the Base Case provides health precinct colocation benefits.	A Option 1A delivers the appropriate services to meet the predicted future service case-mix to 2040-41. This includes additional adult & older persons mental health inpatient unit (**OPMHIU**) beds to support an ageing population, additional surgical capacity to meet demand, delivery of maternity day only beds to support increased maternity services, and increased ED capacity for paediatric cases. Option 1A also supports person-centred care for mental health patients through the satellite facilities.	A As per Option 1A.	B Option 1C delivers the appropriate services to meet the predicted future service case-mix to 2040-41. This includes additional adult & OPMHIU beds to support an ageing population, additional surgical capacity to meet demand, delivery of maternity day only beds to support increased maternity services, and increased ED capacity for paediatric cases. However, Option 1C does not optimise clinical outcomes or meet the environmental needs of mental health patients.
		3) Improves patient and carer wellbeing outcomes	D The Base Case assumes no further capital investment to upgrade facilities and amenity to support the improved wellbeing of patients and carers.	A+ Option 1A provides new and contemporary hospital environments to support improved wellbeing outcomes. This includes 2,455sqm of commercial, café, public amenity, and cultural spaces. Expanded mental health services will delivered in a stand-alone facility on the northern block which is preferred over a 'stacked approach' (i.e. Option 1C) as recovery of mental health patients is better supported in a more 'human-scale' development.	A As per Option 1A. However, as the mental health building is delivered in a staged approach under Option 1B, the full extent of wellbeing benefits from improved facilities and health environments will not be delivered until 2040-41.	B Option 1C provides new and contemporary hospital environments to support improved wellbeing outcomes. This includes 2,451sqm of commercial, café, public amenity, and cultural spaces. Location of mental health services within the main hospital building is not optimal in supporting the recovery of mental health patients.
Accountability	Improve health and wellbeing for the ACT community	4) Develops the skills and flexibility of the ACT healthcare workforce	D The Base Case assumes no further capital investment to upgrade facilities and technology to support improved workforce education and training.	A Option 1A delivers 2,756sqm of dedicated education and clinical research spaces with the latest technologies and clinical solutions to implement workforce education and	A As per Option 1A.	A Option 1C delivers 2,726sqm of dedicated education and clinical research spaces with the latest technologies and clinical solutions to

[55] The MCA undertakes a qualitative analysis of project characteristics with affordability measured through economic and financial analysis within the Business Case

	Objectives / benefits of Project	MCA criteria	Base Case	Scoring Option 1A Bruce multiple buildings in a single stage	Option 1B Bruce staged	Option 1C Single building
				training. This will support the ACT Government maintain the capability and skills required to respond to future demands.		implement workforce education and training. This will support the ACT Government in maintaining the capability and skills required to respond to future demands.
		5) Improves staff wellbeing and experience	D The Base Case assumes no further capital investment to upgrade facilities and amenity to support the improved wellbeing of the hospital staff.	A Option 1A delivers 1,803sqm of commercial, café, staff amenity and EOT facilities that are modern and fit for purpose, alongside an 800 space carpark. The upgraded facilities will improve the experience of the hospital staff and support their wellbeing whilst working.	A As per Option 1A.	A Option 1C delivers 1,814sqm of commercial, café, staff amenity and EOT facilities that are modern and fit for purpose, alongside an 800 space carpark. The upgraded facilities will improve the experience of the hospital staff and support their wellbeing whilst working.
Sustainability	**Provide a contemporary healthcare environment**	6) Enables contemporary models of care	D The Base Case assumes no further capital investment to enable the implementation of contemporary models of care e.g. no capability to integrate different services or deliver person-centred care.	A Option 1A delivers new and appropriate medical facilities and enablement of information communications technology (**ICT**) to support contemporary models of care. The delivery of 164 ambulatory spaces provides an opportunity to develop new models of care in the community and improve health outcomes. The expansion of mental health services in a stand-alone facility provides an optimal environment for mental health patients.	A As per Option 1A.	A Option 1C delivers new and appropriate medical facilities and enablement of ICT to support contemporary models of care. The delivery of 164 ambulatory spaces provides an opportunity to develop new models of care in the community and improve health outcomes. The expansion of mental health services and location in a separated wing of the hospital further provides an improved healing environment for mental health patients.
		7) Supports digital capabilities for a sustainable and innovative health system	D The Base Case assumes no further capital investment to enable emerging technologies.	A Option 1A delivers an investment into ICT of $74.8 million (nominal), including 280sqm for the new Virtual Hospital Hub. This will enable contemporary and emerging technologies and building of digital capabilities to support better outcomes and more efficient health service delivery.	A As per Option 1A.	A Option 1C delivers an investment into ICT of $71.3 million (nominal), including 280sqm for the new Virtual Hospital Hub. This will enable contemporary and emerging technologies and building of digital capabilities to support better outcomes and more efficient health service delivery.
	Increase resilience of ACT health network	8) Improves system redundancy and response to major health events	D The Base Case assumes no further capital investment to increase the capacity or flexibility of health	A Option 1A delivers 99 ED POC to meet demand to 2040-41, within new infrastructure aligned to modern standards (e.g. fire safety, adaptability). This increases	A As per Option 1A.	A As per Option 1A.

	Objectives / benefits of Project	MCA criteria	Scoring Base Case	Option 1A Bruce multiple buildings in a single stage	Option 1B Bruce staged	Option 1C Single building
			infrastructure to improve system redundancy.	the ability of the hospital and the network to respond to surges in demand from any health crises or major events.		
	Improve operational outcomes	9) Improves operational efficiency of the hospital and ACT health network	**D** The Base Case assumes no further capital investment to enable improvement in operational efficiency, but has continued access to private services within the precinct.	**A-** The upgrade to the infrastructure and technology delivered under Option 1A, including 109,687sqm of new facilities, enables operational efficiency for the workforce, delivery of services and design sustainability. However, the need to transfer patients between the mental health services building and the main hospital provides some inefficiencies in the timely provision of care.	**A-** As per Option 1A.	**A** The upgrade to the infrastructure and technology delivered under Option 1C, including 109,426sqm of new facilities, enables operational efficiency for the workforce, delivery of services and design sustainability. The colocation of the public hospital services with those of the private hospital provide further efficiencies in the timely provision of care.
Deliverability and operability	**Asset performance**	10) Order of magnitude capital costs and removal of asset maintenance backlog	**A** The Base Case will require a total capital expenditure of $530.7 million (nominal) over the next 30 years to deliver critical infrastructure works to keep CPHB safe and operational.	**C** Option 1A requires a capital investment of $1,692.9 million (nominal) which comes as a cost to the ACT Government.	**C** Option 1B requires a capital investment of $1,708.1 million (nominal) which comes as a cost to the ACT Government.	**C** Option 1C requires a capital investment of $1,579.4 million (nominal) which comes as a cost to the ACT Government.
	Delivery and operating risk	11) Level of delivery and operating risk (including operational disruption at CPHB)	**B** Key risks under the Base Case includes operational risks associated with constrained service delivery and ageing infrastructure.	**C** Key risks under Option 1A include risks associated with disruption to existing services, decanting, and the physical constraints of delivering on a brownfield site.	**D** Key risks under Option 1B include risks associated with disruption to existing services which is extended through the staged approach, decanting, and the physical constrains on delivering on a brownfield site.	**C** As per Option 1A.
		12) Level of planning and program risk (including approvals and public acceptance)	**A** No planning or program risk.	**C** Moderate level of planning risk under Option 1A associated with access to site, APZ restrictions and ecology on northern block.	**C-** As per Option 1A, with added program delay risk due to a staged delivery.	**B** Moderate level of planning risk under Option 1C associated with access to the site, and higher risk / interdependencies from single building development.
		13) Certainty of land tenure	**D** Low certainty of land tenure for Government.	**D** Low certainty of land tenure for Government.	**D** As per Option 1A.	**D** As per Option 1A.
		Overall ranking	**8**	**2**	**4**	**3**

Source: ACTHD and MPC (2023)

Table 26: MCA outcomes (Options 1D, 2, 3 and 4)[56]

Objectives / benefits of Project	MCA criteria	Scoring Option 1D Multiple buildings (reduced size)	Option 2 Greenfield	Option 3 Smaller hospital	Option 4 Third hospital + base case
Access **Improve health and wellbeing for the ACT community**	1) Meets current and future healthcare demand and reduces patient wait times	**B** Option 1D delivers increased critical care capacity to meet healthcare demand to 2040-41, and ambulatory care capacity to meet a level of demand prior to 2030-31. It will deliver 452 multi-day beds, 99 ED POC, 17 operating suites, <154 ambulatory spaces and supporting medical imaging across 90,803sqm.	**A** As per Option 1A.	**C** Option 3 delivers increased capacity to meet healthcare demand to 2030-31. It will deliver 434 multi-day beds, 81 ED POC, 15 operating suites, 154 ambulatory spaces and supporting medical imaging across 93,689sqm.	**B** Option 4 delivers an additional smaller hospital to support CPHB in meeting healthcare demand to 2040-41. It will deliver 294 multi-day beds, 19 ED POC, 10 operating suites, 147 ambulatory spaces and supporting medical imaging across 63,125sqm.
	2) Provides appropriate health services in a location of population growth	**B** Option 1D delivers the appropriate services to meet the predicted future service case-mix to a level of demand prior to 2030-31, to 2030-31 and to 2040-41. This includes additional adult & OPMHIU beds to support an ageing population, additional surgical capacity to meet demand, delivery of maternity day only beds to support increased maternity services, and increased ED capacity for paediatric cases. Option 1D also supports person-centred care for mental health patients through the satellite facilities.	**A-** As per Option 1A. However, Option 2 does not provide the health precinct colocation benefits that the Bruce campus options deliver.	**B** Option 3 delivers the appropriate services to meet the predicted future service case-mix to 2030-31. This includes additional adult & OPMHIU beds to support an ageing population, additional surgical capacity to meet demand, delivery of maternity day only beds to support increased maternity services, and increased ED capacity for paediatric cases.	**B** Option 4 delivers an additional smaller hospital to support CPHB in meeting the predicted future service case-mix to 2040-41. This includes additional adult & OPMHIU beds to support an ageing population, additional surgical capacity to meet demand, delivery of maternity day only beds to support increased maternity services, and increased ED capacity for paediatric cases.
	3) Improves patient and carer wellbeing outcomes	**A** Option 1D provides new and contemporary hospital environments to support improved wellbeing outcomes. This includes 2,306sqm of commercial, café, public amenity, and cultural spaces. Option 1D also delivers a satellite mental health facility to support patient recovery.	**A+** As per Option 1A. Additionally, the improved access to the surrounding natural environment of the preferred site provides patient and carer amenity and supports patient-centred care outcomes. There are also active Aboriginal communities within the Ginninderra catchment and the option offers opportunities to connect with these communities and improve health outcomes through targeted initiatives.	**B** Option 3 provides new and contemporary hospital environments to support improved wellbeing outcomes. This includes 1,605sqm of commercial, café, public amenity, and cultural spaces.	**C-** Option 4 provides new and contemporary hospital environments to support improved wellbeing outcomes. This includes 957sqm of commercial, café, public amenity, and cultural spaces. However, the operation of three disparate hospitals in the network (CH, CPHB, new smaller hospital) creates issues relating to equity of service and facilities.

[56] The MCA undertakes a qualitative analysis of project characteristics with affordability measured through economic and financial analysis within the Business Case

Objectives / benefits of Project	MCA criteria	Scoring Option 1D Multiple buildings (reduced size)	Option 2 Greenfield	Option 3 Smaller hospital	Option 4 Third hospital + base case
Accountability **Improve staff wellbeing, retention and training capacity**	4) Develops the skills and flexibility of the ACT healthcare workforce	C Option 1D delivers 1,647sqm of dedicated education and clinical research spaces with the latest technologies and clinical solutions to implement workforce education and training. This will support the ACT Government in maintaining the capability and skills required to respond to future demands.	A As per Option 1A.	B Option 3 delivers 2,334sqm of dedicated education and clinical research spaces with the latest technologies and clinical solutions to implement workforce education and training. This will support the ACT Government maintain the capability and skills required to respond to future demands.	C Option 4 delivers 1,573sqm of dedicated education and clinical research spaces with the latest technologies and clinical solutions to implement workforce education and training. This will support the ACT Government maintain the capability and skills required to respond to future demands.
	5) Improves staff wellbeing and experience	B Option 1D delivers 1,803sqm of commercial, café, staff amenity and EOT facilities that are modern and fit for purpose, alongside a 600 space carpark. The upgraded facilities will improve the experience of the hospital staff and support their wellbeing whilst working.	A As per Option 1A.	B Option 3 delivers 1,737sqm of commercial, café, staff amenity and EOT facilities that are modern and fit for purpose, alongside a 600 space carpark. The upgraded facilities will improve the experience of the hospital staff and support their wellbeing whilst working.	C Option 4 delivers 1,211sqm of commercial, café, staff amenity and EOT facilities that are modern and fit for purpose, alongside a 600 space carpark. The upgraded facilities will improve the experience of the hospital staff and support their wellbeing whilst working.
Sustainability **Provide a contemporary healthcare environment**	6) Enables contemporary models of care	C Option 1D delivers new and appropriate medical facilities and enablement of ICT to support contemporary models of care. The expansion of mental health services in a stand-alone facility provides an optimal environment for mental health patients.	A As per Option 1A.	B Option 3 delivers new and appropriate medical facilities and enablement of ICT to support contemporary models of care. The delivery of 154 ambulatory spaces provides an opportunity to develop new models of care in the community and improve health outcomes. This is capped at 2030-31 demand which limits the benefits received.	C Option 4 delivers new and appropriate medical facilities and enablement of ICT to support contemporary models of care. The delivery of 147 ambulatory spaces provides an opportunity to develop new models of care in the community and improve health outcomes. This is capped at the incremental demand on the Base Case which limits the benefits received.
	7) Supports digital capabilities for a sustainable and innovative health system	A Option 1D delivers an investment into ICT of $63.2 million (nominal), including 280sqm for the new Virtual Hospital Hub. This will enable contemporary and emerging technologies and building of digital capabilities to support better outcomes and more efficient health service delivery.	A As per Option 1A.	A Option 3 delivers an investment into ICT of $63.7 million (nominal), including 280sqm for the new Virtual Hospital Hub. This will enable contemporary and emerging technologies and building of digital capabilities to support better outcomes and more efficient health service delivery.	C Option 4 delivers an investment into ICT of $45.1 million (nominal), including 200sqm for the new Virtual Hospital Hub. This will enable contemporary and emerging technologies and building of digital capabilities to support better outcomes. However, the need to integrate the new technology with existing systems may impact on technical efficiency under this option.
Increase resilience of	8) Improves system redundancy and	A As per Option 1A.	A As per Option 1A.	B	B

	Objectives / benefits of Project	MCA criteria	Scoring Option 1D Multiple buildings (reduced size)	Option 2 Greenfield	Option 3 Smaller hospital	Option 4 Third hospital + base case
	ACT health network	response to major health events			Option 3 delivers 81 ED POC to meet demand to 2030-31. Whilst this partially improves the ability of the hospital to respond to surges in demand, there is limited improvement to future system redundancy and service delivery in the event of a territory-wide health crisis.	Option 4 delivers an additional 19 ED POC to meet demand to 2040-41, through a smaller hospital. Whilst the infrastructure upgrades and alignment with contemporary standards is limited to the new smaller hospital, the separation of the health facilities and services across the new and existing hospitals will improve network resilience in the case of a major event.
	Improve operational outcomes	9) Improves operational efficiency of the hospital and ACT health network	**B** The upgrade to the infrastructure and technology delivered under Option 1D, including 89,813sqm of new facilities, enables operational efficiency for the workforce, delivery of services and design sustainability. However, the need to transfer patients between the mental health services building and the main hospital provides some inefficiencies in the timely provision of care.	**A** As per Option 1A, with no service flow impacts from a separated mental health facility due to site topography and level design.	**B** The upgrade to the infrastructure and technology delivered under Option 3, including 93,689sqm of new facilities, enables operational efficiency for the workforce, delivery of services and design sustainability.	**C** The upgrade to the infrastructure and technology delivered under Option 4, including 63,125sqm of new facilities, enables operational efficiency for the workforce, delivery of services and design sustainability. However, the delivery of services across multiple facilities can impact on operational efficiency at the network level.
Deliverability and operability	**Asset performance**	10) Order of magnitude capital costs and removal of asset maintenance backlog	**C** Option 1D requires a capital investment of $1,403.7 million (nominal) which comes as a cost to the ACT Government.	**C** Option 2 requires a capital investment of $1,613.2 million (nominal) which comes as a cost to the ACT Government.	**C** Option 2 requires a capital investment of $1,343.3 million (nominal) which comes as a cost to the ACT Government.	**B** Option 4 requires a capital investment of $966.8 million (nominal) which comes as a cost to the ACT Government.
	Delivery and operating risk	11) Level of delivery and operating risk (including operational disruption at CPHB)	**C** As per Option 1A.	**B** Key risks under Option 2 includes risks associated with impacts on program timeframes and costs from additional activities required for a greenfield site e.g. land acquisition costs, leasing negotiations, rezoning and potential community objection to the loss of parkland as a result of the site location	**C** Key risks under Option 3 include risks associated with both Options 1A and 2 (i.e. both brownfield and greenfield risks).	**C** Option 4 involves risks associated with delivering on an unconfirmed greenfield site including impact on program and cost, as well as risks associated with existing infrastructure at CPHB.
		12) Level of planning and program risk (including approvals and public acceptance)	**C** As per Option 1A.	**D** High level of planning risk associated with approvals and zoning requirements for greenfield redevelopment. Rezoning may have significant impacts on program.	**B-** Lower level of planning risk either on brownfield or greenfield site due to smaller size hospital.	**B-** As per Option 3.

Objectives / benefits of Project	MCA criteria	Scoring			
		Option 1D Multiple buildings (reduced size)	Option 2 Greenfield	Option 3 Smaller hospital	Option 4 Third hospital + base case
	13) Certainty of land tenure	D As per Option 1A.	A High certainty of land tenure for Government.	B Moderate certainty due to potential greenfield site.	B As per Option 3.
	Overall ranking	**6**	**1**	**5**	**7**

Source: ACTHD and MPC (2023)

5.3 Shortlisted options

Following the criteria analysis, Options 1A and 2 have been shortlisted for further consideration in this Business Case.

Both Options 1A and 2 deliver increased inpatient capacity to service the community to 2040-41, including a stand-alone mental health facility designed to better support patient recovery. Through the delivery of new and contemporary facilities, both options support improved quality of care, better support the training and development of the workforce and improve the sustainability and resilience of the health network.

Option 2 scores marginally higher against improved wellbeing outcomes due to flexibility for future expansion, opportunities for health partnerships with the local Aboriginal community and improved patient and carer access to the natural environment. Option 2 also encompasses lower delivery and operating risk due to the development on a greenfield site which eliminates disruption to existing service delivery and is more flexible in relation to the ongoing contractual negotiations.

Compared to Option 2, Option 1A involves a slightly lower level of operational efficiency and higher level of delivery risk due to the location of the mental health facility on the northern block. Development on the northern block is contingent on the relaxation of APZ requirements and will require patients and staff to travel between levels to access the facility from the main hospital building. There is also a materially lower level of certainty in relation to land tenure for a proposed redevelopment on the Bruce campus.

5.4 Key next steps and options refinement process

The two shortlisted options will be further explored through economic and financial analysis in the Business Case. This will be to identify the preferred capital solution and associated site to progress to the next stage of detailed design and planning works, for which funding is being sought through the Business Case.

A separate parallel process is currently underway to consider the operating model to support the proposed capital solution. The outcomes of this process will inform future decision making and planning as part of the planning phase for the Northside Hospital project.

The detailed design scope of works will include confirmation of operator, further site surveys, planning approvals, detailed design, early contractor involvement period and development of the Enabling Works and Main Works Business Cases.

Appendix A: Schedule of Accommodation

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Northside Hospital Redevelopment

Workforce Planning Method Paper

PwC and ACT Health

January 2023

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1 SUMMARY

The Northside Hospital workforce projections have been undertaken by Capital Insight Pty Ltd on behalf of Price Waterhouse Coopers as part of the feasibility planning for the possible expansion of Northside Hospital in Canberra, a facility of ACT Health.

The method paper outlines the process of developing the high-level workforce classifications and FTE projections, and the inputs and assumptions that underpin this. It considers national and international trends in the health workforce such as increasing specialisation in clinical scope of practice within medicine, nursing and allied health, the growth in the use of Enrolled nurses, opportunities for employing allied health assistants, and the potential for health technologies such as Assistive Technology and Tele-Medicine/Telehealth to facilitate more efficient models of care

Workforce planning has been informed by several sources, and include ACT Health and Commonwealth regulatory and legislative requirements where relevant; guidelines from interstate health agencies including NSW Ministry of Health, Department of Health and Human Services, Victoria, and Queensland Department of Health; recommendations from professional bodies including medical colleges, nurses associations, and allied health bodies, and benchmarking against similar sized facilities elsewhere in NSW, Queensland and Victoria. Table 1 provides a summary of references used within the workforce model.

Table 1: Workforce Planning Reference snapshot

Workforce Classification	References / assumptions
Allied Health	• Allied Health Professions Australia • Australian Institute of Radiography • NSW Health Allied Health Portfolio of the Workforce Planning and Development Branch • Relevant benchmarking
Medical	• Australian Government Dept of Health and Aged Care Medical Workforce Reform Advisory Committee • Australian College of Emergency Medicine • Australian and New Zealand College of Anaesthetics • College of Intensive Care Medicine • Royal Australasian College of Physicians • Relevant benchmarking
Nursing	• ACT Health Nurse and Midwife Patient Ratios • Australian Nursing and Midwifery Federation • NSW Nurses and Midwifery Association • Australian College of Perioperative Nurses (ACORN Standards for Perioperative Nursing in Australia) • Australian College of Emergency Nursing • Relevant benchmarking
Support Services / General	• ACT Health workforce sustainability strategy • Qld Health Workforce Business Planning Framework • Australian Institute of Health and Welfare • Relevant benchmarking

Note: a Baseline FTE was to be estimated using Canberra Hospital staffing to create a staffing rate per Point of Care (PoC) to apply to the existing infrastructure base case PoCs for the Northside Hospital project. However, this dataset was not received in time to integrate into the workforce model.

2 INTRODUCTION

2.1 BACKGROUND

The ACT Government has committed to planning a new Northside Hospital, with the aim to start construction by mid-decade. The business case is being developed and is expected to be ready for consideration within the 2023-24 Budget.

The future Northside Hospital will need to cater for the growing population and demand in the northside of Canberra, as described by the services arrangements in the Clinical Services Plan.

Capital Insight has been engaged to work with the Northside Hospital project team to develop workforce projections for the proposed new build. These workforce projections will be high level, drawing upon information that ACT Health currently has in relation to the existing hospital (~250 beds) and benchmarks from similar sized hospitals, to estimate the number of FTES required for the new build of over 500 beds, as indicated by Table 2.

Table 2: Northside Hospital forecast bed demand[1]

	2030/31	2040/41
Medical	174	218
Surgical	78	100
Womens	22	24
Behavioural	16	18
Stroke	7	9
Mental Health	72	91
Critical Care	32	39
Birthing Suite	6	8
Total Beds	**407**	**507**

2.2 WORKFORCE PLANNING OBJECTIVES

The objectives of this high-level projection of workforce for the future Northside Hospital are:

- to estimate and confirm high-level workforce projections for the future Northside Hospital from a public model perspective
- to support the estimation of labour costs for the purposes of the strategic business case (i.e. cost benefit analysis and financial impacts statement)
- to assess the potential implications of a private model approach to the future new hospital on the workforce projections.

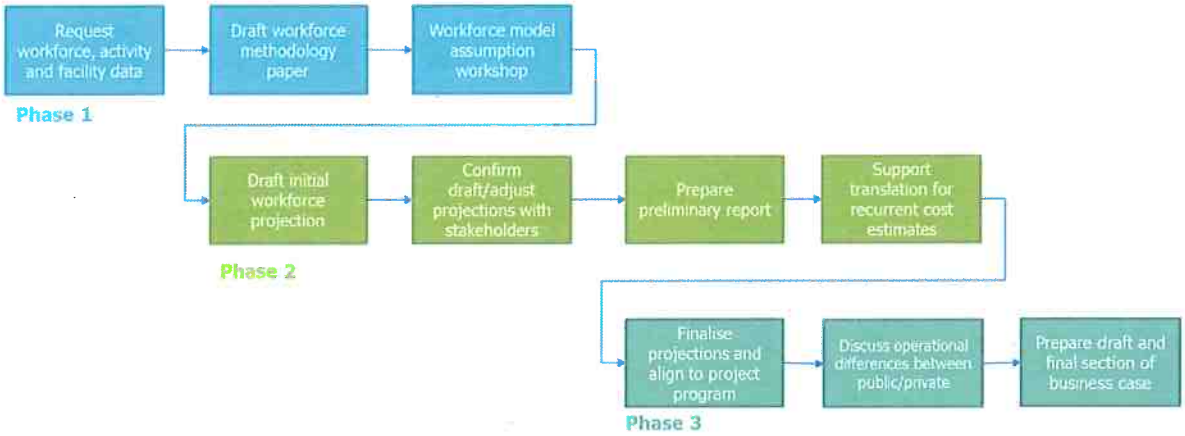
[1] Northside Clinical Services Plan Steering Committee Papers

3 WORKFORCE PLANNING METHODOLOGY

3.1 PROCESS

The proposed methodology to project the workforce for the future Northside Hospital is summarised in Figure 1.

Figure 1: Workforce Planning Methodology



Phase		Activities
1.	Prepare a methodology paper and facilitate a workshop to confirm modelling assumption	• Review and integrate the clinical activity projections and high level SoA for the new Northside Hospital into the workforce model • Obtain workforce information from Canberra Hospital for the public service baseline • Confirm ACT standard workforce models and staffing ratios • Prepare preliminary workforce model methodology and workshop approach • Facilitate workshop with Northside Hospital project team • Finalise methodology, assumptions and actions
2.	Draft workforce projections and support labour cost estimates	• Analyse workforce data to establish baseline aligned to the relevant cost centres/allocations, disciplines, grades • Refine CI model to suit data structure • Confirm program of the preferred option and workforce implications • Prepare projections and preliminary report • Support the integration of workforce model and the option appraisal model in real terms
3.	Finalise workforce projections and incorporate within the business case	• Facilitate meeting with Northside Hospital project team to discuss operational differences between public and private models (e.g. training, employment bases, research) • Refine and finalise the workforce model for review and endorsement • Prepare draft and final section of the business case.

3.2 KEY ASSUMPTIONS

The projected FTE for the new Northside Hospital will be estimated using projected Points of Care (PoC), benchmarks and facility square metres for each staff category, as summarised by Table 3. Note that the projection is for hospital-based staff and does not include HITH/PACS/Community.

Table 3: FTE growth drivers by staff category

Staff categories	Growth drivers
Management and Administration	• Estimated Executive and Director positions based on total forecast FTE • Administration FTE in relation to total projected FTE (~12% of total FTE)
Medical	• Estimated Senior Medical Officers (SMO) and Junior Medical Officers (JMO) based on the forecast PoC, for each relevant functional unit and clinical service
Nursing	• Estimated Senior Nursing (e.g. NUM, CNC, CNE), Registered Nursing (e.g. RN, CNS) and Enrolled Nursing based on the forecast PoC, for each relevant functional unit and clinical service • Registered Nurses are considered to comprise 75% of non-senior nursing staff, and Enrolled Nurses comprise 25% of non-senior nursing staff.
Allied Health	• Allied Health staff projections based on benchmarks per forecast PoC, for each relevant service (e.g. outpatient services), and benchmarks per level of activity (e.g. ED) • Allied Health Professionals are considered to comprise 80% of total Allied Health staff, and Allied Health Assistants are considered to comprise 20% of total Allied Health staff.
Clinical Support	• Clinical Support staff projections based on high-level benchmarks per relevant PoC or per square metre rate
Non-Clinical Support	• Non-Clinical Support staff projections based on high-level benchmarks per relevant PoC or per square metre rate

The proposed scope for the new Northside Hospital is defined by the high-level SoA[2], developed by TSA, as summarised by Table 4.

Table 4: Current and projected points of care for the Northside Hospital

	2017/18	2030/31	2040/41
	Existing Base Case	Opening capacity	Total capacity
Multiday Beds	305	407	507
Day-Stay Beds	19	27	36
Emergency Department	55	81	99
Operating Suite	7	15	17
Ambulatory Care	17	154	164
Allied Health	–	24	24
Medical Imaging	12	20	20
Projected Floor Area (sqm)	–	93,688	109,687

3.3 OUTPUTS

The workforce projections were estimated for the opening bed profile at 2030/31 and for the hospital capacity at 2040/41, and structured using staff sub-categories to support the estimate of labour costs. A summary of the workforce projections and the methodology and assumptions employed will be drafted for inclusions within the business case, aligned to the *TPP18-06 NSW Government Business Case Guidelines*.

The workforce projections will support the estimated labour costs for the option appraisal in real terms, aligned to the *TPP17-03 NSW Government Guide to Cost-Benefit Analysis*.

[2] Northside Hospital high level SOA v1.3

Table 5: Northside Hospital Workforce Projections (2030/31 and 2040/41)

Staff Category	2030/31	2040/41
Medical		
Senior Medical Staff	115	121
Junior Medical Staff	354	390
Total Medical	**469**	**511**
Nursing		
Senior Nursing (inc. NUM, CNC, CNE, NP)	105	121
Registered Nursing (75% non-senior nursing, inc. RN, CNS)	715	904
Enrolled Nurses (25% non-senior nursing)	238	301
Total Nursing	**1,058**	**1,326**
Corporate / Administration		
Executive	17	17
Administration/Clerical	254	297
Total Corporate / Administration	**271**	**314**
Allied Health		
Allied Health Staff (inc. Dietitian, Physio, OT, Speech, Social Worker, Podiatrist, Psychiatrist)	175	195
Pharmacy	29	30
Phlebotomy	5	5
Other	1	1
Scientific (inc. Radiographer, Physicist)	54	54
Total Allied Health Professional (80%)	**211**	**229**
Total Allied Health Assistants (20%)	**53**	**57**
Clinical Support		
CSSD	25	29
Biomedical engineering	10	11
ICT	TBC	TBC
Operations Asst	11	12
Total Clinical Support	**46**	**51**
Non-Clinical Support		
Maintenance and Engineering	21	25
Domestic Services	41	47
Porterage	39	43
Food Services	30	37
Supply/Dock	6	7
Security	20	24
Total Non-Clinical Support	**157**	**183**
Grand Total	**2,265**	**2,671**

REPORT DETAILS

Title	Northside Hospital Redevelopment – Workforce Planning Method Paper
Prepared for	PWC and ACT Health
Prepared by	Capital Insight Pty Limited
File Name	124722 5.1 Northside Hospital Workforce Method Paper v1.1
Date	10/1/22

TSA
Advisory

New Northside Hospital

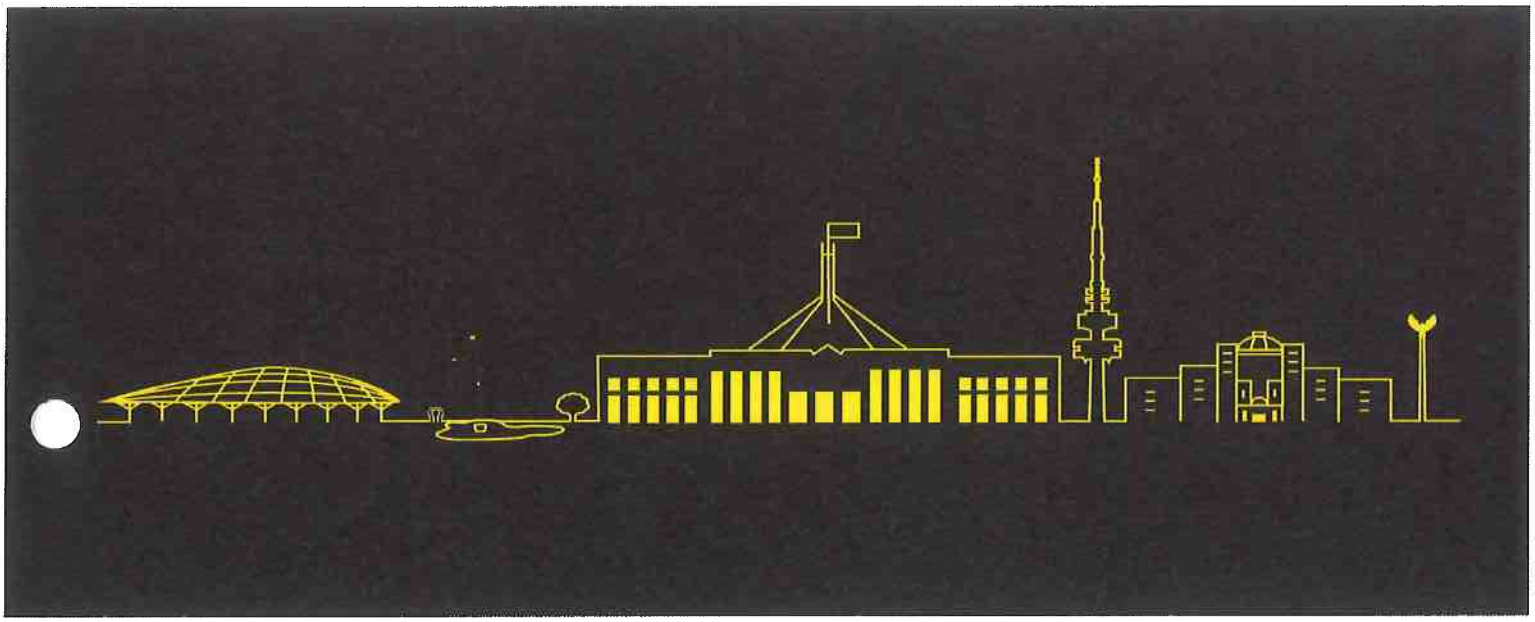
Strategic Functional Design Brief

Best for Project

MARCH 2023 \ **ISSUE NO. 3.0**

Version Control

Version	Description of Change	Issued to	Issued by	Date of Issue
1.0	Draft Framework		TSA	09 Feb 2023
2.0	Additional detail throughout		TSA	24 Feb 2023
3.0	Address comments		TSA	10 March 2023



Contents

Glossary

ACU	Australian Catholic University
AHIA	Australasian Health Infrastructure Alliance
AusHFG	Australian Health Facility Guidelines
ANU	Australian National University
CALD	Culturally and Linguistically Diverse
CARPS	Computerised Tasks Management System
CCU	Cardiac Care Unit
CE	Central Equipment
CHS	Canberra Health Services
CPHB	The Calvary Public Hospital
CS	Courier Service
CSP	Clinical Services Plan
ECT	Electro-convulsive Treatment
EFR	External Functional Relationships
eMM	electronic Medication Management system
ED	Emergency Department
ENT	Ear, Nose and Throat
EUG	Executive User Group
EWIS	Emergency Warning Intercommunication System
FFE	Furniture, Fittings and Equipment
GDM	Gestational Diabetes Mellitus
HDU	High Dependency Unit
HLSOA	High Level Schedule of Accommodation
HPU	Health Planning Unit
HSPU	Health Service Planning Unit
iEMR	integrated Electronic Medical Record
ICT	Information and Communications Technology
ICU	Intensive Care Unit
IPU	Inpatient Unit
MoC	Model of Care
MDT	Multidisciplinary Team
MPC	Major Projects Canberra
NCSM	Northside Clinical Services Model
NCSP	Northside Clinical Services Plan
NOK	Next of Kin
PACU	Post-Anaesthetic Care Unit
PPE	Personal Protective Equipment
PTS	Pneumatic Tube Systems
QEII	Tresillian Queen Elizabeth II Family Centre
RDS	Room Data Sheets
SAGO	Standard Adult General Observation
SFDB	Strategic Functional Design Brief
SoA	Schedule of Accommodation
SSD	Sterilising Services Department
SSU	Short Stay Unit
TCH	The Canberra Hospital
UCH	University of Canberra Hospital
WIP	Warden Communication Phones

1. Introduction

1.1 Purpose

The purpose of this Strategic Functional Design Brief (SFDB) is to provide ACT Health Directorate a statement of the health services to be provided at the proposed New Northside Hospital, in order to inform future stages of planning.

This SFDB also aims to outline the:

- Project objectives, scope, and services.
- Relevant clinical service plans (CSP).
- Points of care and schedule of accommodation (SOA).
- Key external functional relationships.
- Models of care.
- Overarching operational policies.

1.2 Project Objectives

The planning for health services on the Northside of the Australian Capital Territory (ACT) considers that Health services will be integrated across a range of health service providers and settings to deliver care. This includes the planning for a new Northside Hospital which will replace the facilities at Calvary Public Hospital in Bruce, which are approaching their end-of-life.

The new Northside Hospital presents an opportunity to meet the needs of Canberra's growing and ageing population, creating a modern health facility that delivers patient and community focused care in alignment with the Territory's wider health service network with the key objectives to provide:

- Greater capacity in the health care system and services in the north of the ACT
- Improved access to health services and specialised services
- Increased services to reduce the impact of chronic disease.
- Ability to embrace different settings for healthcare delivery.
- Services to meet growing demand and priority populations.
- A facility that is agile and flexible, with a whole-of-life focus.

1.3 Project Background

The Australian Capital Territory (ACT) Government provides public healthcare services across Canberra and surrounds. Recognising the need for further investment to meet the demands of Canberra's growing and ageing population, the ACT Government has committed to continue the planning and design work for a new northside hospital. This development will replace the facilities at Calvary Public Hospital in Bruce, which are approaching their end-of-life.

2. Overarching Service Framework

2.1 Introduction

The ACT Government is responsible for providing comprehensive healthcare services for the population of the ACT and tertiary referral services to southeast NSW.

There are four public hospitals in the ACT:

- The Canberra Hospital (TCH) located in Garran.
- The University of Canberra Hospital (UCH) located in Bruce.
- The Calvary Public Hospital (CPHB) located in Bruce.
- Tresillian Queen Elizabeth II (QEII).

There are three private hospitals in Canberra:

- The National Capital Private Hospital co-located with the CH in Garran.
- Calvary John James Hospital located in Deakin.
- Calvary Private Hospital collocated with the CPHB in Bruce.

Other ACT Health facilities include:

- Arcadia House
- Community Health Centres in Belconnen
- Dickson, Phillip
- Gungahlin Community Health Centre
- Karralika
- Tedd Noffs, Watson (North)
- Village Creek Centre
- Watson North Rehabilitation Facility
- Walk in Centres (WiC) - Belconnen, Tuggeranong, Inner North (Dickson), Weston and Gungahlin

The Territory's public health system is managed by two organisations:

- The ACT Health Directorate responsible for the administration and care of the Territory's health system; and
- Canberra Health Services (CHS) responsible for providing publicly owned acute, sub-acute, primary and community-based health services.

2.2 ACT Health Directorate

The ACT Health Directorate is accountable for the stewardship of the health system in the ACT by:

- Providing health policy, health capability and developing health strategies, including working with the Commonwealth on key health improvement initiatives.
- Setting the direction to ensure services meet community needs and expectations.
- Delivering improved health outcomes for the community.
- Ensuring that the health system is innovative, effective, and sustainable now and in the future.

The ACT Health Directorate is also responsible for:

- Managing demand for and supply of health services across the Territory.
- Improving the health and wellbeing of the ACT population by promoting healthy behaviours and lifestyles and through ongoing monitoring and evaluation of health programs and policy.
- Preventing, and providing a timely response to, potential public health incidents.
- Leading the health workforce and clinical training strategy, including building strong partnerships with key academic institutions and training providers.
- Commissioning and managing contracts for the provision of health services, including partnerships with community sector organisations, peak bodies, and advocacy groups.
- Monitoring and enforcement of public health regulations.
- Providing public health advice.

2.3 Canberra Health Services

CHS provides acute, sub-acute, primary, and community-based health services to a catchment of approximately 400,000 people.

CHS also services the surrounding Southern NSW region including the Bega Valley, Bombala, Cooma-Monaro, Eurobodalla, Goulburn, Mulwaree, Palerang, Queanbeyan, Snowy River, Upper Lachlan Shire and the Yass Valley.

CHS administers a range of publicly funded health facilities, programs and services including but not limited to:

- Collaboration with CPHB.
- TCH - 600-bed tertiary hospital providing trauma services and most major medical and surgical sub-specialty services.
- UCH Specialist Centre for Rehabilitation, Recovery and Research - a dedicated rehabilitation facility, with 140 inpatient beds, 75-day places and additional outpatient services.
- Walk-in Centre's - providing free treatment for minor illness and injury.
- Community Health Centres - providing a range of general and specialist health services to people of all ages.
- A range of community-based health services - including early childhood services, youth and women's health, dental health, mental health and alcohol and drug services.

2.4 Calvary Public Hospital

Calvary Public Private Hospital (CPHB) is a 250-bed teaching hospital which provides a 24/7 Emergency Department (ED), intensive and coronary care services (ICU and CCU), medical and surgical inpatient services, maternity services, voluntary inpatient mental health services (MHS), specialist outpatient clinics, Hospital in the Home (HiTH) service and

the Geriatric Rapid Acute Care Evaluation (GRACE) service.

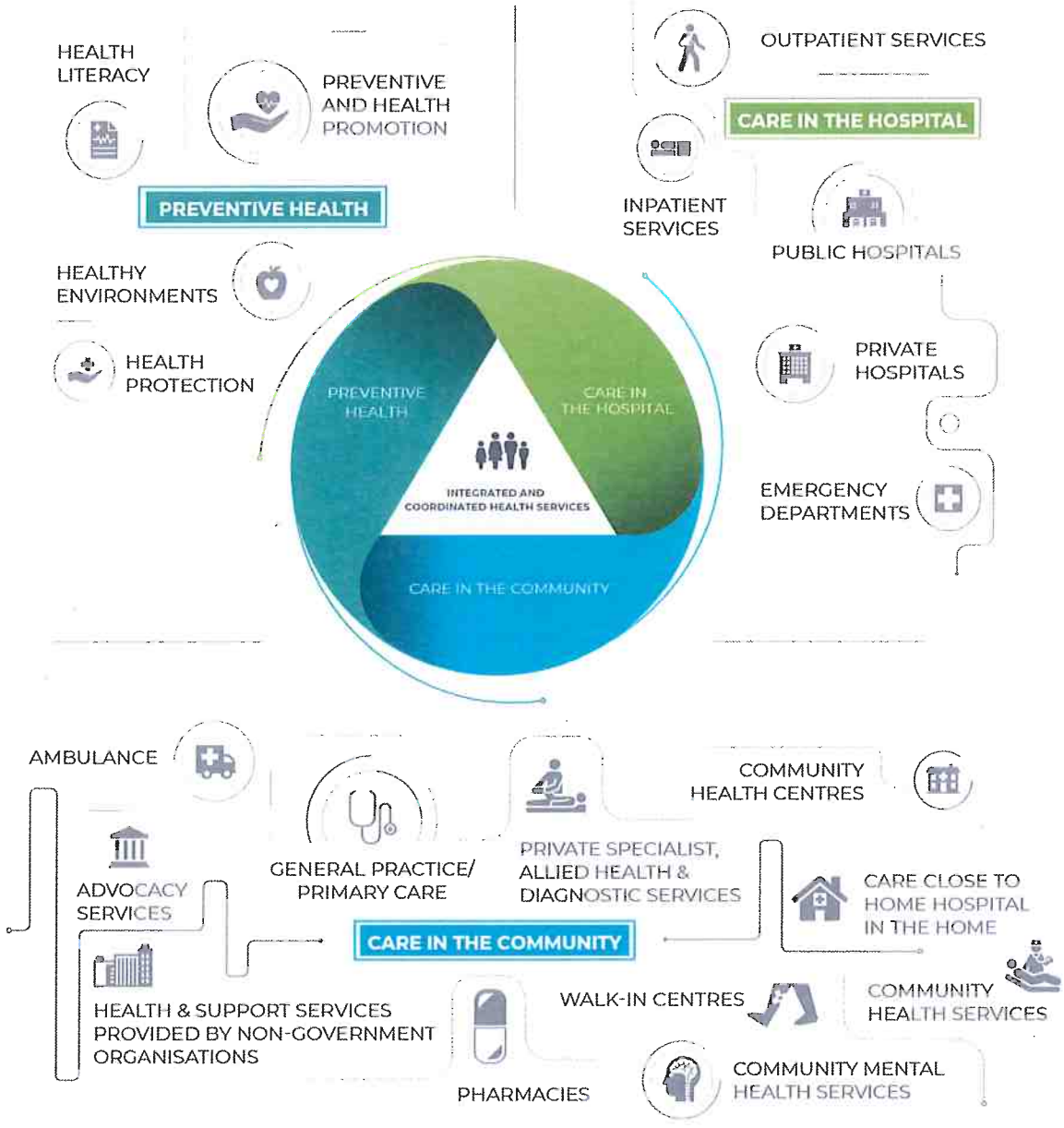
Calvary Health Care ACT (CHC) delivers services for CPHB and Calvary Private Hospital both of which are operated by The Little Company of Mary Health Care (LCMHC). These services are provided under the Calvary Network Agreement.

3. ACT Health Framework

3.1 Overview

The following graphic provides an overview of the ACT Public Health System. It depicts how the Public Health System will collaborate with the broader health system in the ACT to achieve the best outcome for our patients. The plan outlines how we will help improve access, integration, health outcomes and deliver a more patient-centred approach to health service.

Figure 1: Health Services provided in the ACT.

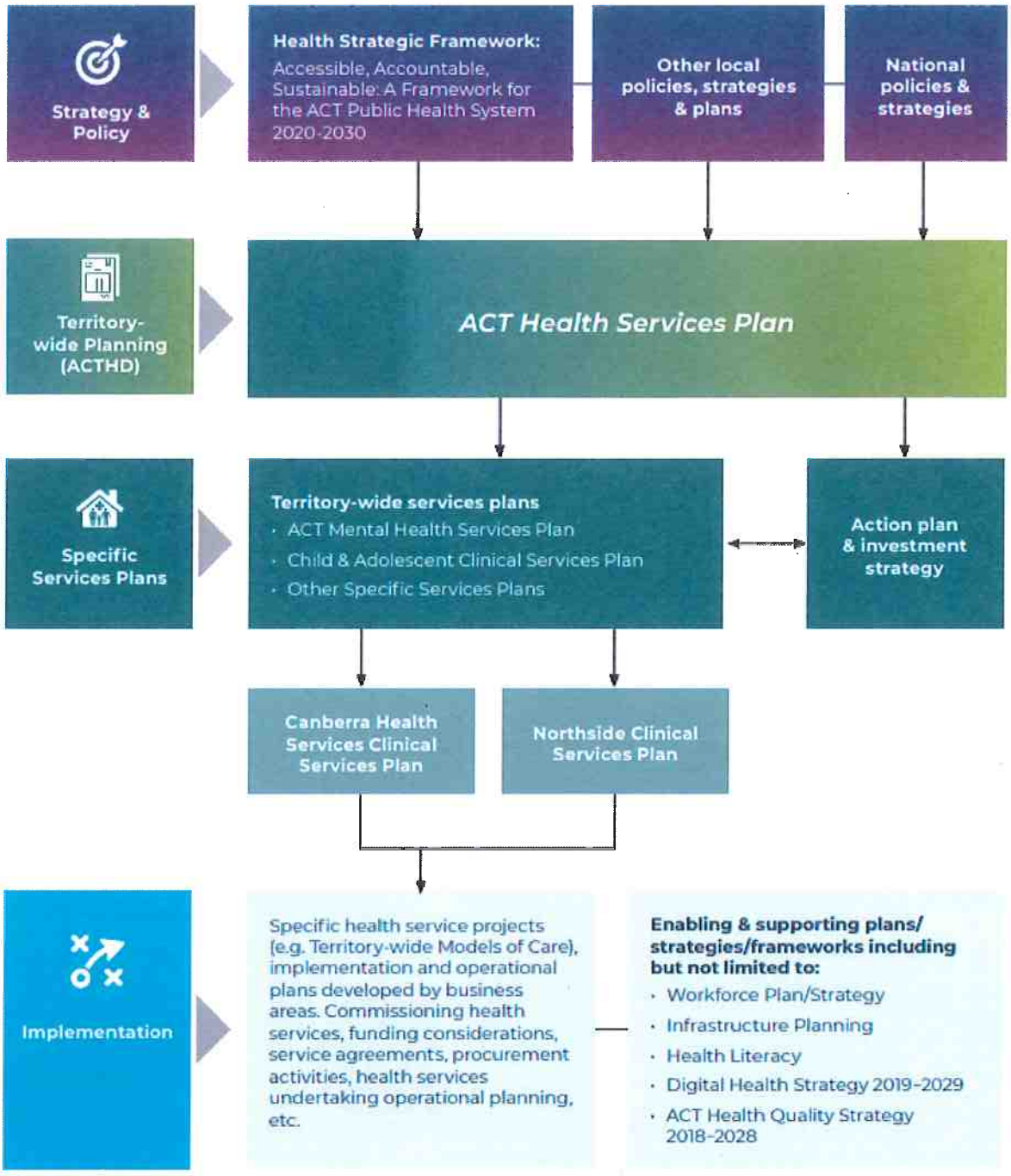


3.2 Hierarchy of Policies, Strategies and Plans[1]

The following graphic provides an overview of the health policies, strategies and plans underpinning this SFDB.

Figure 2: ACT Health Services Plan 2022 to 2030

[1] ACT Health Services Plan 2022 to 2030



3.3 ACT Health Services Plan 2022 to 2030

The ACT Health Services Plan 2022 to 2030[2] (the HSP) provides a roadmap for improving the way health services work together in the ACT and sets out the ACT Government's vision to support the community, those in surrounding regions and workforce. The following graphic outlines the future service directions and desired outcomes.

[2] https://www.health.act.gov.au/sites/default/files/2022-09/ACT%20Health%20Services%20Plan_2022%20to%202030.pdf

Figure 3: ACT Health Services Plan 2022 to 2030

The health landscape is changing, we have seen the world around us has change dramatically in recent years with COVID-19. The ACT health system continues to face similar pressures to others globally, including rising costs driven by increasing incidence of chronic diseases, demographic and social shifts, inequitable access to services, and gaps in workforce and infrastructure. This combined with, the advent of personalised care, technological and digital innovation, a focus on wellness and advances in medical research and models of care will impact the type of health care that is provided and the types of facilities that are built.

To meet the current and future challenges for system wide reform will require creative and innovative solutions to deliver future-focused and cutting-edge health services, that are adaptable and sustainable to provide the best health outcomes for our people. We need to focus our efforts where there is maximum influence in the project lifecycle and integrate good design principles, digital and non-capital solutions into planning and design.

All of this requires new ways of thinking, planning, delivering and maintaining our health facilities and services to meet Within the context of key challenges / opportunities such as impact of cost escalation, increasing expectations on net zero pathway and increasing requirement for capital and recurrent affordability.

3.4 ACT Health Services Plan 2021-2026

This ACT Health Services Plan 2021-2026[3] establishes the system wide priorities for service development and redesign of publicly provided and funded health services in the ACT. The Plan encompasses the range of public health services provided by:

- CHS.
- CPHB.
- Health protection and other services delivered through the ACT Health Directorate.
- Services provided by other organisations in the community.
- Public hospital services that ACT residents access interstate.

The service planning methodology is underpinned by the following principles:

- Planning for safe and quality services.
- Planning to improve population health outcomes and access.
- Planning that is person-centred.
- Planning for culturally appropriate services.
- Planning for sustainable services.

The following strategic priorities underpin the themes, strategies and actions identified in the Plan:

- **Aligning services with need**: To improve health outcomes at the population level, a focus is needed on both those population groups that are in greatest need and those services that are most in need of investment. It is important that reforms support better, more equitable access to care across the whole service spectrum from promotion and prevention services through to acute care.
- **A focus on prevention**: Preventing health issues from emerging (primary prevention), reducing impact or re-occurrence (secondary prevention) as well as managing the impact of ongoing health issues (tertiary prevention) are essential for supporting access to care and ensuring sustainability of our health system.

[3] https://www.health.act.gov.au/about-our-health-system/planning-future/act-health-services-plan-2022-2030

Therefore, it is vital that the focus is shifted from diagnosis and treatment to prevention of disease or worsening of a condition to support better health outcomes for individuals and the population.

- **Improving integration**: Fragmentation of health services, inequitable access, lack of continuity of care, governance issues and a 'silo' approach to health service provision are major barriers to improving population health outcomes. Improving integration of services both vertically (within their own service) and horizontally (with other services across the patient journey) supports better patient experiences and outcomes.
- **Embracing technology**: Advances in technology reshape everyday life and provide opportunities to improve all aspects of health care including clinical diagnosis and treatment, delivery of support services and communication with and between staff and patients. Improving the use of technology to enhance and complement care is an essential component of our commitment to ensuring access to the right care, in the right place, at the right time.

3.5 Points of Care

Clinical service planning is undertaken to ensure the organisation and its health services are arranged and delivered to meet the community's current and future needs and preferences, and to make the most effective use of available resources. It provides a clear direction for service development and resource investment across all parts of the health system and the health continuum.

The clinical service planning process looks at the future array and configuration of services required to meet population needs, including evidence-based models of care and service models and the role that public and private healthcare facilities and services are likely to play. It looks at the challenges that are faced in meeting the health needs of the ACT and surrounding regions due to a growing and ageing population, the rising burden of disease due to the increasing incidence, prevalence and complexity of chronic conditions and how this can be addressed through capital and non-capital solutions.

Throughout the clinical service planning process for the new Northside Hospital and the broader health services on the northside of Canberra, future 'points of care' to the planning horizon of 2041 have been drafted.

Figure 5: Northside Hospital – Points of Care

Northside Hospital					
	Reference Document>	Draft Northside Hospital Planning Nov 2022	Aecom 2020	Draft Northside Hospital Planning Nov 2022	
Care Type Beds	Clinical Unit	Current Funded - Operational Base	Infrastructure Existing Base Case	Updated Expanded Services (Self Sufficiency)	Updated Expanded Services (Self Sufficiency)
			2017/18	2030/31	2040/41
Multiday Beds	Medical Beds	99	133	174	218
	Inpatient Behavioural Unit			16	18
	Surgical Beds	24	32	78	100
	Cardiology Beds		6		
	Rehab & Aged Care	28	16	NPS	NPS
	Specialist Medical Beds		19		
	Intensive Care	8	8	12	15
	High Dependency Unit		8		
	Stroke Unit	4	4	7	9
	Cardiac Care Unit	6		8	10
		169	226	295	370
	Adult & OPMHIU	36	41	72	91
	Specialist ECT				
	Women's Beds	15	20	22	24
	Special Care Nursery	10	10	12	14
	Birthing Rooms	4	8	6	8
Total Beds		234	305	407	507
Day Stay Beds	Day Chemo		8	6	8
	Maternity Day Only			2	2
	Adult Day Surgery Beds	15	9	19	26
	Same Day Medical		2	0	0
	Renal Dialysis		0	0	0
Total Multiday Beds / m²		249	324	434	543
Emergency Department	Resus/Cubicles/Fast Track	61	36		
	Resus			6	7
	Fast Track			13	16
	Acute			36	45
	Behavioural / Mental Health			6	6
	Seclusion and De-escalation room			1	1
	Short Stay	19	19	19	24
Total Emergency Department m2		80	55	81	99
Operating Suite	Operating Room	5	7	11	12
	Procedure Room	2	0	4	5
Total Operating Suite m2		7	7	15	17
Ambulatory	Acute site Outpatients hub - Consultation Spaces		17	63	73
	Acute site Outpatients hub - Treatment Spaces			6	6
	Acute site Outpatients hub - Specialty Spaces			34	34
	Acute site Outpatients hub - Cardiac Treatment			5	5
	Virtual Care Spaces				
	Paediatric, adolescent and neonatology			8	8
	Ambulatory Procedures/Infusion Centre - Consult			4	4
	Ambulatory Procedures/Infusion Centre - Treat			27	27
	Ambulatory Procedures/Infusion Centre - Spec			7	7
	Allied Health				
Total Ambulatory Areas m²		17	17	154	164
Medical Imaging	Interventional Radiology			2	2
	Interventional Radiology -CT			1	1
	General X-ray		4	4	4
	MRI		1	2	2
	CT		3	2	2
	Ultrasound		4	6	6
	OPG			1	1
	Fluoroscopy - fixed		0	2	2
	Mammography		0		
Total Medical Imaging m²		12	12	20	20

3.6 Reference Documents

The Australasian Health Facility Guidelines (AusHFG) have been used to inform the development of this functional brief, including the schedule of accommodation.

The AusHFG are an initiative of the Australasian Health Infrastructure Alliance (AHIA). The AusHFG enable health planners and designers of health facilities throughout Australasia to use a common set of guidelines and specifications for the base elements of health facilities. Using the AusHFG as a basis to plan offers the benefits of Australasian best-practice approach to health facility planning by supporting the delivery of optimal patient care through provision of an appropriate physical environment.

The following Health Planning Unit (HPU) have been used when developing the functional brief and schedule of accommodation:

- HPU 131 - Mental health – Overarching Guideline
- HPU 135 - Older Peoples Acute Mental Health Inpatient Unit
- HPU 132 - Child and Adolescent Mental Health Unit
- HPU 540 - Paediatric Adolescent Unit
- HPU 390 - Neonatal Care Unit
- HPU 155 - Ambulatory Care and Community Health
- HPU 610 - Rehabilitation Inpatient Unit
- HPU 330 - Maternity Unit
- HPU 340 - Adult Acute Inpatient Unit
- HPU 260 – Cardiac Care Unit
- HPU 360 - Intensive Care Unit
- HPU 270 - Day Surgery/Procedure Unit
- HPU 520 - Operating Unit
- HPU 300 - Emergency Unit
- HPU 510 - Maternity Unit
- HPU 620 - Renal Dialysis unit
- HPU 140 - Allied Health/Therapy Unit
- HPU 430 - Front of House Unit
- HPU 490 - Hospital Mortuary / Autopsy Unit
- HPU 700 - Logistics / Back of House Services
- HPU 440 - Medical Imaging Unit
- HPU 550 - Pathology Unit
- HPU 560 - Pharmacy Unit

4. High Level Schedule of Accommodation

A high-level schedule of accommodation has been developed to inform the new Northside Hospital planning, using the points of care referenced in section 3.5.

Using the array and configuration of clinical services, incorporating innovation, benchmarking of similar facilities, AusHFG, unique drivers around workforce and sustainable healthcare models the high-level schedule of accommodation (HLSOA) has been built up.

The New Northside Hospital high-level schedule of accommodation provides:

- Meterage for each clinical, clinical support and non-clinical department and service.
- Benchmarked across like facilities that have been planned and constructed in NSW and interstate.
- Brought together with industry benchmarked travel and engineering allowances confirmed by Genus Advisory.

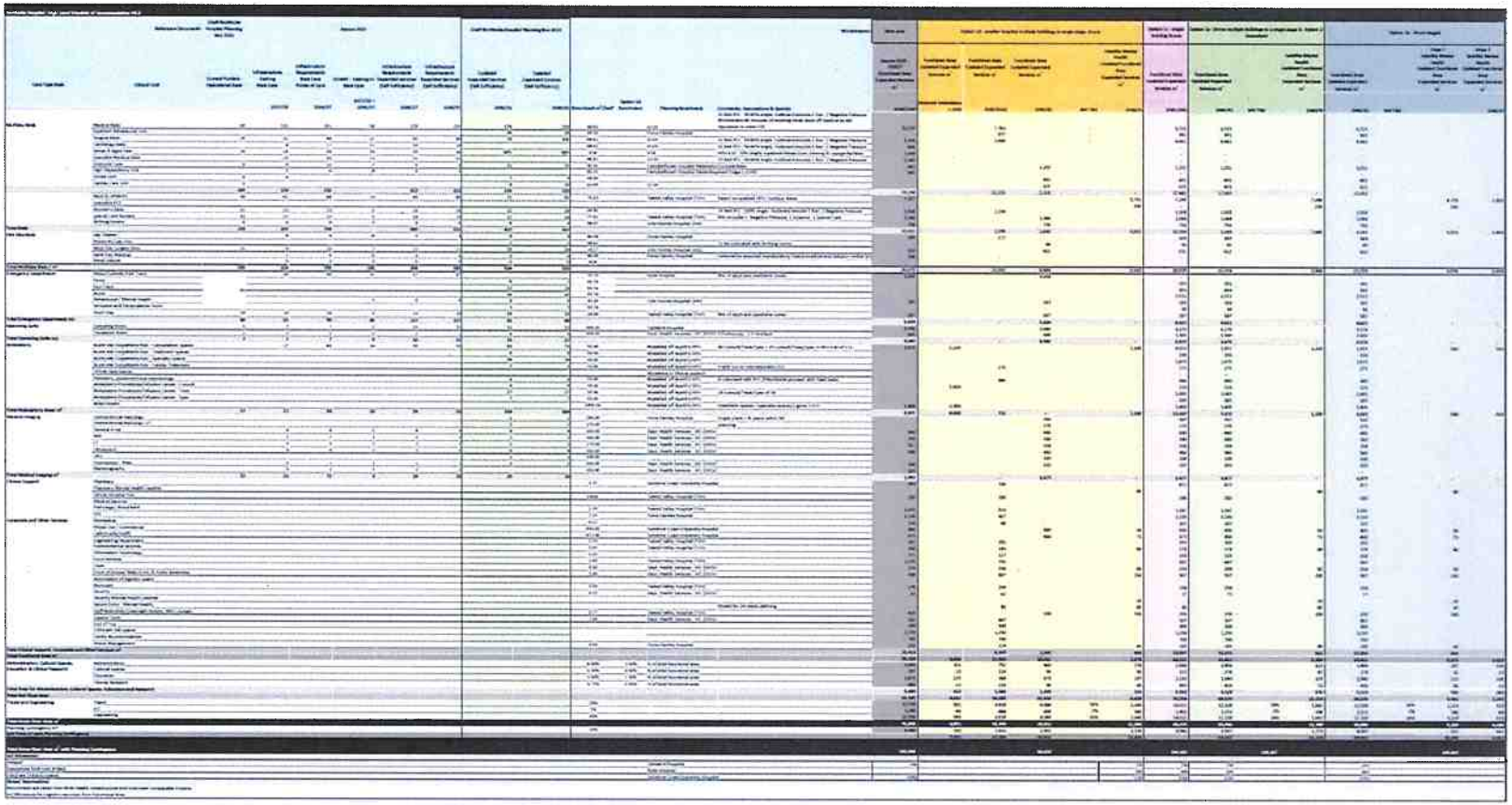
The following guidelines have informed the development of the HLSOA for the New Northside Hospital:

- AusHFG's
- Victorian Health and Human Service Building Authority.

The high-level schedule of accommodation allows planning to move forward with certainty and guide options planning.

The high-level schedule of accommodation is shown below in FIGURE 6 and APPENDIX A

Figure 6: High-level Schedule of Accommodation



5. Functional Relationships

5.1 Overview

External functional relationships describe the optimal location of the services within the overall hospital including the physical relationships required between different areas within the facility and flow and access requirements to support patient, staff, and public movements within the facility. These relationships are the building blocks of facility design. They will influence the shape, size and orientation of the building.

The external functional relationships are shown as a visual diagram that shows how services are to be grouped, arranged, and distributed throughout the site and its buildings. Architects and engineers use this information in the layout of the functional areas and departments within the facility and within the context of the site.

The relationships are defined as:

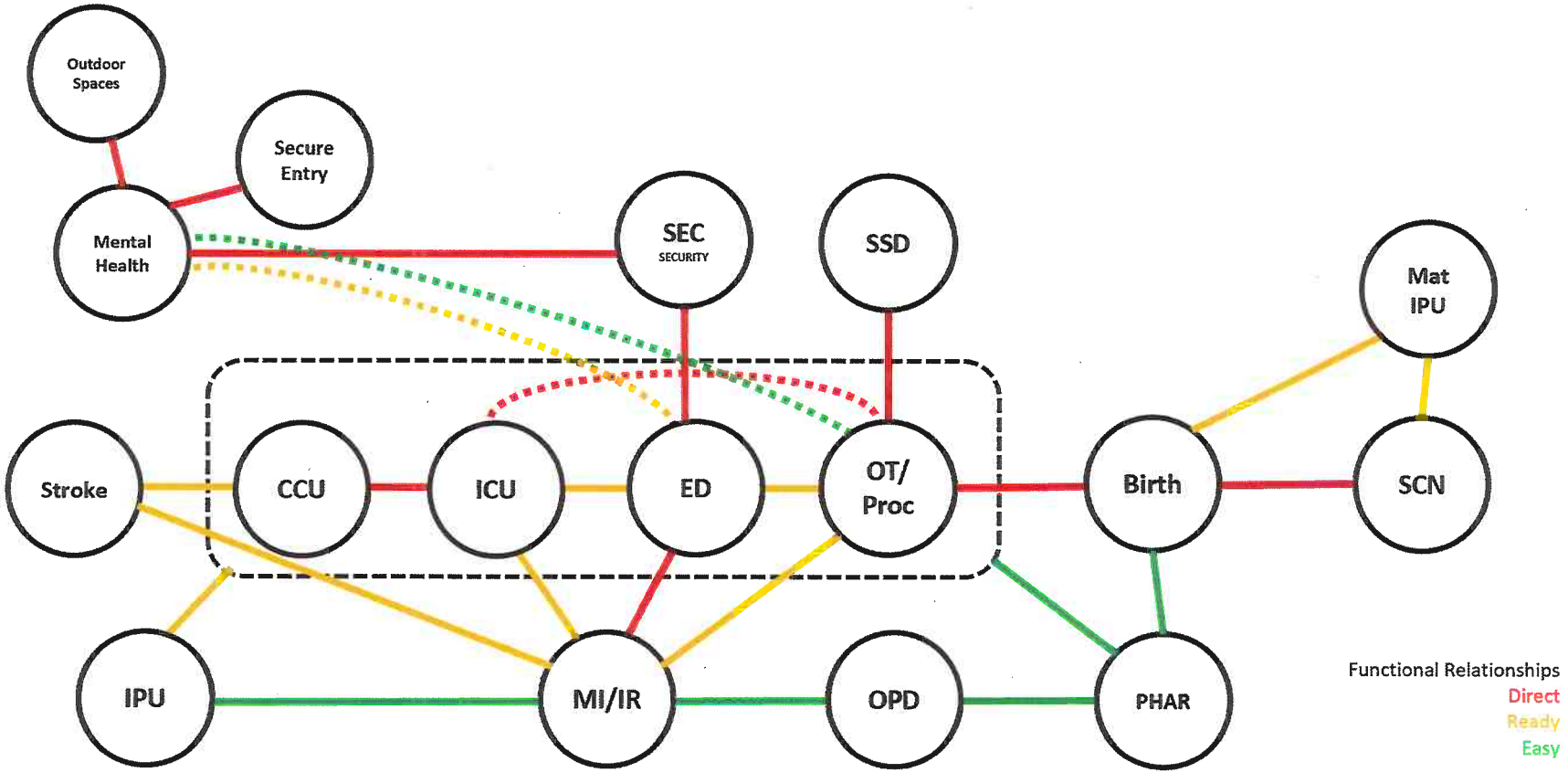
- **Direct access** - co-located, such as an ED and Medical Imaging.
- **Ready access** - proximal access via vertical or horizontal means (e.g., relationship between Surgical IPUs and the Operating Theatre Suite).
- **Easy access** - access on site such but relationship is not critical.

5.2 Process

The external functional relationships for the New Northside Hospital were developed over two meetings with the Northside Hospital Executive User Group (EUG) whose role is to provide high level advice on such matters. The group discussed and debated each clinical and clinical support service and their key relationships arriving at a documented external functional relationship diagram for key services. The diagram as shown in FIGURE 7 was verbally confirmed in EUG 3 as an accurate depiction of the required functional relationships.

5.3 External Relationships

Figure 7: The New Northside Hospital – Functional Relationships


Outdoor Spaces
Secure Entry
Mental Health
SEC
SECURITY
SSD
Mat IPU
Stroke
CCU
ICU
ED
OT/ Proc
Birth
SCN
IPU
MI/IR
OPD
PHAR
Functional Relationships
Direct
Ready
Easy

5.4 Internal Functional Relationships

Internal functional relationships identify how the various areas within each clinical, clinical support or support service area will work together i.e., whether a design works and meets the needs of the future operational or service model.

Internal functional relationships need a clear understanding on the future operational or service model, this will be worked through in the next stage of consultation.

6. Future Models of Care

6.1 Overview

When considering the future Model of Care for the New Northside Hospital there are two main reference documents that are under development, the Northside Clinical Services Model (NCSM) and the Northside Clinical Service Plan (NCSP), these documents when completed will seek to provide a high-level picture of the current and future service system.

These high-level service models are intended to:

- guide the development of evidence-based clinical models of care describing the right care, at the right time and in the right location across the continuum of care, and
- ensure health professionals 'view the same picture', work towards common goals and evaluate performance on an agreed basis.

The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital.

Noting that this is not intended to replicate engagement but just to describe services broadly for the technical team to continue planning and design.

6.2 Future Approach

When considering the approach to developing the future Models of Care, Clinical Redesign Methodology and Experience-Based Co-Design principles should be used to guide this process to deliver improved patient experiences with patient outcomes at the centre.

6.3 Models of Care

6.3.1 Adult Acute Inpatient Overnight Model of Care

*** The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital. Noting that this is not intended to replicate engagement but just to describe services broadly and generalized principles for the technical team to continue planning and design***

Aim, Objective, and Scope of Model

An acute Hospital will typically include an array of Adult Inpatients Units for the provision of a care environment that involves the patient, family, and carers in care planning, which will be of a high quality, evidenced based, culturally appropriate which delivers equitable and coordinated care as close to home as possible.

The adult inpatient units provide integrated care for medical, surgical, medical oncology and haematology, acute geriatric, palliative care, stroke, coronary care and geriatric evaluation and management sub specialities.

Key aspects of the model

Adult inpatient units typically have the following guiding principles:

- Be patient centred, enabling carers to be involved to support the patient journey.
- Implement evidenced based practice.
- Defined protocols for streaming patients into the most appropriate care environment / site.
- Defined protocols for optimal patient assessment and review times.
- Clearly defined care pathways for high-risk patients.
- Integrate the multidisciplinary care team into the acute setting to support early mobilisation, therapy, prevent avoidable deterioration, and support safe and early discharge.
- Information and communications technology linkages to other sites/ service providers.
- Integrated Electronic Medical Record (iEMR) enabled.
- Education and training opportunities.
- Respect the role that family members, friends, carers and advocates may play in the patient's decision making.

Medical Inpatient Unit

The Medical Inpatient unit model of care will deliver care to patients of all ages with a range of medical conditions and co-morbidities. The unit will be supported by a mix of rooms to allow for increased adaptability and flexibility in caring for a wide range of patient groups. All beds and treatment areas will be for multipurpose use. The

model of care for medical inpatients will be based around the patient cohort within each unit. There will be clear streaming of patients to the appropriate inpatient unit to provide specialist care.

Surgical Inpatient Unit

The Surgical Inpatient Unit model of care aims to decrease the length of stay in overnight hospital care by engaging patients and carers in the healthcare experience and when appropriate, transition them through the continuum of care to a range of multidisciplinary health services such as rehabilitation, ambulatory and outpatient clinics, community health services, and Hospital in the Home. The model of care for surgical inpatients will be based around the patient cohort within each unit. There will be clear streaming of patients to the appropriate inpatient unit to provide specialist care.

Inpatient Behavioural Unit

The Inpatient Behavioural Unit model of care will deliver care under a proposed shared care model under general medicine with geriatrician consult. Treatment will include promoting interaction between patients and staff and supporting therapeutic goals.

Cardiac Care Unit

The Cardiac Care Unit (CCU) model of care will deliver support, monitoring and treatment of highly dependent patients with medical or surgical cardiac conditions, which are life threatening or potentially life threatening. The service will provide assessment, treatment, and monitoring services for cardiac patients.

Stroke Unit

The Stroke Unit model of care and the Clinical Guidelines for Stroke Management by National Stroke Foundation will be an integral component of the Stroke Unit, providing nursing capabilities, and 24-hour telemetry for patients with suspected cardio-embolic strokes.

Multidisciplinary care will be provided with the commencement of early mobilisation and rehabilitation where appropriate. Functional requirements for the Stroke model of care include:

- Close observations of patients with high falls risk and higher medical acuity
- Direct access to a therapy space (which will be a shared space for all inpatients)

Operational Arrangements

CSCF level	Level 4
Governance	TBC
Hours of Operation	24hours / 7 days per week
Network	TBC – typically part of an integrated service network
Workforce	A specialist multidisciplinary team including medical, nursing, allied health professionals and support services.

Clinical Supports Services	Pathology Pharmacy Medical Imaging Pharmacy Other clinical support – TBC

6.3.2 Ambulatory Care Summary Model of Care

*** The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital. Noting that this is not intended to replicate engagement but just to describe services broadly and generalized principles for the technical team to continue planning and design***

Service Aim, Objective, and Scope of Model

Ambulatory Care services are required for the provision of a care environment that involves the patient, family, and carers in care planning, which will be of a high quality, evidenced based, culturally appropriate which delivers equitable and coordinated care as close to home as possible.

The aim of the Ambulatory Care Service is to provide comprehensive integrated holistic care to enhance the non-admitted patient journey and enhance operational efficiency while reducing reliance on hospital presentations. The services will promote wellness and provide opportunities for early diagnosis, treatment, and rehabilitation to patients, and meet the needs of people recovering from an acute illness or complex chronic disease or condition that requires a multidisciplinary and transdisciplinary approach to care.

Service Description

The Ambulatory Care service provides the setting for nursing, medical, allied health, students, clinical and non-clinical support, carers and administrative staff to work collaboratively to provide safe and efficient care for patients requiring ambulatory services. The Ambulatory Care Service will provide a range of services that focus on both enhancing the health and wellbeing of patients. Outpatient services will be an efficient service by clustering subspecialty clinics, specialty diagnostic and support services and allied health services into a co-located environment. It will also provide the basis for virtual clinics/telehealth service delivery. The design will be flexible to accommodate varied types of medical, nursing, and allied health care services and to ensure 'flow of traffic' is simplified and facilitates access to information technology.

Key Aspects of the Model

The Ambulatory Care Service will:

- Be patient centred, enabling carers to be involved to support the patient journey.
- Implement evidenced based practice.
- Empower and educate patients to better manage their chronic illness and maintain independence.
- Defined protocols for streaming patients into the most appropriate care environment / site.
- Defined protocols for optimal patient assessment and review times.

- Clearly defined care pathways for high-risk patients.
- Integrate the multidisciplinary care team into the acute setting to support early mobilisation, therapy, prevent avoidable deterioration, and support safe and early discharge.
- Information and communications technology linkages to other sites/ service providers.
- iEMR enabled.
- Education and training opportunities.
- Respect the role that family members, friends, carers and advocates may play in the patient's decision making.

Outpatient Consultation

Outpatient consultation will provide care that takes place as online consultation through virtual care technology, face to face consultation in the patient's home, or face to face consultation at the hospital. The Outpatient Consultation service will provide patients with a broad range of multidisciplinary and specialist consultation, assessment, and treatment services. The care environment will support the connection and patient flow across specialist service providers to enable collaboration and connected care. The services will include one-on-one and multidisciplinary group therapy either face-to-face and/or virtually. The services will be classified as non-admitted patient care.

Services may include:

- Maternity Outpatient Clinics
- Endocrinology and Diabetes Management
- Early Pregnancy Unit
- Cardiology
- Allied Health – service specific consultation and support for Speciality consultation services
- Dermatology
- Ophthalmology
- Rheumatology
- Immunology and Allergy Services
- Nephrology
- Gastroenterology
- Respiratory
- Chronic Pain

Operational Arrangements

CSCF level	Level 4
Governance	TBC

Hours of Operation	An Ambulatory Care Services will typically operate 0700 – 1900 hours, Monday to Saturday. The Ambulatory Care services may provide extended hours of service depending on clinical demand. After hours services may include health care options such as telephone and videoconference helplines to provide flexibility for patients.
Network	TBC Part of integrated service network
Workforce	A specialist multidisciplinary team including medical, nursing, allied health professionals and support services.
Clinical Supports Services	Pathology Pharmacy Medical Imaging Pharmacy Aboriginal Liaison Officer Healthcare Interpreter Services Sub-specialty consultation (on-site and through virtual) Other clinical support - TBC

6.3.3 Emergency Care Summary Model of Care

*** The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital. Noting that this is not intended to replicate engagement but just to describe services broadly and generalized principles for the technical team to continue planning and design***

6.3.4 Service Aim, Objective, and Scope of Model

Typical Emergency Department provides a care environment that involves the patient, family, and carers in care planning, which will be of a high quality, evidenced based, culturally appropriate which delivers equitable and coordinated care as close to home as possible.

Formal network linkages will be in place, to enable 24 access to support for service provision above the service capability including assistance to decision making, care planning and management of critically ill patients.

The Emergency Department (ED) will provide timely, accessible, and appropriate health services to both adult and paediatric patients with acute illness or injury. The ED will receive, triage, stabilise and provide acute health care to patients. This includes patients requiring resuscitation and those with emergent, urgent, semi-urgent and less-urgent conditions.

Service Description
The ED provides the setting for nursing, medical, allied health, students, peer workers, clinical and non-clinical support, carers, and administrative staff to work collaboratively to provide safe and efficient care for patients with emergency care needs.

Key Aspects of the Model
The ED will:

- Be patient centred, enabling carers to be involved to support the patient journey.
- Implement evidenced based practice.
- Defined protocols for streaming patients into the most appropriate care environment / site.
- Defined protocols for optimal patient assessment and review times.
- Clearly defined care pathways for high-risk patients.
- Integrate the multidisciplinary care team into the acute setting to support early mobilisation, therapy, prevent avoidable deterioration, and support safe and early discharge.
- Information and communications technology linkages to other sites/ service providers.
- iEMR enabled.
- Education and training opportunities.
- Respect the role that family members, friends, carers and advocates may play in the patient's decision making.

The range of integrated ED models of care that will be provided include:

Triage and Patient Registration
Triage is a fundamental component of ED management where a person's acuity and level of urgency for treatment is determined to stream the patient to the most appropriate care zone. First aid is provided if required.

Triage and Patient Registration will be situated in the same area for the focus of initial presentation and associated clerical/administrative functions.

Following Triage, the patient will be directed to the appropriate stream/sub wait area. Patients will be seen according to a combination of clinical urgency and their time of arrival.

Resuscitation

The most seriously ill or injured patients will be treated in the resuscitation area. Both paediatric and adult services will be provided. Both ambulant, and ambulance arrivals may require immediate triage to the resuscitation area.

Acute Care

The Acute Care Zone will manage patients that are acute, potentially unstable and complex in nature. This cohort of patients require a higher level of care, more frequent observations, haemodynamic monitoring, specialised interventions, and comprehensive management.

Fast Track

Fast Track will provide rapid assessment, care and observation for non-complex ambulant patients. A fast track stream will provide ready access from the waiting area and reception areas. The acute bays within the fast track area will facilitate a multidisciplinary review of the patient.

Paediatric Zone

Following triage, paediatric patients (child and adolescent) will be streamed where appropriate to the separate paediatric zone within the ED which will provide assessment, early treatment, fast track and acute care services. The exception will be paediatric patients requiring resuscitation on presentation, these patients will be managed in a resuscitation bay within the resuscitation areas designed for paediatric use. The Paediatric ED treatment spaces will be suitable for a 'treat and leave' type of care or 'resuscitate and transfer' to a high delineation hospital.

Safe Assessment Zone – Behavioural, Drug and Alcohol and Mental Health

This model typically provides assessment and management for patients with intoxication and suicidal ideation. Patients with disturbed and high-risk behaviours will be assessed within a separate de-escalation and seclusion area of the ED.

Allied Health Services

An integrated and multidisciplinary Allied Health rapid assessment, intervention and discharge team will be provided to prevent unnecessary admission and fast track clinical handover from the ED. The key services may include pharmacy, physiotherapy and occupational therapy. Access to other Allied Health disciplines will be required on an ad hoc basis, for example dietitian, speech pathology (beneficial for hospital avoidance dysphagia), Podiatry, with potential to extend hours into the future.

Operational Arrangements

CSCF level	Level 4
Governance	TBC
Hours of Operation	24hours / 7 days per week
Network	TBC Part of integrated service network
Workforce	A specialist multidisciplinary team including medical, nursing, allied health professionals and support services.
Clinical Supports Services	Pathology Pharmacy Medical Imaging

Pharmacy
Aboriginal Liaison Officer
Security
Other clinical support - TBC

6.3.5 Intensive Care Unit Surgery Summary Model of Care

*** The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital. Noting that this is not intended to replicate engagement but just to describe services broadly and generalized principles for the technical team to continue planning and design***

Service Aim, Objective, and Scope of Model
An Adult Intensive Care Unit (ICU) provides a care environment that involves the patient, family, and carers in care planning, which will be of a high quality, evidenced based, culturally appropriate which delivers equitable and coordinated care as close to home as possible.

The aim of the Intensive Care Unit is to create a sustainable, patient centric, efficient, and effective Intensive Care environment for the complex critically ill patient. Involving the patient, family and carers in care planning and delivery, and that is high quality, evidenced based and culturally appropriate, and delivers equitable and accessible care and to provide an appropriate level of support for Hospital services.

Service Description
The Intensive Care Unit will provide an appropriate level of support for other Hospital services such as emergency, operating theatres, and medical specialties. The unit will receive patients from a variety of sources including directly from the community, via ambulance services and emergency departments, and as internal and external referrals and transfers.

Intensive Care is an essential component of the acute hospital system. Safe, effective, and timely care of the critically and acutely unwell patient improves survival and outcomes.

Key Aspects of the Model
The Intensive Care Unit will:

- Be patient centred, enabling carers to be involved to support the patient journey.
- Implement evidenced based practice.
- Defined protocols for streaming patients into the most appropriate care environment / site.
- Defined protocols for optimal patient assessment and review times.
- Clearly defined care pathways for high-risk patients utilising advanced monitoring and treatment modalities.
- Information and communications technology linkages to other sites/ service providers.
- iEMR enabled.
- Education and training opportunities.

- Formal process will be established that support regular communication within the network between Level 4 and 5/6 ICU to discuss the flow of patients requiring intensive care within the Territory, including the appropriate location of at-risk patients.
- Respect the role that family members, friends, carers and advocates may play in the patient's decision making.

Intensive Care Unit Model of Care

The ICU Model of Care will be a specially staffed and equipped, separate and self-contained area of the hospital dedicated to the management and monitoring of patients with life-threatening conditions, injuries, and complications. The ICU will provide special expertise and facilitates for support of vital functions through the skills of medical, nursing, allied health and other personnel experienced in the management of these problems.

The ICU will be capable of providing immediate resuscitation and short-term cardiorespiratory support for critically ill patients. Patient care in the ICU will be provided by a multidisciplinary team, led by an intensive care specialist. The admission, discharge and referral of the patient is under the governance of the Intensivist in collaboration with the referring team.

The ICU will be supported through functional links with a higher level ICU, in a networked approach to service delivery. Enabling timely access via telehealth/remote monitoring to senior critical care clinical advice. Patients requiring more complex care are transferred to the level 6 service. This includes patients who require complex multi-system life support, extended periods of mechanical ventilation, renal replacement therapy, or invasive cardiovascular monitoring for an indefinite period.

Operational Arrangements

CSCF level	Level 4
Governance	TBC
Hours of Operation	The Intensive Care Unit will operate 24 hours a day, 7 days a week
Network	TBC
Workforce	A specialist multidisciplinary team including medical, surgical, nursing, allied health professionals and support services.
Clinical Supports Services	Pathology Pharmacy Medical Imaging Pharmacy Biomedical Engineering Other clinical support - TBC

6.4 Mental Health Model of Care

*** The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked*

*MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital. Noting that this is not intended to replicate engagement but just to describe services broadly and generalized principles for the technical team to continue planning and design***

Service Aim, Objective, and Scope of Model

Adult Mental Health Units provide a care environment that involves the patient, family, and carers in care planning, which will be of a high quality, evidenced based, culturally appropriate which delivers equitable and coordinated care as close to home as possible.

The aim of the Mental Health Adult Inpatient Unit (IPU) is to provide safe, recovery-oriented, welcoming and engaging environment, in the least restrictive environment possible. The service aims to provide information in a way that patients can understand and involve patient, families and carers in decision making.

Service Description

The Mental Health Adult Inpatient Unit will provide care to admitted patients, usually on a short-to medium-term and intermittent basis.

The Mental Health Service provides the setting for nursing, medical, allied health, students, peer workers, clinical and non-clinical support, patients, carers and administrative staff to work collaboratively to provide safe and efficient care for patients with reoccurring or ongoing mental illness. The Adult Mental Health IPU will provide short term inpatient care, inclusive of assessment and treatment services for adults to the age of 65, who experience severe or brief episodes of mental illness and cannot be adequately treated in a less restrictive environment. The unit requires the capacity to manage and contain high acuity admission, as well as providing a range of therapeutic programmes and interventions.

The Mental Health Model of Care also includes de-escalation and seclusion areas within the Mental Health Adult Inpatient Unit and ED. The Mental Health Adult IPU will provide gazetted acute adult mental health services and a neurostimulation suite for electro-convulsive treatment (ECT) and repetitive Transcranial Magnetic Stimulation (rTMS) treatment to support same-day and non-admitted services.

Child and Adolescent Mental Health Services will continue at Canberra Hospital.

Key Aspects of the Model

The Mental Health Adult Inpatient Unit will:

- Be patient centred, enabling carers to be involved to support the patient journey.
- Implement evidenced based practice.
- Provide inpatient services to voluntary and involuntary patients.
- Provision of direct admission promoting ED avoidance.
- Structured as an integrated mental health service (across inpatient and community mental health).
- Group program – therapeutic environment / activities.
- Culturally appropriate for culturally and linguistically diverse (CALD) communities.
- Defined protocols for streaming patients into the most appropriate care environment / site.

- Defined protocols for optimal patient assessment and review times.
- Clearly defined care pathways for high-risk patients.
- Integrate the multidisciplinary care team into the acute setting to support early mobilisation, therapy, prevent avoidable deterioration, and support safe and early discharge.
- Information and communications technology linkages to other sites/ service providers.
- iEMR enabled.
- Education and training opportunities.
- Respect the role that family members, friends, carers and advocates may play in the patient's decision making.

Mental Health Adult Acute Inpatient Unit

The Mental Health Adult Inpatient Unit will provide a safe clinical and therapeutic environment for people who may be characterised as complex, difficult to treat and are of serious ongoing risk to themselves or others. The care and treatment provided will be based on assessment need and mental health recovery principles. The Mental Health Adult IPU will manage clinical risk and implement behaviour management interventions while supporting individuals and their families/carers across the broad continuum of care, including facilitating a smooth transition of care to other teams/services.

The service is intended to focus on people with complex needs who are unable to be adequately treated in less restrictive settings due to their mental illness and associated issues of behaviour and risk. This can include:

- Severely disorganised behaviour leading to difficulty in managing the activities of daily living.
- Poor impulse control and judgement.
- Ongoing risk of aggression and violence.
- Serious risk of self-harm and/or harm to others.

Operational Arrangements

CSCF level	Level 4
Governance	TBC
Hours of Operation	24hours / 7 days per week
Network	TBC
Workforce	A specialist multidisciplinary team including medical, nursing, allied health professionals, lived experience workers, carer support and other support services
Clinical Supports Services	Pathology Pharmacy Medical Imaging Pharmacy Aboriginal Liaison Officer Security Other clinical support - TBC

6.4.1 Perioperative Suite and Day Surgery Summary Model of Care

*** The planning for the New Northside Hospital has not advanced to the level of detailed service level models of care / model of service engagement and documentation. Therefore, this strategic functional brief will note a benchmarked MoC for the major departments/services that aligns to the clinical capability of the New Northside Hospital. Noting that this is not intended to replicate engagement but just to describe services broadly and generalized principles for the technical team to continue planning and design***

Service Aim, Objective, and Scope of Model

Perioperative Suite provides a care environment that involves the patient, family, and carers in care planning, which will be of a high quality, evidenced based, culturally appropriate which delivers equitable and coordinated care as close to home as possible. The aim of the Perioperative Service is to treat patients in clinically appropriate timeframes while optimising patient outcomes and deliver elective services through a contemporary and efficient service model.

Service Description

The Perioperative Service will provide surgical and procedural services for children and adults, including anaesthetic services, surgical services, operating rooms, interventional / hybrid suites, endoscopy services and post anaesthetic care. The Perioperative Services will enable clinically appropriate surgical and procedural services to be provided locally, support the delivery of new technologies and contemporary models of care.

Key Aspects of the Model

The Perioperative Suite will:

- Be patient centred, enabling carers to be involved to support the patient journey.
- Implement evidenced based practice.
- Defined protocols for streaming patients into the most appropriate care environment / site.
- Defined protocols for optimal patient assessment and review times.
- Clearly defined care pathways for high-risk patients.
- Information and communications technology linkages to other sites/ service providers.
- iEMR enabled.
- Education and training opportunities.
- Respect the role that family members, friends, carers and advocates may play in the patient's decision making.

Sub-specialties typical of this level facility are noted below:

- General Surgery (day and overnight)
- Orthopaedics
- Ophthalmology
- Gynaecology
- Surgical Oncology (diagnostic and curative)

- Urology
- Plastics

The Perioperative Services Model of Care will be designed to cater for the needs of the community it serves. It will include the following key functional areas:

- Pre-admission clinic
- Operating Theatre Bookings
- Same Day Surgical Admission and Discharge
- Operating Theatre Suite
- Intervention / Imaging
- Endoscopy Unit
- Anaesthetic Services
- Post Anaesthetic Care Unit (PACU)
- Sterilising Services Department (SSD)

Operational Arrangements

CSCF level	Level 4
Governance	TBC
Hours of Operation	TBC
Network	TBC
Workforce	A specialist multidisciplinary team including medical, surgical, nursing, allied health professionals and support services.
Clinical Supports Services	Pathology Pharmacy Medical Imaging Pharmacy Biomedical Engineering Other clinical support - TBC

7. Overarching Policies and Procedures

Throughout the following section specific operating policies and procedures are listed, these will require further development through the next stages of the project.

Where possible content has been brought in from benchmark facilities as a starting point with which to expand on. Note content is not intended to replicate engagement but rather assist in framing engagement.

Operational policies have a major impact upon the planning, design, capital, and recurrent costs of health facilities. It is necessary to demonstrate that the capital and recurrent cost implications of the proposed operational policies have been fully considered. Therefore, documenting the future policies is an important step in the planning of capital infrastructure.

7.1 Clinical Services

Item	Operational Principles
	Northside Hospital
Operating Hours	The ED, Inpatient and Intensive Care will operate 24 hours a day, 7 days per week. Perioperative Unit will operate 24 hours a day, 7 days per week. Operating hours will be confirmed in consultation for all other services.
	Northside visiting hours will be detailed in the next stage of planning. Access to the hospital outside visiting hours will be via the Emergency Department.
Access to sites during business hours	The overarching principle is to minimise entry points into the hospital. Staff access • The design must provide for staff to access the hospital from public entrances and via dedicated staff access points controlled by the security team. • Parking for staff must be conveniently located to enable safe passage into the facility both during and after hours. • The design must provide for agency/casual and cleaning staff to access the hospital during and after hours via the Main Entry. • Loading dock access for Support Services (supply, linen, cleaning, pharmacy, pathology, clinical engineering, property management and maintenance) • Courier and other small deliveries will be via the main entrance or loading dock. Public access:

Item	Operational Principles
	Northside Hospital
	• Public access will be provided via the ED for emergency presentation. • Inpatient Units, Maternity Services and Ambulatory Services will be accessed via Main Entry. • Family and visitors will be welcomed into the Intensive Care Unit (ICU) via a controlled access point via the ICU main reception area. • Security will be responsible for managing access to the building.
After-hours Access	The ED public will be access controlled after business hours
	A 'staff only' entrance will be via ED or dedicated swipe security access.
Admissions	Patients may be admitted via the Emergency Department, Maternity Unit, transferred from other health services, transferred back from other health services, or admitted after medical officer consultation in rooms or clinics as elective or urgent admissions. Detailed policies/procedures/guidelines to be developed.
Discharges and Patient Transfer:	Detailed policies/procedures/guidelines to be developed.
Allied Health	Detailed policies/procedures/guidelines to be developed.
Infection Control	Infection Control policies and guidelines to be included. General • Staff, patients and visitors will be encouraged to maintain hand hygiene throughout the provision of hand basins, soap dispensers and sterilising hand gel. Single use disposal items will be used throughout the hospital. • The design of the hospital should take into account the need to ensure a high level of infection control in all aspects of practice. • Clean up areas will be required to clean patient equipment with space to hold dirty equipment. • Allow for appropriate space between patients in shared rooms to assist and maintain appropriate infection prevention and control. Isolation Rooms The use of isolation rooms will be provided throughout both facilities to meet a range of isolation requirements: • **Class S** (standard pressure): Class S rooms are for isolating patients capable of transmitting infection by contact or droplet routes.

Item	Operational Principles Northside Hospital
	• **Class N** (negative pressure): Class N rooms are used for isolating patients. The rooms are supported by a dedicated ensuite and anteroom. Use of Class N rooms is associated with the prevention of transmitting infection by airborne droplet nuclei.
Medical Imaging	Operational guidelines and policies to be included. The imaging department will provide on demand time urgent medical imaging, with rapid acquisition, transfer and reporting of images. • Located adjacent to the Emergency Department for timely assessment and treatment of patients. • Radiology staff • PACS system will manage all picture and information management requirements as well as provide access for on-site and off-site viewing and reporting. • Access to cardiac CT, MRI and ultrasound.
Pathology	Operational guidelines and policies to be include. Hours of Operation to be confirmed in the next stage of planning. General • Pathology requests will be computerised with authorised access to verified results. Point of Care Testing (PoCT) will be provided in selected locations within the ED supported by Pathology Services and a pneumatic tube system to deliver samples to pathology and pharmacy. • Transport of specimens will be internal (to laboratories) and external (between facilities). • Pneumatic Tube Systems (PTS) will be used to transport specimens to and from the Pathology Unit. • Pathology specimen collection to inpatient units via pathology collection staff. • Outpatients service via specimen collection chairs. • Pathology and Radiology results will be reported electronically.
Anaesthetic Services	Hours of Operation to be confirmed in the next stage of planning. General • One anaesthetic room per operating theatre • access to ultrasound. • access to radiographer.

Item	Operational Principles Northside Hospital
	• access to operating theatre staff. • access to registered medical specialists with credentials in anaesthetics where emergency services provided. • Anaesthetist will be responsible for on the day of surgery/procedure final assessment for fitness for surgery/procedure. • Recovery from anaesthesia to take place under supervision in a dedicated area close to where anaesthesia or sedation has been administered. • PACU is part of the operating suite with easy access for management of emergencies. • Electronic record-keeping available.
Emergency Department (ED)	The unit will operate in accordance with Australian Council on Health Care Standards. The unit will adhere to the relevant design and space standards outlined in the *Australasian Health Facility Guidelines* • *(AusHFG) Part B – Health Facility Briefing and Planning* • AusHFG 300 Emergency Unit • It is assumed the Emergency Department service operates 24 hours a day, 7 days a week.
Intensive Care Unit	The ICU will operate in accordance with Australian Council on Health Care Standards. The unit will adhere to the relevant design and space standards outlined in the *Australasian Health Facility Guidelines* • AusHFG 360 Intensive Care-General and 540 Paediatric/Adolescent Unit
Medication Management and Pharmacy Services	Medications will be managed and administered in accordance with operational policies: Hours of Operation to be confirmed in the next stage of planning. ○
Mental Health	The unit will adhere to the relevant design and space standards outlined in the *Australasian Health Facility Guidelines (AusHFG) Part B – Health Facility Briefing and Planning* • AUSHFG HPU 131 Mental Health – Overarching Guidelines.
Perioperative Services	The service will adhere to the relevant design and space standards outlined in the *Australasian Health Facility Guidelines (AusHFG) Part B – Health Facility Briefing and Planning* • AusHFG 0130 – Admissions Unit • AusHFG 0270 – Day Surgery Procedure Unit

Item	Operational Principles
	Northside Hospital
	• AusHFG 0520 – Operating Unit • AusHFG 0190 - Sterilizing Services Unit Operational Policies: • ACORN Standards for Perioperative Nursing in Australia, The Australian College of Perioperative Nurses • ANZCA PS15: Recommendations for the Perioperative Care of Patients Selected for Day Care Surgery • ANZCA: Perioperative Care Framework • ACI GL2018_004 – The Perioperative Toolkit Hours of Operation to be confirmed in the next stage of planning.

7.2 Non-Clinical Services

A number of non-clinical principles and policies will require documenting, including but not limited to:

- Administration (Clerical)
- Access and Wayfinding
- Biomedical Engineering
- Cleaning
- Clinical Records Management
- Death and dying
- Environmental Services
- Emergency Management
- Fire Safety
- Food Services
- Hotel Services
- ICT
- Infection Prevention and Control
- Internal Mail
- Interpreter Services
- Linen

- Loading Dock
- Management and Storage of Gases Medical Gases
- Materials Movement
- Mortuary
- Parking (staff, visitors)
- Patient Amenities
- Patient Safety and Quality
- Pneumatic Tube System
- Reception
- Security
- Spiritual Support and Pastoral Care
- Staff Amenities
- Stores
- Supply Services
- Transport Services (Patients, staff, visitors)
- Visitor Amenities

8. Appendices

Appendix A – Schedule of Accommodation

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