Port Macquarie Base Hospital Clinical Services Plan - Final

Port Macquarie Base Hospital, MNCLHD

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Prepared By:	J. Sheehan, O. Pagan, L. Posselt	
Reviewed By:	K. Favaloro	
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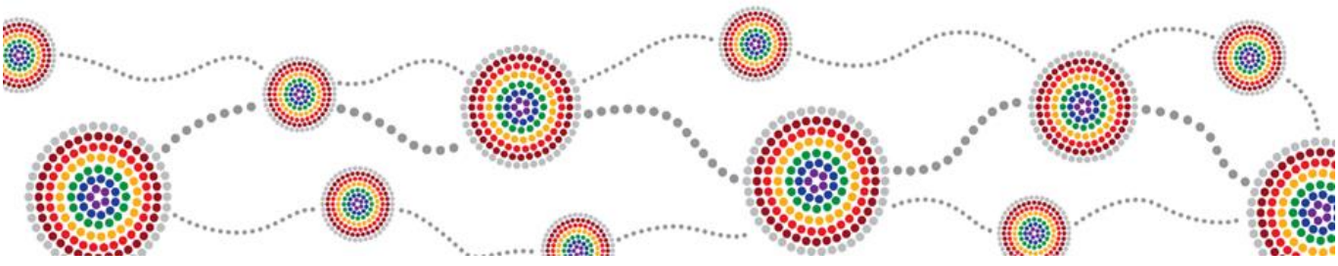


Acknowledgement of Country

We acknowledge that the Birpai people are the Traditional Custodians of the Port Macquarie Hastings land. We acknowledge the Traditional Custodians' living culture, their connection to country and their contribution to the life of this region. We pay our respects to Elders past and present and emerging leaders and welcome all Aboriginal people who may read this document.

Throughout this document when we use the term Aboriginal or First Nation people, we are referring to Aboriginal Australians and Torres Strait Islander People.

1. Executive Summary

Mid North Coast Local Health District (MNCLHD) has undertaken the development of a Clinical Services Plan, Master Plan and Capital Investment Proposal for the Port Macquarie Base Hospital (PMBH) campus. These documents have been prepared with advice from clinicians, management and external stakeholders, who have assisted in the identification of service directions and capacity requirements that will enable the facility to respond to current and future service demand.

The planning horizon for the Clinical Services Plan is to 2031, however activity and infrastructure projections are calculated to 2036 for Master Planning purposes.

PMBH will continue to function as a Group B Major, rural referral facility providing a range of services to residents of the Port Macquarie-Hastings Local Government Area (LGA), the Hastings Macleay Clinical Network (HMCN) and the broader MNCLHD. Services are, and will continue to be, provided from PMBH and Port Macquarie Community Health Centre, which is located at Moreton Street, 3.5kms from PMBH.

The Port Macquarie-Hastings LGA population is growing. The population was 86,769 people at the census conducted in August 2021, with an annual growth rate (AGR) of 2.02% over the previous five years since the 2016 census. This growth is higher than the NSW annual growth rate of 1.53% over this same period.

In terms of socioeconomic status, the Port Macquarie-Hastings LGA population is ranked within the top 50% of regions across NSW (i.e., more advantaged than the average across NSW) and had a higher rate of unemployment compared to the population of NSW (5.6% v 5.0%). In comparison to NSW, the LGA population has:

- higher proportion of Aboriginal and/or Torres Strait Islander people
- higher proportion of persons with a profound or severe disability
- higher proportion of persons with mental and behavioural problems
- lower rates of potentially preventable admissions
- higher rates of colorectal, melanoma, leukaemia, breast and prostate cancer
- higher rates of high blood pressure, high or very high psychological distress, obsess people, current smokers and alcohol intake
- higher proportion of children assessed as developmentally vulnerable and obese children.

Master planning is required to identify the most optimal strategy and framework for redeveloping the existing PMBH Building (originally built in 1994), which is nearing the end of its useful life and has current mechanical and engineering defects already identified and requiring immediate remediation. The Master Plan will be underpinned by this Clinical Services Plan.

This Clinical Services Plan:

- Includes detailed projections of service volumes across all admitted and non-admitted services and clinical support services required to meet future activity demand to 2031 and infrastructure estimates to 2035-36
- Describes the range and level of services as determined as priorities by the Technical Planning Paper prepared for the PMBH Steering Committee, and details current and future models of care at a high level
- Defines the detailed scope and scale of infrastructure requirements across all services with consideration of operating models (i.e., staffing ratios) and capital staging options.

Notwithstanding the fact that PMBH will need further capital investment in the future to support service expansion to meet growth in demand over the next 10 to 15 years. Local consultation highlighted key priorities for service development if capital funding became available. These priorities include:

- Addressing major issues with the PMBH 1994 building, including leaks, mould, poor functionality, insufficient boiler capacity and lack of space.
- Maternity services have been identified as the highest priority clinical service area for investment. The service is implementing a continuity of care model and have been dealing with increasing numbers of births. Consequently, the current space has a very poor layout and lack of space for a contemporary maternity and birthing service and is also not culturally appropriate for Aboriginal women when birthing. Currently located in a section of the hospital requiring significant maintenance and repair, the layout is very inefficient with insufficient space for birthing, and inadequate room for antenatal clinics and early pregnancy assessment care.
- Emergency Department (ED) presentations have increased significantly - higher than originally projected. The service has already exceeded planned capacity previously built when the ED was expanded in 2014. While there are some strategies that can be introduced to assist with patient flow, the current ED at PMBH has some significant capacity, design and layout issues that impact functionality and timely patient care.
- There is no dedicated medical ambulatory care space and a very limited outpatient space
- WIFI / mobile reception / connectivity is a major issue across the campus and within the hospital ward areas, hindering many aspects of service provision, including virtual care.

This Clinical Services Plan was undertaken with the knowledge that there is no capital investment forthcoming, and in the environment of stressed health services and health staff involved in delivering care during a worldwide pandemic. Across Australia, hospital services are operating at escalation levels in response to red, amber and black alerts. That is, nationally, health services have been under severe pressure, and even at the completion of the writing of this Clinical Services Plan (July 2022), PMBH had been on and off escalation consistently and is expected to continue that same pattern for some months into the future.

Moving forward, future strategies and planning will be undertaken in the context of managing the immediate impact of the pandemic within MNCLHD in the short to medium term. Consideration has been given to how demand for healthcare has changed while concurrently considering how to respond to growth in demand due to population growth, the trend of people relocating to regional areas and the changing age profile of catchment residents. There are also major opportunities to improve patient streaming at PMBH through the implementation of a new innovative model of care which integrates ED services with expanded outpatient services for lower acuity, lower complexity patients in order to reduce unnecessary ED presentations and overnight inpatient admission. As an immediate response to demand a clear message around priorities for service development was provided through the consultation process:

1. Implementation of a seven day a week discharge service to support more regular rounding of patients to move them along their patient journey; daily physician ward rounds to include weekends to improve discharge rates
2. Increased community support to target hospital substitution, telehealth and hospitalisation prevention services; increased utilisation for Hospital in The Home / Rehabilitation in The Home models including virtual follow up to promote early discharge for surgical patients; increased patient education pre-operative for expectations relating to stay and discharge planning
3. Increase in the number of allied health staff rostered on every weekend and to enable the ability to back fill against staff on leave.

The development of services on a networked basis will continue, enabling hospitals within the Hastings Macleay Clinical Network to develop complementary roles and thus reducing unnecessary duplication of resources. Consequently, the role of Port Macquarie Base Hospital and the planning of future service requirements is clearly linked to the future roles of Wauchope District Memorial Hospital, Kempsey District Hospital, and surrounding Community Health services.

2. Environmental Scan / Future Directions / Policy Framework

2.1 Environmental scan and drivers of service need

Environmental scanning is a critical and ongoing part of the planning process in which information on external events and trends are continuously collected and considered throughout the planning process. Sources include social, economic, political and technical indicators.

Key challenges, particularly for rural health communities, associated strategies and future considerations are as follows:

Service Sustainability

Rural and regional service sustainability relies on care being delivered in the most cost-effective place by the right provider; which also includes how specialised services can provide effective, acceptable outreach services. There needs to be a range of flexible options for care and a process for managing the patient journey to ensure care continuity. Underpinning this is a reliance on skills maintenance and capability of the health workforce.

Recruitment and Retention

Difficulties associated with recruitment and retention of a competent health workforce, maintaining workforce skills and access to training opportunities are common within rural and remote communities. *Health Professionals Workforce Plan 2012-2022* recognises this issue and outlines strategies.

Equitable access to services

Where rural and remote communities are too small to provide local health services (often for safety and quality reasons, but also economic reasons), residents must access care from larger urban centres and access to these services can be problematic. This may result in health needs not being met, lack of continuity of care and an absence of monitoring of the effectiveness of services in terms of health outcomes. Integrated care and patient-centred approaches, with established partnerships is vital.

Poorer health outcomes

On average, Australians living in rural and remote areas have shorter lives, higher levels of disease and injury and poorer access to and use of health services, compared with people living in metropolitan areas. This may be due to multiple factors including lifestyle differences and a level of disadvantage related to education and employment opportunities (social determinants of health), and access to health services (discussed above).

Social determinants of health

Place based planning is one mechanism in attempting to address the social determinants of health, that is to provide services that will provide the most benefit to the community as a whole. Access to and coordination with specific social services are particularly relevant for specific cohorts such as Mental Health, Child and Youth Health and aged care where it is known that health outcomes can be improved. Connections to social elements such as education, housing and welfare information and support can reap both individual and community benefits.

Chronic illness pressures

The growing number of patients with complex comorbidities within certain population groups will place increasing demand on the health system. Greater access to flexible, person-centred treatment models specifically designed to meet their needs will be critical. Much of the focus on these models will need to be on ways to avoid hospital admission and to provide care in alternative more cost-effective settings.

Greater integration of care

Integrated care involves the provision of seamless, effective and efficient care that reflects the whole of a person's health needs throughout their care journey and considers not only the individual but works in partnership with family members and carers. Successful integration requires genuine partnerships with consumers and between service providers to build capacity and capability and to transition to a new way of working together.

Changing treatment settings

There is a growing trend for some aspects of hospital bed-based care being replaced by ambulatory or community-based care and this has clear health benefits to patients. This trend will continue as health technology advances, inpatient models of care change and the health system responds to the demand for best and least disruptive care closer to home.

Digital technology enabling change

The health system will also need to increase the pace of adoption of new digital technology to meet both consumers and providers expectations. Over the next decade, health service provision will change significantly as a result of the wider availability and greater affordability of digital technologies, including connected and cognitive devices, robotics and 3D printing and big data and analytics.

2.2 Policy Framework

This Clinical Services Plan will be supported by the integrated policy and planning framework and aligns with the Australian Government, NSW Government, NSW Ministry of Health, and Local Health District's strategic directions.

The key strategic drivers will include:

Australian Government

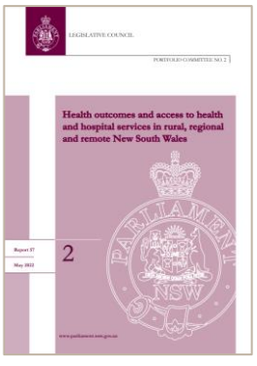
- National Health Reform Agreement (NHRA)
- National Partnership Agreement on Improving Public Hospital Services
- Activity Based Funding
- National Disability Insurance Scheme
- Fifth National Mental Health and Suicide Prevention Plan

NSW Government

NSW Premier Priorities

In June 2019, the NSW Premier unveiled 14 Premier's Priorities. There are three priorities specifically related to improving health outcomes being:

- Improving service levels in hospitals - Reduce preventable hospital visits by 5% through to 2023 by caring for people in the community
- Improving outpatient and community care - 100% of all triage category 1, 95% of triage category 2, and 85% of triage category 3 patients commencing treatment on time by 2023
- Reducing the rate of death by suicide - Reduce the rate of suicide deaths in NSW by 20% by 2023



Regional Health Inquiry Report

In May 2022, the findings and recommendations of the *Health outcomes and access to health and hospital services in rural, regional and remote New South Wales* was tabled. The committee found that residents of rural, regional and remote New South Wales have poorer health outcomes and inferior access to health and hospital services, and face significant financial challenges in accessing these services, compared to their metropolitan counterparts. Forty-four recommendations were provided, including:

- A 10-Year Rural and Remote Medical and Health Workforce Recruitment and Retention Strategy be developed and implemented
- Wider implementation of the Nurse Practitioner model of care and greater employment of geriatric nurses
- The working conditions, contracts and incentives of GPs working as Visiting Medical Officers in public health facilities in rural, regional and remote New South Wales be reviewed
- That NSW Health expedite its review of the nursing and midwifery workforce with a view to urgently increasing nurse and midwifery staffing numbers based on local need across rural, regional and remote New South Wales

- That the NSW Government implement the midwifery continuity of care model throughout rural, regional and remote New South Wales
- NSW Health commit to a model of care under which virtual care technology is used to supplement, rather than replace, face-to-face services.

NSW Ministry of Health

- Ministry of Health Services Plans, Policies, and Procedures
- A Blueprint for eHealth in NSW
- NSW Virtual Care Strategy 2021-2026
- Health Professionals Workforce Plan 2012-2022
- NSW Strategic Framework and Workforce Plan for Mental Health 2018-2022
- NSW Aboriginal Mental Health and Wellbeing Strategy 2020-2025
- End of Life and Palliative Care Framework 2019-2024

NSW Health 20-Year Health Infrastructure Strategy

The 20-year Health Infrastructure Strategy outlines the direction of the Strategy to inform future planning for infrastructure investment for NSW health districts, networks and services.

The Strategy articulates the future of health infrastructure investment in NSW over the next 20 years and recognises that NSW Health will have a diverse health infrastructure portfolio to deliver a comprehensive and integrated service system.

Future Health: Guiding the next decade of care in NSW 2022-2032

The Future Health Strategic Framework, Summary and Report will be the roadmap to address the NSW Health demands and challenges while also reflecting the aspirations of the community, patients, workforce and partners in healthcare over the next 10 years. Future Health is to be used to guide current and future strategic and local planning.

The Strategic Outcomes and Key Objectives outlined in Future Health have been informed by the experiences and viewpoints of the people interacting with the NSW health system.

NSW Health Workforce Plan 2022-2032

To ensure the workforce can deliver high quality care to those in need, the NSW Health Workforce Plan 2022-2032 provides a delivery framework to guide the implementation of the workforce-related strategies across the health system.

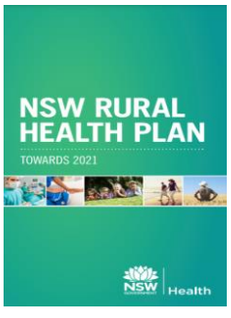
The NSW Health Workforce Plan translates the Future Health Strategy 2022-2032 to deliver on its vision, informs LHDs/SHNs, Agencies and Pillars' workforce plans and translate local workforce plans into day-to-day operations.

NSW Aboriginal Health Plan 2013 - 2023

This Plan provides the strategic direction for improving Aboriginal Health over the next 10 years.

The vision set out in the Plan is: Health equity for Aboriginal people, with strong, respected Aboriginal communities in NSW, whose families and individuals enjoy good health and wellbeing.

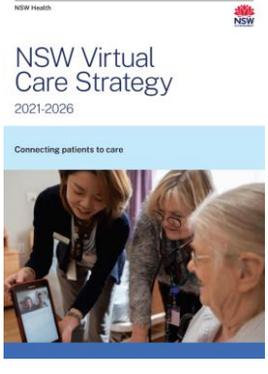
The goal set out in the Plan is: To work in partnership with Aboriginal people to achieve the highest level of health possible for individuals, families and communities.



NSW Rural Health Plan Towards 2021

This Plan sets strategic goals with a specific focus on rural NSW and builds on previous improvements to ensure patients receive care as close to home as possible and in a coordinated and seamless way.

This direction supports contemporary models of care that efficiently utilise the provision of outreach and 'hub and spoke' type services that sustains high quality and safe services at the point where rural people need them.



NSW Virtual Care Strategy 2021 - 2026

The NSW Virtual Care Strategy outlines the steps the NSW Health system will take to further integrate virtual care as a safe, effective, accessible option for healthcare delivery in NSW

The Strategy aims leverage off a range of existing initiatives across the state, whist also looking at innovations in technology that can transform how healthcare is delivered, support access to healthcare, particularly specialist services, and provide patients with more choice about how and where they receive their care. The implementation of the Strategy will focus on six strategic focus areas that aim to achieve the targeted outcomes detailed in the Strategy, support future demand for virtual care, and achieve longer-term transformation of the health system.

Leading Better Value Care

Leading Better Value Care is one of the programs that is accelerating value based healthcare in NSW. It involves clinicians, networks and organisations working together on high-impact initiatives to improve outcomes and experiences for people with specific conditions. In NSW, value based healthcare means improving health outcomes, the experiences of receiving and providing care and the effectiveness and efficiency of care. NSW Health has identified and scaled 13 evidence-based models or standards of care. They are:

MNCLHD Plans

- MNCLHD Health Needs Profile 2016
- Mid North Coast Mental Health Services Clinical Services Plan 2013-2021
- MNCLHD Ration Therapy Position Paper 2020
- Asset Strategic Plan 2018
- Master Services Plans for sites and redevelopment projects.

MNCLHD Clinical Services Plan 2018-2022

The Clinical Services Plan outlines the strategic intent of MNCLHD in the development, delivery and enhancement of its clinical services over the five years to 2022 in order to continue to provide contemporary, quality and safe health services for Mid North Coast communities.

In considering what will be required for the MNCLHD the following five key clinical service strategic directions were identified:

- Working to Improve the Health of the Population of the Mid North Coast.
- Achieving Access Performance and Service Quality
- Providing Better Value Care
- Innovation, Education and Research
- Workforce Development

MNCLHD Strategic Plan 2022 - 2032

The Strategic Plan provides strategic objective statements that guides MNCLHD a direction to continually advance and evolve to meet the needs and expectations of the community. The Plan will enhance collaboration, build the digital sophistication in health, and grow and support the workforce across the MNCLHD. The Plan's purpose is to deliver safe, effective, sustainable services that protects and improve the health and wellbeing of the residents living on the Mid North Coast.

MNCLHD Aboriginal Health Plan 2019-2023

The purpose of the Aboriginal Health Plan is to set strategic directions to reduce the gap in health outcomes for Aboriginal people when compared to non-Aboriginal people. It will guide all activities conducted within MNCLHD that may impact on Aboriginal people.

The six strategic directions to providing services that improve the health and wellbeing of Aboriginal people are:

- Building trust through partnerships
- Implementing what works and building evidence
- Ensuring integrated service planning and delivery
- Strengthening Aboriginal Workforce
- Providing culturally competent work and environmental health services

MNCLHD First 2000 Days Local Implementation Plan 2020-2025

The First 2000 days Framework outlines the importance of the first 2000 days in a child's life (from conception to the age of five) and what actions are required within the NSW Health system to ensure all children have the best possible start to life.

Throughout 2020 and 2021 MNCLHD staff and managers demonstrated a strong commitment to achieving three key objectives of the First 2000 Days Framework by engaging in working groups and developing a five year Implementation Plan. The Working Group meets quarterly to measure progress against specific work areas discussed in this Implementation Plan

3. Key Planning Considerations and Principles

3.1 Planning Assumptions

The following planning assumptions have been applied to this planning exercise, and are reflected throughout this Plan:

- People will have more control over their health enabling them to make decisions on the type of care that matters most to them
- Services where possible, should be planned in partnership with consumers through codesign
- Safe, high quality, reliable, evidence-based healthcare should be delivered in a sustainable and personalised way, within hospitals, in communities, at home and virtually, underpinned by the Choosing Wisely principals
- Planning and provision of health services should be based principally on the future needs of the whole catchment population and not solely on the settings and location of existing services
- Where it is safe and effective, care should be delivered as close as possible to home. There will be clear pathways and support for access if local provision is not appropriate
- Services should be planned with capacity to respond to changes in service demand, new models of care, research and digital technology advances
- Teleheath and eHealth technology should be embedded in all service models and be a core integrated component of service delivery
- Services should be planned on a collaborative model with other service providers which supports co-location, networking and/or physical integration where there is service or patient synergy
- Care should be delivered across all settings by a future workforce that is highly skilled, digitally enabled and flexible with a culture of leadership and innovation
- Value based care will continue to be adopted, particularly focused at vulnerable community groups
- Commitment to environmentally sustainable and efficient physical assets and resources such as energy, waste management and water usage.

3.2 Methodology for Projecting Service Activity

3.2.1 Inpatient Activity Projections

Future requirements for acute overnight and same day medical and surgical services and subacute services at PMBH have been projected to 2035-36 using the NSW HealthAPP and CaSPA (Clinical Services Planning Analytics Portal) developed and endorsed by the MoH for use in clinical service planning. The modelling tool takes account of projected population growth and ageing and NSW age and sex specific trends in length of stay and separation rates for Enhanced Service-Related Groups (ESRGs), in the development of projections for inpatient separations and bed days. All acute projections have been projected excluding renal dialysis, chemotherapy, unqualified neonates and acute psychiatry. The HealthAPP projections were updated (acute and subacute scenarios developed) to incorporate the 2022 NSW Population Projections (rather than 2016 NSW Population Projections) for Port Macquarie-Hastings and Kempsey Local Government Areas (LGAs).

Importantly, the projection assumptions are pre-COVID-19, with 2018-19 being the base year, and do not consider any activity impacts due to the global pandemic, changes in clinical practice or pathways nor the change in flow through consumer choice / capability improvements. 2018-19 activity was extracted from FlowInfo (not 2019-20 due to COVID-19 impacts) with HealthAPP growth rates (2014-15 to 2035-36) applied to 2035-36 (this also applied for Hospital in the Home activity). An exception was made

for birthing projections – 2020-21 births as per the MNCLHD Inpatient Report were used as the base year, to more accurately reflect the current status in birthing.

HealthAPP uses activity and flow patterns as the baseline for projections and assumes a gradual trend towards the State-wide level of utilisation for each ESRG. In calculating bed requirements, the following bed occupancy rates were used:

- 85% for surgical and medical overnight beds
- 75% for maternity, paediatric and neonatal overnight beds (qualified neonate activity was utilised for neonatal services / SCN)
- 90% for subacute beds
- 170% for same day medical, maternity and paediatric beds, 250 days a year.

3.2.2 Theatre/Procedure Room Projections

Theatre / procedure room requirements are projected in line with Ministry of Health methodologies. Local 2019-20 theatre data was utilised for procedure duration inputs. Endoscopy / gastroenterology activity was separated to calculate activity that would ideally be conducted in a separate procedure room.

Growth rates for surgical services were applied with the following assumptions:

- Endoscopy / gastroenterology activity was projected forward (from 2019-20 actual volumes) at 1.86%, equal to the HealthAPP average growth rate (2015 – 2036) for the respective SRGs
- All other surgical/procedural activity was projected forward (from 2019-20 actual volumes) at 1.50%, equal to the HealthAPP average growth rate (2015 – 2036) for the surgical and procedural SRGs (excluding endoscopy and gastroenterology)
- Theatre and procedure room operational hours per day – 20 hours urgent, nine hours planned
- Operational days – 365 days urgent, 231 days planned
- 65% utilisation rate
- 2 x stage 1 recovery bays and four x stage 2 recovery bays per endoscopy suite
- 2 x stage 1 recovery bays and two x stage 2 recovery bays per theatre.

3.2.3 ICU and CCU inpatient projections

ICU projections are based on the 2019-20 ICU hours with the average growth rate of adult medical, surgical/procedural and maternity bed days applied. 365 days a year, 24 hours a day, 75% occupancy.

CCU projections are based on 3% of adult medical, surgical/procedural and maternity bed days. 365 days a year, 24 hours a day, 75% occupancy.

3.2.4 Birth Suite Projections

Birth suite requirements were calculated on an average annual throughput of 300 births per year per suite (100% of vaginal births and 50% of caesarean births through a birth suite).

3.2.5 Emergency Department Activity Projection Methodology

The NSW Ministry of Health methodology used to project emergency department services is as follows:

- Activity derived from EDAA (2016-17 to 2018-19) was used to determine ALOS and admission percentages
- Admitted treatment spaces = [(total presentations * 90% seen between 6am and midnight * % admitted / 365 days) / (18 hours / admitted LOS)] / 85% occupancy
- Non-admitted treatment spaces = [(total presentations * 90% seen between 6am and midnight * % non-admitted / 365 days) / (18 hours / non-admitted LOS)] / 85% occupancy
- Resuscitation bays = higher of 1/15000 annual attendances or 1/5000 yearly admissions
- EDSSU = Average of 2016-17 to 2018-19 ED only, EMU only, ED and EMU only and up to 24h LOS ED and Ward (may incl EMU) admissions, with HealthAPP growth rates applied to 2035-36. 365 days a year, 170% occupancy
- Isolation rooms – 1/10000 attendances (max. two rooms for Level 4 hospitals and below).

2018-19 emergency department activity was extracted from FlowInfo (not 2019-20 due to COVID-19 impacts) with HealthAPP growth rates (adjusted to incorporate the 2022 NSW Population Projections for Port Macquarie-Hastings and Kempsey LGAs) applied to 2035-36.

3.2.6 Outpatient/Non-Admitted Projections

The NSW Health projection methodology for non-admitted services for infrastructure uses a function of Occasion of Service (OOS) and OOS duration data, with a distinction made for new and review appointments. Assumptions include:

- Non-admitted activity used to project the required infrastructure at PMBH excludes email, postal and non-client contact activity as well as services provided in the home setting, community setting and outreach services. Imaging, pathology, COVID-19 swab test/vaccination, chemotherapy, oncology, infusions, renal dialysis, haemodialysis, mental health and dispensing pharmacy activity has also been excluded.
- As the available data did not provide session duration times, these were averaged and an assumption of 60 minutes for new sessions, and 30 minutes for review sessions was used for infrastructure projections. The actual ratio of new/review sessions for 2020-21 OOS was used for the projections.
- Infrastructure projections assume the clinics operate seven hours a day, 240 days a year, at 80% occupancy.
- 2020-21 OOSs were used as the base year for projections, with activity growth projections developed using relevant inpatient HealthAPP growth rates from 2015 – 2036 (refer to Appendix E).
- “Specialist outpatients” spaces were calculated by assuming that 20% of projected adult medical inpatient separations (excluding gynaecology, renal medicine and haematology activity) would be seen at least two times at a public specialist outpatient clinic.

3.2.7 Other

As this Clinical Services Plan is to inform high level Master Planning, it was assumed that the current number of transit lounge spaces and sameday cardiac catheterisation spaces will remain the same. This will need to be reviewed in the next iteration of service planning.

4. Profile of the Catchment

4.1 Population Profile and Health

The profile and health characteristics of the Port Macquarie-Hastings LGA, relative to NSW, is detailed below. Detailed data reflecting the profile and health characteristics of the Port Macquarie-Hastings LGA population **and Kempsey LGA** population, relative to the population of NSW are described in Appendix A.

4.1.1 Vulnerable Population Groups

- The Port Macquarie-Hastings LGA and Kempsey LGA population had a higher proportion of Aboriginal and/or Torres Strait Islander people (5.1% and 15.1% vs. 3.5%, 2020), persons with a profound or severe disability (2016) and people with mental and behavioural problems (2017-18) than the population of NSW.
- In 2016, 4.1% of persons residing in the Port Macquarie-Hastings LGA (and 3.1% in Kempsey LGA) were born in non-English speaking countries. This is lower than the NSW average of 21% of persons born in non-English speaking countries.

4.1.2 Socioeconomic Profile

Socio-Economic Indexes for Areas (SEIFA) ranks areas in Australia according to relative socio-economic advantage and disadvantage. A range of SEIFA indices are available, including the Index of Relative Socioeconomic Advantage and Disadvantage (IRSAD).

- The Port Macquarie-Hastings LGA scored in the 6th decile on the IRSAD in terms of socioeconomic status which means they are ranked within the top 50% of regions across NSW (i.e., more advantaged than the average across NSW). Areas with higher socioeconomic status generally (but do not always) demonstrate lower rates of risky behaviours and poorer health outcomes.
- The Kempsey LGA scored in the 1st decile on the IRSAD (i.e. ranked in the bottom 10% of regions across NSW).
- In June 2020, the Port Macquarie-Hastings LGA and Kempsey LGA populations had a higher rate of unemployment compared to the population of NSW (5.6% and 9.8% vs. 5.0%).

4.1.3 Health and Wellness Profile

- The Port Macquarie-Hastings LGA population had lower rates of potentially preventable admissions than the population of NSW in 2018-19, for total chronic conditions, total vaccine-preventable conditions, total acute conditions and all potentially preventable conditions, whereas the Kempsey LGA population had higher rates of potentially preventable admissions than NSW for total chronic conditions, total acute conditions and all potentially preventable conditions.
- Participation in health screening programs (cervical – 2015 and 2016, bowel and breast – 2016 and 2017) by resident was higher for Port Macquarie-Hastings LGA residents, and Kempsey LGA residents (excluding for breast screening) than NSW residents.
- From 2010 - 2014, the aged standardised rates (ASRs) of colorectal, melanoma, breast and prostate cancer for Port Macquarie-Hastings LGA and Kempsey LGA residents was higher than NSW residents.
- In 2017-18, the Port Macquarie-Hastings LGA and Kempsey LGA population had higher ASRs of high blood pressure, high or very high psychological distress, obsess people, current smokers and alcohol intake than the population of NSW.

4.1.4 Children's Health Profile

- In 2018, the Port Macquarie-Hastings LGA and Kempsey LGA population had a higher proportion of children assessed as developmentally vulnerable, obese children, low birthweight babies and smoking during pregnancy compared to the population of NSW.

4.2 Catchment Definition

The PMBH Primary Catchment (Primary Catchment) is defined as the population that resides within the Port Macquarie-Hastings LGA. Port Macquarie-Hastings LGA lies within the Mid North Coast region of New South Wales, covers 3,686 square kilometres and is located 420 kilometres north of Sydney and 510 kilometres south of Brisbane.

In each year between 2015-16 and 2019-20, approximately 15% of patients that separated from PMBH resided in Kempsey LGA, defined as PMBH's Secondary Catchment.

4.3 Current Population

The Port Macquarie-Hastings LGA census population was 86,769 as at August 2021, with an annual growth rate (AGR) of 2.02% over the previous five years (since the 2016 census). This is higher than the NSW AGR of 1.53% over this same period. The most recent composition of the Port Macquarie-Hastings LGA population by age and sex at August 2021 shows that the proportion of people aged 45 and over was higher than that of NSW. Approximately 55% of the population was aged over 45 in the Port Macquarie-Hastings LGA vs. 42% across NSW.

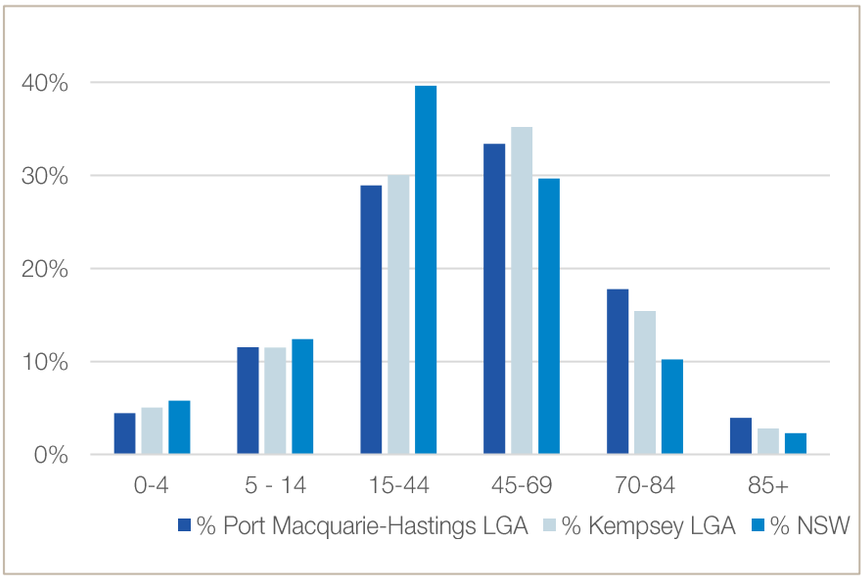
The Kempsey LGA census population was 30,682 in August 2021 (having increased at an AGR of 1.22% since the 2016 census) with 53% of the population aged over 45.

Table 1 – Port Macquarie-Hastings and Kempsey LGA population by age group, 2021

Age group (years)	Port Macquarie-Hastings LGA	Kempsey LGA	*NSW*	% Port Macquarie-Hastings LGA	% Kempsey LGA	*% NSW*
0-4	3,849	1,548	*468,056*	4%	5%	6%
5 - 14	10,012	3,527	*1,001,945*	12%	11%	12%
15-44	25,092	9,217	*3,199,274*	29%	30%	41%
45-69	28,971	10,799	*2,395,218*	33%	35%	29%
70-84	15,428	4,728	*823,753*	18%	15%	10%
85+	3,417	863	*183,895*	4%	3%	2%
Total	86,769	30,682	*8,072,141*	100%	100%	*100%*

Source: ABS, 2021 Census, Age and Sex

Figure 1 – Port Macquarie-Hastings and Kempsey LGA population by age group, 2021



Source: ABS, 2021 Census, Age and Sex

4.3.1 Key 2021 Census Results for Port Macquarie Hastings LGA

- 7,187 people reported that they needed assistance in their day to day lives in one or more of the three core activity areas of self-care, mobility, and communication because of a long-term health condition (lasting more than six months), disability (lasting more than six months) or old age. This represents 8.3% of the LGA population.
- There were 3,321 private dwellings indicated as unoccupied within the LGA and a total of 34,848 private dwellings identified. This represents 9% pf the total private dwellings not occupied on census night.
- Respondents were asked to report whether they had any long-term health conditions and almost 70% reported none. Those people with a condition reported - 14% arthritis, 10% asthma, 6% heart disease, 5% diabetes and 11% with a mental health condition (including depression or anxiety).
- 95% (or 83,058) of LGA residents were at home on the night of the census, there were 4,257 visitors (from other States or other LGAs within NSW) in Port Macquarie-Hastings LGA the night of the census.

4.3.2 Aboriginal Population

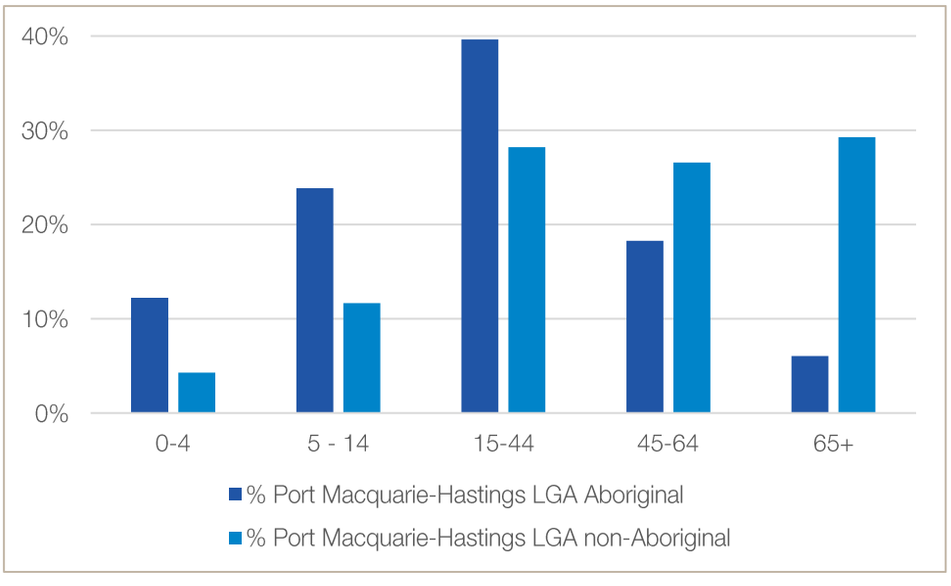
As at June 2020, the ERP of Aboriginal and/or Torres Strait Islander people residing in the Port Macquarie-Hastings LGA was 4,302, approximately 5% of the population. Although 54% of the total Port Macquarie-Hastings LGA population was aged over 45 in the Port Macquarie-Hastings LGA, only 24% of the Aboriginal population was aged over 45. There was a similar trend within Kempsey LGA and NSW as a whole.

Table 2 – Port Macquarie-Hastings and Kempsey LGA Aboriginal population by age group, 2020

Age group (years)	Port Macquarie-Hastings LGA	Kempsey LGA	*NSW*	% Port Macquarie-Hastings LGA	% Kempsey LGA	*% NSW*
0-4	526	626	*35,878*	12%	13%	*12%*
5 - 14	1,026	1,002	*63,037*	24%	21%	*22%*
15-44	1,705	1,938	*123,817*	40%	42%	*43%*
45-64	786	810	*49,545*	18%	17%	*17%*
65+	260	291	*16,290*	6%	6%	*6%*
Total	4,302	4667	*288,567*	100%	100%	*100%*

Source: Public Health Information Development Unit, Social Health Atlas of Australia, NSW, Data by Local Government Area, Published April 2022

Figure 2 – Port Macquarie-Hastings Aboriginal and non-Aboriginal population by age group, 2020



Source: Public Health Information Development Unit, Social Health Atlas of Australia, NSW, Data by Local Government Area, Published April 2022

4.4 Projected Population

Population projections in NSW are developed at a LGA level by the NSW Department of Planning, Industry and Environment (DPIE) every two years on the basis of revised estimated population numbers and assumptions. The latest population projections for NSW were developed by DPIE in 2022 and include the impact of the COVID-19 pandemic on population change across NSW. The base population for the 2022 projections is the estimated resident population by age and sex as of 30 June 2020. For comparison the 2021 census results have been included in Table 3 below and shows an overall population growth between the 2016 and 2021 census dates of 6,696 people or 8.4% growth over the five years. In addition:

- The Port Macquarie-Hastings LGA population is projected to grow from 80,073 in 2016 to 97,746 in 2036, an AGR of 1.0% (equivalent to the growth rate projected across NSW).
- Population growth is forecast for all age groups, with the most significant growth forecast for the 70 years and over age group.
- The Kempsey LGA population is projected to increase from 29,431 in 2016 to 31,449 in 2036.
- Females aged 15 – 44 years are expected to increase between 2021 and 2036 by 711 for Port-Macquarie Hastings LGA and 240 for Kempsey LGA.

Table 3 – Port Macquarie-Hastings LGA population projections by age group, 2016 to 2036

Age group (years)	2016	2021	2026	2031	2036	% Change 2016 - 2036	AGR	*NSW AGR*
0-4	4,139	3,849	4,251	4,258	4,272	3.2%	0.2%	*0.1%*
5 - 14	9,639	10,012	10,401	10,444	10,548	9.4%	0.5%	*0.4%*
15-44	23,393	25,092	25,984	26,688	26,822	14.7%	0.7%	*0.7%*
45-69	27,575	28,971	28,812	29,017	29,770	8.0%	0.4%	*0.8%*
70-84	12,340	15,428	17,112	19,011	20,010	62.2%	2.4%	*2.9%*
85+	2,987	3,417	3,808	4,892	6,324	111.7%	3.8%	*4.0%*
Total	80,073	86,769	90,368	94,310	97,746	22.1%	1.0%	
NSW total	*7,732,858*	*8,166,757*	*8,462,770*	*8,933,640*	*9,404,886*	*21.6%*	*1.0%*	
Kempsey LGA	*29,431*	*29,926*	*30,479*	*31,028*	*31,449*	*6.9%*	*0.3%*	

Source: 2022 NSW DPIE Population Projections and 2021 Census Results

The Port Macquarie-Hastings Council also separately forecasts the population of the Port Macquarie-Hastings LGA as a whole and by sub areas. These forecasts were last adjusted in December 2019 (pre-COVID-19). Port Macquarie-Hastings Council forecasts a population of 100,673 in 2031, 6.7% higher compared to the DPIE forecast of 94,310 people as outlined above. Between 2016 and 2036, Port Macquarie-Hastings Council forecasts that the Thrumster sub region will increase by 7,428 people, equal to 36% of the total growth across the LGA over this period. It should be noted that these projections are not endorsed by Government so are only provided for information and comparison to the DPIE projections.

Thrumster is bounded by the locality of Fernbank Creek in the north, by the Port Macquarie Remainder and Innes Peninsula small areas in the east, by the locality of Lake Innes in the south and by the locality of Sancrox in the west.

Kempsey Shire Council projections forecast the Kempsey LGA population will increase to 32,649 in 2031 and 34,148 in 2036.

5. Port Macquarie Base Hospital

PMBH is a Group B Major, rural referral facility that provides a range of services predominantly to residents of the Port Macquarie-Hastings LGA, the Hastings Macleay Clinical Network (HMCN) and the broader MNCLHD. Services are provided from PMBH and Port Macquarie Community Health Centre (located at Moreton Street, 3.5kms from PMBH).

Services provided at PMBH include specialist wards/units for general medicine, surgery, day surgery, planned and emergency theatre service, coronary care, intensive care, obstetrics, paediatrics, 24-hour emergency department, oncology, palliative care, rehabilitation, stroke, acute renal dialysis, high dependency and mental health and non-admitted clinics. Services are predominately provided at role delineation Level 4 or 5 (refer to Appendix B for current role delineation levels).

A range of Allied Health services support patient care both in the hospital and community setting. Diagnostic services include pathology, CT scans, nuclear medicine, MRI, ultrasound and general x-ray.

5.1 Current Infrastructure

The current treatment spaces at PMBH are summarised in the table below.

Table 4 – Current treatment spaces at PMBH

Service type	Physical Beds / Spaces	Funded Beds / Spaces	How many Staffed Beds / Spaces
Overnight beds			
Medical	71	62	62
Surgical	58	52	52
Subacute	13	12	12
Obstetrics	19	15	15
Mental Health	24	12	12
Paediatrics	15	8	8
Medical assessment unit	8	8	8
ICU	16	10	10
CCU	8	6	6
Bassinet	12	12	12
SCN	8	8	8
Same day beds/chairs			
Same day cardiac catheterisation	6	6	6
Same day surgical	14	12	12
Renal dialysis	12	8	8
Emergency			
ED	20	16	16
EMU	8	8	8
Other			
Birthing suites	3	3	3
Operating theatres	7	7	7
Endoscopy suites	1	1	1
Transit lounge	6	6	6
Outpatient/non-admitted	34	34	34

5.2 Current Workforce Profile

The table below details PMBH's actual workforce profile using Treasury categories as at June 2022.

Table 5 – Current workforce profile at PMBH

Group	2021-22
Medical	140.50
Nursing	541.10
Allied Health	32.06
Other Prof. & Para Professionals & Support Staff	1.80
Scientific & Technical Clinical Support Staff	40.28
Oral Health Practitioners & Support Workers	0.02
Corporate Services & Hospital Support	104.31
Hotel Services	72.10
Maintenance & Trades	0.05
Other Staff	1.28
Total	933.48

General Practice (GP)

An issue raised several times was the inability to access GP care within the HMCN. This is a difficult workforce area to measure as there are a number of factors influencing access to GP care. However, it is understood that there are very few GPs that bulk bill and stakeholders reported that in many areas GPs have "closed their books". The North Coast Primary Health Network (NCPHN) reported in their 2018 Needs Assessment that Port Macquarie had the highest number of practices (30) and highest number of GPs (168) on the North and Mid North Coast resulting in a GP ratio of 1.3 GPs per 1,000 people. Kempsey was reported as having 13 practices and 33 GPs producing a ratio of 1.1 GPs per 1,000 persons.

5.3 Clinical Network

PMBH is located within the Hastings Macleay Clinical Network (HMCN) in the south of the MNCLHD. PMBH is the major referral hospital for the HMCN, providing the majority of specialist medical and surgical services for the HMCN.

The HMCN covers an area of 7,074 square kilometres, consists of two LGAs - Kempsey and Port Macquarie-Hastings, and shares its northern border with the Coffs Clinical Network, and its western and southern borders with Hunter New England Local Health District.

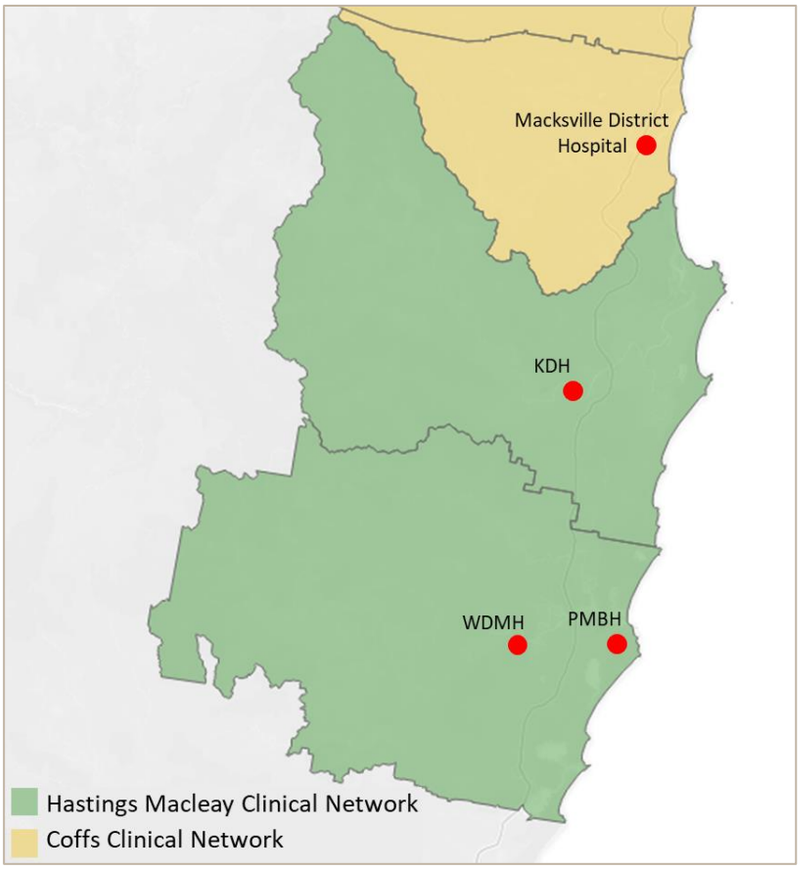
Wauchope District Memorial Hospital and Kempsey District Hospital are the other public hospitals located within the HMCN.

Wauchope District Memorial Hospital operates a 7-day urgent care centre provides a range of specialist services including day only surgery, palliative care and rehabilitation, and is located 15 minutes (16km) drive from PMBH.

Kempsey District Hospital provides emergency, medical and surgical services predominately to Kempsey LGA residents, and is located 40 minutes (54km) drive from PMBH.

Port Macquarie Private Hospital is the only private *hospital* located within the HMCN (noting there are other private health facilities including day surgeries), with 72 beds and six operating theatres, offering medical, surgical and rehabilitation services.

Figure 3 – Map of public hospitals within the HMCN



6. Current and Projected Service Activity

6.1.1 Historical Activity – Supply

Inpatient Activity

- PMBH's total inpatient activity is summarised below for 2015-16 to 2020-21. Note, the analysis presented generally excludes unqualified neonates, chemotherapy, renal dialysis, ED only admissions and Hospital in the Home (HiTH) – entirely and party, as specified under each table and figure.
- Overall, separations and bed days fluctuated from 2015-16 to 2019-20, then increased by 14% and 10% respectively from 2019-20 to 2020-21. The increase in bed days was primarily due to an increase in medical activity (including for non-subspecialty medicine, neurology and cardiology) offset by a reduction in subacute beds days (primarily palliative care).
- PMBH had on average 64 inpatient separations per day in 2020-21, and approximately 61% of these were emergency admissions.
- In 2020-21, 51% of total separations and 60% of total bed days were for people aged 65 years and over.

Table 6 – PMBH inpatient separations and bed days, 2015-16 to 2020-21

Measure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	AGR
Total separations	20,651	22,350	21,803	21,421	20,572	23,487	2.6%
Total bed days	64,184	67,217	67,850	67,226	67,943	74,852	3.1%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

- PMBH bed days entirely as HiTH has reduced overall from 2015-16 to 2020-21, while bed days partly as HiTH increased at an AGR of 9.1%, by over 1,600 bed days.
- Of the 4,643 bed days partly as HiTH in 2020-21, approximately 2,922 bed days (63%) were true HiTH bed days, and 1,721 hospital bed days.

Table 7 – PMBH HiTH inpatient separations and bed days, 2015-16 to 2020-21

HiTH	Measure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	AGR
Entirely HiTH	Separations	111	123	90	96	112	71	-8.5%
	Bed days	689	636	535	551	652	495	-6.4%
Partly HiTH	Separations	265	304	344	395	469	438	10.6%
	Bed days	3,006	3,483	3,729	3,770	4,018	4,643	9.1%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis and ED only

The table below shows PMBH's 2020-21 total activity by clinical group, with separations split by day only and overnight (note, 2020-21 data has generally been used for in depth historical analysis). Clinical groups are defined based on the nature of the service provided (for example surgical / procedural refers to activity generally requiring an operating theatre or procedure room). Of note, mental health also includes drug and alcohol admissions. Refer to Appendix C for detailed ESRG mapping to clinical groups.

In 2020-21, 47% of bed days were medical and 30% were surgical/procedural. Paediatrics, maternity and qualified neonates each made up 4% or less of bed days.

Table 8 – PMBH total activity by clinical group, day only and overnight, 2020-21

Clinical group	Separations				Bed days	
	Day only	Overnight	Total separations	% Separations	Total bed days	% Bed days
Medical	4,145	7,615	11,760	50%	35,135	47%
Surgical/Procedural	3,604	3,993	7,597	32%	22,114	30%
Maternity	286	1,116	1,402	6%	3,275	4%
Subacute	16	533	549	2%	5,580	7%
Mental Health (inc. D+A)	64	501	565	2%	5,100	7%
Qualified Neonate	17	252	269	1%	1,467	2%
Paediatrics	444	901	1,345	6%	2,181	3%
Total	8,576	14,911	23,487	100%	74,852	100%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis and ED only

Births at PMBH consistently remained below 800 births a year from 2015-16 to 2019-20. However yearly births increased to 886 in 2020-21 and *may* increase further in 2021-22.

Table 9 – PMBH birthing maternity activity by ESRG, 2015-16 to 2020-21

ESRG	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21*
722 - Vaginal delivery	504	513	533	480	505	603
723 - Caesarean delivery	292	229	243	281	286	283
Total births	796	742	776	761	791	886

*Source: FlowInfo v21. Excl. ED only and HiTH. *2020-21 data is preliminary, sourced from Cerner PAS, Bed Summary Report, MNCLHD Inpatient Report - Performance Hub*

The table below summarises the SRGs within the medical, surgical/procedural and subacute clinical groups in 2020-21 with the highest bed days (not a comprehensive list). Key observations include:

- Medical activity was for a broad range of services including non-subspecialty medicine, cardiology, respiratory medicine and neurology
- Surgical/procedural activity included for orthopaedics, interventional cardiology and vascular surgery
- Acute psychiatry accounted for 6% of bed days and rehabilitation 5% of bed days.

Table 10 – PMBH major medical, surgical/procedural subacute and mental health activity by SRG, 2020-21

MSP	SRG	Total separations	Total bed days	% total bed days
Medical	27 - Non Subspecialty Medicine	1,851	6,566	9%
	11 - Cardiology	2,077	4,552	6%
	24 - Respiratory Medicine	1,009	4,482	6%
	21 - Neurology	1,113	3,900	5%
	15 - Gastroenterology	1,249	3,491	5%
	49 - Orthopaedics	833	2,219	3%
	17 - Haematology	453	1,747	2%
	52 - Urology	781	1,560	2%
	54 - Non Subspecialty Surgery	754	1,372	2%
	46 - Neurosurgery	308	1,255	2%
Surgical/procedural	49 - Orthopaedics	1,624	6,458	9%
	12 - Interventional Cardiology	765	2,322	3%
	53 - Vascular Surgery	380	1,886	3%
	54 - Non Subspecialty Surgery	714	1,795	2%
	52 - Urology	714	1,533	2%
	43 - Colorectal Surgery	217	1,458	2%
	16 - Diagnostic GI Endoscopy	984	1,395	2%
	44 - Upper GIT Surgery	307	1,232	2%
	15 - Gastroenterology	463	934	1%
	71 - Gynaecology	571	903	1%
Subacute	84 - Rehabilitation	338	3,816	5%
	85 - Psychogeriatric Care	30	716	1%
	87 - Maintenance	41	545	1%
	86 - Palliative Care	140	503	1%
Mental Health (inc. D+A)	82 - Psychiatry - Acute	406	4,674	6%
	81 - Drug and Alcohol	159	426	1%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

The table below breaks down PMBH's 2020-21 separations by clinical group and LGA of residence, and shows that:

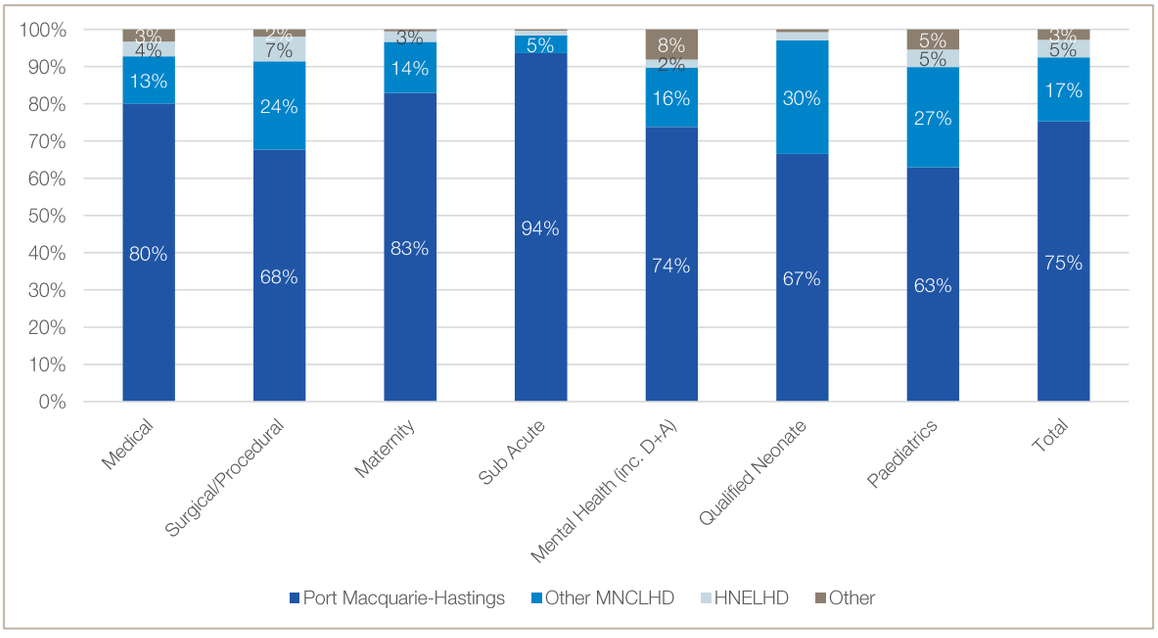
- 75% total separations were for Primary Catchment residents, with a further 17% for other MNCLHD residents (primarily from Kempsey LGA).
- 80% of medical, 68% of surgical/procedural and 63% of paediatric separations were for the Primary Catchment residents, with 24% of surgery/procedural, 27% of paediatric and 30% of qualified neonate separations for other MNCLHD residents, reflecting PMBH's referral role in the HMCN.

Table 11 – PMBH total separations by clinical group and LGA of residence, 2020-21

MSP	Primary Catchment	MNCLHD (other)	HNELHD	Other LHD/interstate
Medical	9,410	1,494	467	389
Surgical/Procedural	5,143	1,800	504	150
Maternity	1,162	193	39	8
Subacute	514	26	7	2
Mental Health (inc. D+A)	417	90	12	46
Qualified Neonate	179	82	6	2
Paediatrics	846	363	63	73
Total	17,671	4,048	1,098	670
%	75%	17%	5%	3%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Figure 4 – PMBH total separations by clinical group and LGA of residence, 2020-21



Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Aboriginal Health

- Overall, total separations and bed days for Aboriginal and/or Torres Strait Islander people has increased from 2015-16 to 2020-21. This increase in separations was primarily due to increases in medical (including cardiology, gastroenterology and neurology) and surgical/procedural (including interventional cardiology and urology) separations.
- PMBH had approximately four inpatient separations per day in 2020-21 for Aboriginal and/or Torres Strait Islander people, and approximately 57% of these were emergency admissions.
- In 2020-21, activity for Aboriginal and/or Torres Strait Islander people made up 7% of PMBH's total separations and 6% of total bed days.

Table 12 – PMBH inpatient separations and bed days for Aboriginal and/or Torres Strait Islander people, 2015-16 to 2019-20

Measure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	AGR
Total separations	1,263	1,300	1,355	1,513	1,528	1,664	5.7%
Total bed days	4,093	3,618	4,078	4,537	4,324	4,702	2.8%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

- In 2020-21, 17% of maternity bed days at PMBH were for Aboriginal and/or Torres Strait Islander people, as was 13% of mental health (incl. D+A) bed days, 27% of qualified neonate bed days and 22% of paediatric bed days.
- In 2020-21, 13% of births at PMBH were for Aboriginal and/or Torres Strait Islander women.

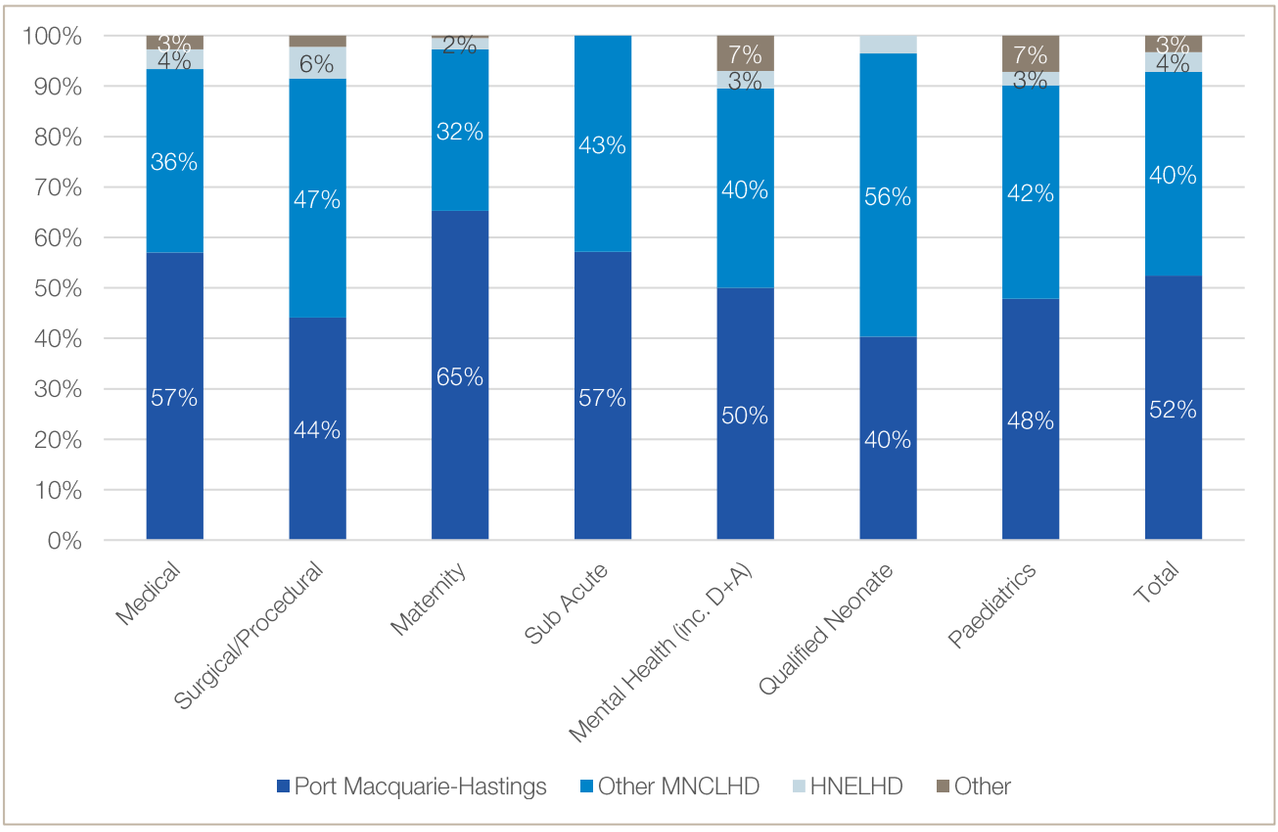
Table 13 – PMBH Aboriginal and/or Torres Strait Islander activity by clinical group, 2020-21

Clinical group	2020-21 separations	% Aboriginal separations / total separations	2020-21 Bed days	% Aboriginal bed days / total bed days
Medical	589	5%	1,454	4%
Surgical/Procedural	401	5%	1,099	5%
Maternity	219	16%	543	17%
Subacute	7	1%	64	1%
Mental Health (inc. D+A)	86	15%	666	13%
Qualified Neonate	57	21%	403	27%
Paediatrics	305	23%	473	22%
Total	1,664	7%	4,702	6%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis and ED only and HiTH

Of the 1,664 separations provided to Aboriginal and/or Torres Strait Islander people at PMBH in 2020-21, 52% were for Primary Catchment residents and 40% for other MNCLHD residents (primarily Kempsey LGA residents).

Figure 5 – PMBH Aboriginal and/or Torres Strait Islander people separations by clinical group and LGA of residence, 2020-21



Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Theatre Activity

- A total of 7,801 surgical/procedural procedures were provided at PMBH in 2019-20. Included within this number:
  - 30% of procedures were for orthopaedics, 21% for general surgery and 13% for urology
  - 5% of procedures were for paediatrics and 95% for adults (with 36% for people aged 70 years and over).
- Procedures increased by 5.6% between 2018-19 and 2019-20, primarily due to an increase in urology, orthopaedics and general surgery, partially offset by a decrease in gastroenterology, maxillo-facial and ophthalmology.
- In 2019-20, average theatre duration was 76.3 minutes, and was highest for vascular and orthopaedic procedures (above 100 minutes).
- In 2019-20, 4% of activity was undertaken in Operating Theatre 7 (dedicated vascular theatre) and 7% in Operating Theatre 6, with 10 – 24% of activity undertaken in each of the other six theatres/endoscopy suite.

Table 14 – PMBH theatre procedures and average theatre duration by specialty, 2018-19 to 2019-20

Specialty	2018-19	2019-20	2019-20 average duration (minutes)
Orthopaedic	1,666	1,794	100.6
Gastroenterology	1,493	1,437	33.0
General Surgery	1,228	1,327	91.9
Urology	772	951	81.1
Vascular	515	548	102.1
Gynaecology	521	541	64.4
Obstetrics	318	343	84.3
Ophthalmology	287	239	42.9
Anaesthesia	164	222	64.3
Ear Nose & Throat	148	176	72.8
Respiratory	143	125	28.4
Dental	60	50	81.2
Radiology	4	29	58.7
Maxillo-Facial	67	14	87.6
Other	3	5	90.4
Total	7,389	7,801	76.3

Source: PMBH Theatre Extract, 2022

Emergency Department Activity

- Presentations to PMBH Emergency Department increased 7.7% annually from 2015-16 to 2020-21. In 2020-21, there were (on average) 128 presentations per day.
- In 2015-16, 37% of emergency presentations were admitted to PMBH (32% of Aboriginal and/or Torres Strait Islander people presentations and 37% of non-Aboriginal and/or Torres Strait Islander people), and this decreased to 29% (25% of Aboriginal and/or Torres Strait Islander people presentations and 30% of non-Aboriginal and/or Torres Strait Islander people) in 2019-20.
- In 2020-21, 7% of adult and 15% of paediatric emergency presentations were for Aboriginal and/or Torres Strait Islander people.
- In terms of triage categories, 44% of total presentations were category 4, 33% category 3, 12% category 2 and 11% category 5 in 2020-21.
- In each year from 2015-16 to 2019-20, approximately 25 - 27% of presentations were for people aged 70 years and over.

Table 15 – PMBH Hospital emergency activity by triage category, 2015-16 to 2019-20

Triage category	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21*	AGR
1	173	155	202	222	244	275	9.7%
2	4,824	4,883	4,528	5,056	4,977	5,416	2.3%
3	13,146	13,933	13,057	14,773	15,141	15,630	3.5%
4	12,748	13,974	15,123	16,420	17,927	20,428	9.9%
5	1,379	1,937	1,954	2,728	3,589	4,983	29.3%
N/A	55	63	7	7	19	67	4.0%
Total	32,325	34,945	34,871	39,206	41,897	46,799	7.7%
Average daily presentations	89	96	96	107	115	128	

*Source: ED Analysis Tool *PMBH ED Activity Report Mar22*

Outpatient and Non-Admitted Activity

Non-admitted activity is summarised in the table below for PMBH and Port Macquarie Community Health Service (PMCH). This is aimed at giving an indicator of what activity is provided to patients on a face to face or audio / audio-visual basis. It excludes activity with no client contact and via email and postal / courier. It also excludes dispensing pharmacy, haemodialysis, oncology (including chemotherapy), radiation oncology and mental health services.

In 2020-21 (noting the above exclusions):

- Over 136,000 OOSs were recorded across the hospital / community health sites in Port Macquarie
- 54% of OOSs were provided at PMBH (predominately outpatient setting), 54% in the community (predominately community health settings) and 17% in homes
- 80% of OOSs were provided in person and 20% through telehealth/audio/audio-visual
- 7.8% of OOSs provided were for Aboriginal and/or Torres Strait Islander residents.

Table 16 – PMBH and Port Macquarie Community Health OOSs by service description, 2017-18 to 2020-21

Service type description	2017-18	2018-19	2019-20	2020-21
Infectious diseases screening	0	0	6,677	20,141
Midwifery and maternity	12,279	10,614	12,525	12,610
Fracture	7,873	9,042	8,211	10,331
Aged Care	7,047	6,772	6,634	7,009
Pre-Admission	7,042	6,913	6,293	6,146
Palliative Care	5,478	5,386	5,231	5,415
Primary Health Care	5,662	5,285	5,916	5,202
Wound Management	5,597	5,282	4,246	4,943
Child and Family	4,453	4,432	4,711	4,886
Obstetrics	5,318	4,365	3,961	4,194
COVID-19 Vaccination	0	0	0	4,003
Enteral Nutrition – Home Delivered	2,392	3,408	3,244	3,789
Pre-anaesthesia	2,763	3,167	2,980	3,741
Physiotherapy - General	4,537	4,181	3,629	3,396
Aged Care Assessment	3,026	3,413	3,508	3,351
Orthopaedics	2,024	2,181	2,061	2,448
Social Work	1,287	2,304	2,651	2,443
Infectious Diseases	1,333	1,963	2,191	2,245
Podiatry - General	1,524	1,894	1,929	2,057
Occupational Therapy - General	2,127	2,281	1,805	2,053
Other	30,982	33,010	28,407	26,363
Total	112,744	115,893	116,810	136,766

Source: MNCLHD NAP Data. Excl. services provided with no client contact and via email and postal / courier. Excl. dispensing pharmacy, haemodialysis, oncology (including chemotherapy), radiation oncology and mental health services.

6.1.2 Historical Resident Inpatient Demand

NSW Health planning tools enable analysis of historical admitted activity across NSW. This enables analysis of data at a population level (i.e., understanding how and where Primary Catchment residents access hospital services).

Note, the analysis presented in this section excludes unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH, as specified under each table/figure. Primary Catchment hospitals refers to both PMBH and Wauchope District Memorial Hospital.

- Primary Catchment residents separated from public hospitals 23,559 times in 2020-21 (and 14,730 times from private hospitals and day procedures).
- Overall, total separations and separations provided at Primary Catchment hospitals remained relatively stable from 2015-16 to 2019-20, then increased from 2019-20 to 2020-21.

Table 17 – Total public demand and self-sufficiency of the Primary Catchment residents, 2015-16 to 2020-21

Measure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total separations	20,227	21,873	21,711	21,488	20,598	23,559
Separation provided at Primary Catchment hospitals	17,138	18,762	18,454	18,060	17,167	19,793
Self-sufficiency (excluding renal dialysis)	85%	86%	85%	84%	83%	84%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

By clinical group, self-sufficiency was highest for subacute, maternity, medical services and qualified neonates in 2020-21 (over 90%) and lowest for paediatric services (70%) and mental health (56%).

Table 18 – Primary Catchment residents self-sufficiency by clinical group, 2020-21

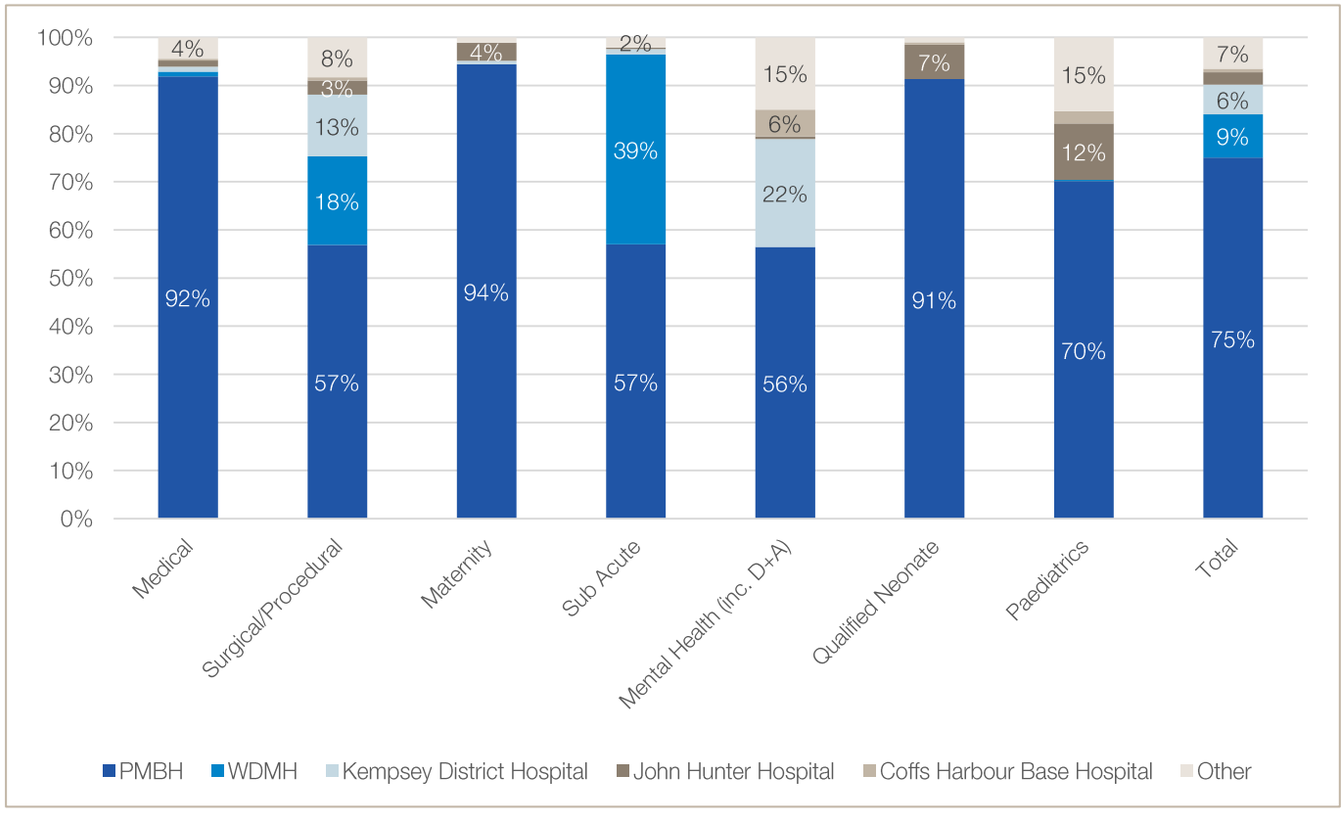
Clinical group	Primary Catchment hospitals	All public hospitals	Self-sufficiency
Medical	9,509	10,239	93%
Surgical/Procedural	6,807	9,046	75%
Maternity	1,162	1,231	94%
Subacute	870	902	96%
Mental Health (inc. D+A)	417	739	56%
Qualified Neonate	179	196	91%
Paediatrics	849	1,206	70%
Total	19,793	23,559	84%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

The figure and table below list the other hospitals that Primary Catchment residents separated from in 2020-21, by clinical group. The figure and table show that:

- 75% of Primary Catchment resident demand was met by PMBH, 9% by Wauchope District Memorial Hospital and 6% by Kempsey District Hospital.
- 57% of Primary Catchment residents surgical/procedural demand was met by PMBH, 18% by Wauchope District Memorial Hospital and 13% by Kempsey District Hospital.

Figure 6 – Primary Catchment resident separations by clinical group per facility, 2020-21



Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Table 19 – Primary Catchment resident separations by clinical group per facility, 2020-21

Clinical group	PMBH	Wauchope District Memorial Hospital	Kempsey District Hospital	John Hunter Hospital	Coffs Harbour Base Hospital	Prince of Wales (excl. Coll. Care)	Prince of Wales (Coll. Care)	Manning Base Hospital	Queensland Hospitals	Other
Medical	9,410	99	106	132	40	41	8	24	57	322
Surgical/Procedural	5,143	1,664	1,160	267	60	126	131	68	16	411
Maternity	1,162	0	9	46	1	0	0	2	3	8
Subacute	514	356	10	3	0	1	1	1	2	14
Mental Health (inc. D+A)	417	0	166	4	41	0	0	11	10	90
Qualified Neonate	179	0	0	14	1	0	0	0	0	2
Paediatrics	846	3	0	141	31	0	0	1	9	175
Total	17,671	2,122	1,451	607	174	168	140	107	97	1,022
% Demand	75%	9%	6%	3%	1%	1%	1%	0%	0%	4%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Aboriginal Health

Overall, self-sufficiency (excluding renal dialysis) for Aboriginal and/or Torres Strait Islander Primary Catchment residents was lower than the entire Primary Catchment in 2020-21 (82% vs. 84%).

Table 20 – Total public demand and self-sufficiency of the Aboriginal and/or Torres Strait Islander Primary Catchment residents, 2015-16 to 2020-21

Measure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total separations	779	771	837	984	994	1,136
Separation provided at Primary Catchment hospitals	640	643	686	799	820	931
Self-sufficiency (excluding renal dialysis)	82%	83%	82%	81%	82%	82%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

By clinical group, self-sufficiency was highest for subacute (low volumes), maternity and medical services in 2020-21 (over 90%) and lowest for mental health (54%).

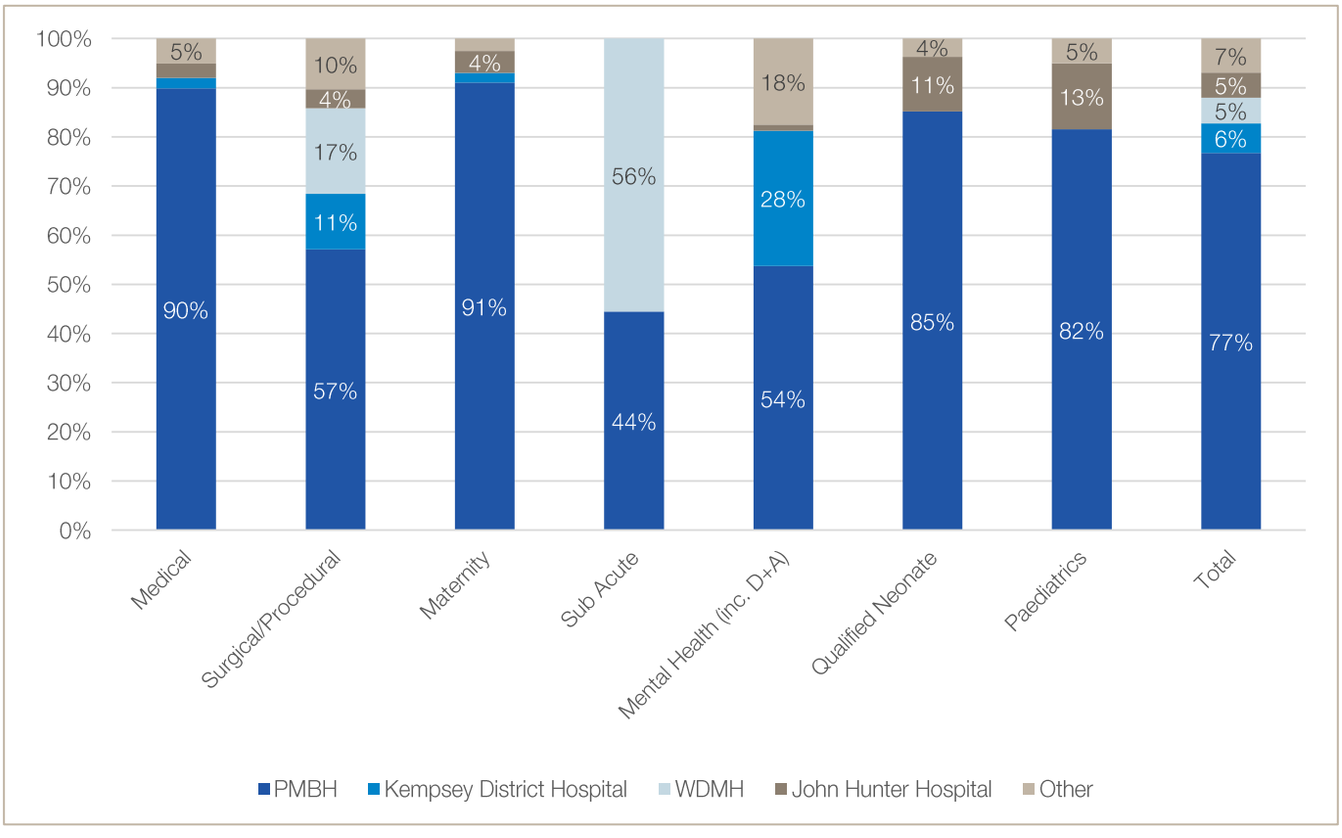
Table 21 – Aboriginal and/or Torres Strait Islander Primary Catchment residents self-sufficiency by clinical group, 2020-21

Clinical group	Primary Catchment hospitals	All public hospitals	Self-sufficiency
Medical	336	374	90%
Surgical/Procedural	231	310	75%
Maternity	143	157	91%
Subacute	9	9	100%
Mental Health (inc. D+A)	43	80	54%
Qualified Neonate	23	27	85%
Paediatrics	146	179	82%
Total	931	1,136	82%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

The figure below lists the other hospitals that Aboriginal and/or Torres Strait Island Primary Catchment residents separated from in 2020-21, by clinical group. The figure shows that 77% of Primary Catchment resident demand was met by PMBH, 6% by Kempsey District Hospital, 5% by the John Hunter Hospital and 5% by Wauchope District Memorial Hospital.

Figure 7 – Aboriginal and/or Torres Strait Island Primary Catchment resident separations by clinical group per facility, 2020-21



Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Private Activity

From 2015-16 to 2020-21, the overall percentage of private separations to total separations (public and private) for Primary Catchment residents has maintained at 38%.

Table 22 – Total public and private facility demand of the Primary Catchment residents, 2015-16 to 2020-21

Measure	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total separations (public and private)	32,617	34,477	35,518	36,005	34,206	38,289
Total separations (private)	12,390	12,604	13,807	14,517	13,608	14,730
% Private seps	38%	37%	39%	40%	40%	38%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

In 2020-21, Primary Catchment residents private activity (by bed days) primarily related to surgical/procedural activity (primarily orthopaedics, ophthalmology and diagnostic GI endoscopy), subacute activity (rehabilitation), and Mental Health (inc. D+A) services (acute psychiatry).

Table 23 – Primary Catchment residents activity by clinical group at private facilities, 2020-21

Clinical group	Separations	Bed days	% bed days
Medical	1,361	3,295	11%
Surgical/Procedural	9,741	14,324	46%
Maternity	15	65	0%
Subacute	2,128	9,675	31%
Mental Health (inc. D+A)	1,283	3,711	12%
Qualified Neonate	5	25	0%
Paediatrics	197	198	1%
Total	14,730	31,293	100%

Source: FlowInfo v21. Excl. unqualified neonates, chemotherapy, renal dialysis, ED only and HiTH

Outpatient and Non-Admitted Activity

The table below summarises where Primary Catchment residents accessed non-admitted services from 2017-18 to 2020-21. This is aimed at giving an indicator of what activity is provided to patients on a face to face or audio / audio-visual basis. It excludes activity with no client contact and via email and postal / courier. It also excludes dispensing pharmacy, haemodialysis, oncology (including chemotherapy), radiation oncology and mental health services.

In 2020-21:

- Approximately 82% of Primary Catchment demand was met a PMBH and PMCH
- Approximately 93% of Drug and Alcohol Network services were provided from Port Macquarie facilities
- Services accessed from Camden Haven Community Health were primarily for general care nursing / wound management
- Services accessed from Wauchope District Memorial Hospital were primarily for pre-admission services
- 7.6% of Primary Catchment demand was by Aboriginal and/or Torres Strait Islander residents.

Table 24 – Primary Catchment residents OOS by organisation, 2017-18 to 2020-21

Organisation	2017-18	2018-19	2019-20	2020-21
PMBH	46,491	44,847	48,787	64,504
PMCH	49,593	52,921	50,003	50,296
Drug and Alcohol Network	7,200	7,661	8,206	8,644
Wauchope District Memorial Hospital	2,586	2,743	2,425	3,167
Camden Haven Community Health	5,008	4,801	4,091	3,691
Wauchope Community Health	4,412	3,996	3,561	2,944
Kempsey Community Health	2,279	2,351	2,099	1,930
Coffs Harbour Community Health	1,330	1,783	1,675	1,373
Kempsey District Hospital	703	806	669	1,279
Coffs Harbour Base Hospital	820	901	736	864
Macksville District Hospital	0	158	373	757
Macksville Community Health	804	990	695	649
Other	5	151	246	182
Total	121,231	124,109	123,566	140,280

Source: MNCLHD NAP Data. Excl. services provided with no client contact and via email and postal / courier. Excl. dispensing pharmacy, haemodialysis, oncology (including chemotherapy), radiation oncology and mental health services.

6.2 Projected Activity

The table below summarises the projected inpatient separations and bed days, emergency presentations and non-admitted occasions of service to 2036, as per the methodology outlined in Section 3.2.

For the purposes of preparing this Clinical Services Plan, renal dialysis, chemotherapy and mental health activity (acute psychiatry) acute has not been projected, with separate work either currently underway or planned.

Between 2020-21 and 2035-36 (excluding mental health and renal dialysis):

- Separations are expected to increase by 26% (an AGR of 1.5%) to 28,981 separations
- Bed days are expected to increase by 36% (an AGR of 2.1%) to 95,073 bed days
- HiTH bed days are expected to increase by 23% (an AGR of 1.4%) to 6,304 bed days
- Emergency presentations are expected to increase by 40% (an AGR of 2.3%) to over 65,000 presentations.
- Non-admitted activity (noting the exclusions outlined in Section 3.2) is expected to increase by 22% (an AGR of 1.4%) to over 62,000 OOS.

New Specialist outpatient OOS is projected to reach over 5,500 separations by 2035-36.

Table 25 – PMBH projected inpatient separations and bed days, ED presentations and non-admitted occasions of service to 2036

Client group	Total Separations			Total Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Medical (incl D+A)	11,919	13,508	15,136	35,561	40,498	46,663
Surgical/ Procedural	7,597	8,301	9,101	22,114	23,098	25,145
Maternity	1,402	1,361	1,390	3,275	3,663	3,738
Subacute	549	1,081	1,207	5,580	12,286	15,714
Qualified Neonate	269	226	218	1,467	1,251	1,147
Paediatric	1,339	1,743	1,930	2,106	2,447	2,666
Total	23,075	26,221	28,981	70,103	83,243	95,073
HiTH	508	645	726	5,136	5,596	6,304
Emergency presentations	**46,799**	**58,459**	**65,347**			
Non-admitted OOSs	**50,865**	**58,205**	**62,275**			
Specialist outpatient OOSs	**3,997**	**4,975**	**5,587**			

For detailed inpatient and emergency department projections, refer to Appendix D.

6.3 Projected Infrastructure

The table below details the projected infrastructure requirements for PMBH to 2031 (the planning horizon) and for Master Planning, the 2036 requirements. The methodology for calculating infrastructure projections for each service type, is discussed in Section 3.2.

These projections are 'raw' figures based upon the outputs of endorsed NSW Ministry of Health planning tools and benchmarks used to derive the scenario projected activity and infrastructure spaces. **They will require interpretation into built infrastructure on the basis of considerations outlined in this Plan** as well as other contextual factors (for example related to interim changes, options, priorities, budgets) at the time the redevelopment project progresses with confirmed capital funding.

It should also be noted that these projections are based on population data that will be updated in the next12 months and based on the more recent census conducted in 2021. As such these projections will need review once a capital investment has been announced.

The projections are subject to Ministry of Health review and approval and are preliminary and not considered NSW Government or NSW Health policy.

Projections for mental health (acute psychiatry), renal dialysis and chemotherapy have not been included and will be undertaken through separate district wide planning processes.

Table 26 – PMBH summary of projected infrastructure requirements by service type, 2021 to 2031 (and 2036)

Service Type	Current (physical)	Current (funded)	2031	2036
Overnight beds				
Overnight medical	79	70	95	113
Overnight surgical/procedural	58	52	52	57
Overnight subacute	13	12	28	28
SCN	8	8	8	8
ICU	16	10	16	16
CCU	8	6	7	8
Total overnight	182	158	206	230
HiTH beds	10	10	19	21
Same day and overnight beds				
Maternity	19	15	14	14
Paediatrics	15	8	9	9
Same day				
Same day medical	0	0	11	12
Same day cardiac cath	6	6	6	6
Same day surgical (stage 2)	14	12	16	16
ED Spaces				
Adult ED spaces including bays used for isolation & Fast Track*	18	15	34	38
Paediatric ED spaces	4	0	4	4
Resus bays	3	2	4	5

Service Type	Current (physical)	Current (funded)	2031	2036
EDSSU	8	8	10	10
Isolation (Negative Pressure)	1	1	2	2
Total ED spaces	34	26	54	59
Other				
Birthing suite	3	3	3	3 (4)
Operating theatres	7	7	6	6
Endoscopy suites	1	1	1	1
Specialist outpatient	..	..	3	3
Non-admitted	31 (+3)	31 (+3)	32 (+3)	35 (+3)
Transit lounge	6	6	6	6

Notes:

- One of the current ED acute adult spaces is operating as the safe assessment room. This would normally be an additional space; there are also consult rooms not included in this count of spaces.
- It has been assumed that any additional demand for subacute services exceeding the 28 bed unit at PMBH would be serviced at Wauchope District Memorial Hospital. This includes up to 20 beds by 2036.
- Of the 34 current community/outpatient spaces at PMBH, three spaces are used for clinics that were not included in the projections, being COVID-19 (not expected to continue), hydrotherapy (part of community health projections) and HiTH (excluded). As such, the three clinics have been carried forward and should be added to the final projections. That is in 2035-36 there are 35 clinics projected and if these non-projected services are to be required then another three physical clinics should be included to equal 38 clinics in total.
- HiTH beds refers to the virtual beds required to service the HiTH bed days outlined in Table 25 (and Table 46). It is noted that the current 10 virtual care beds can surge up to by 16 as required.
- Although activity projections indicate a requirement for three birthing suites by 2036, provision should be made for a four birthing suite should the demand arise.
- Activity projections indicate a requirement of five SCN cots, however eight is recommended to support back transfers from John Hunter Children's Hospital, a to support one to four staffing ratio.

7. Future Models of Care and Clinical Service Profiles

The following section provides an overview of the clinical service provided at PMBH and some of the directions for each of these services in the future. The *Key Issues Identified by Stakeholders* are drawn directly from comments made by participants during the consultation phase, these issues were raised by some as being felt that they contributed to barriers to service delivery and are not included as a criticism or an endorsed position of MNCLHD of the service, but rather provide a summary of some of the concerns individuals felt impact delivery of care or in some instances they have provided suggested changes that may be valuable to consider when reviewing future models of care.

7.1.1 Medical Services

Current Service Profile and Scope

PMBH will continue to provide Role Delineation Level 4 and 5 medical services across a number of sub specialities. PMBH has three separate medical ward areas providing inpatient admitted medical care. Ward 3D has 22 beds (funded for 20) which was commissioned in 2014 in a new building and comprises 10 single rooms; Ward 1B has 22 beds (funded for 16 and will flex to 20 in escalation) and used for general medical and some surgical; and 1C has 27 medical beds (26 funded) there are nine single rooms and attached to the ward is the 12 bed AGEM unit. Also, within these medical wards there are specialised areas such an eight bed Medical Assessment Unit (MAU) and a four bed Acute Stroke Unit and sub speciality medical services that have developed over time. The remaining medical beds are used to provide general medical, cardiac, neurology, respiratory, renal, palliative, medical oncology, acute geriatric care (AGEM) and patients admitted for delirium and confusion. The medical workforce is predominantly Visiting Medical Officer (VMO) and one staff specialist.

Hospital in the Home (HiTH) is widely considered as a necessary service to support efficient patient flow, manage ED demand, reduce hospital-based acquired complications and infections, and to provide best practice care in the least restrictive environment. Total HiTH virtual beds are 10 and physical beds at PMBH are one bed and one chair. The beds can surge up to 16 home visits at a time. HiTH operates from PMBH and is medically led. Utilisation has remained static since 2015-16 through to 2019-20 with 11 to 13 beds worth of activity provided annually as either entirely HiTH or partial HiTH; many patients are referred from the 1C and 3D wards although the criteria for referral does limit some patients being referred to HiTH, such as those with dementia.

In 2018-19, of the patients aged 65 years and over that were admitted (excluding for acute psychiatry), over 96% separated within two weeks, with less than 1% (equivalent to 3,046 bed days) of patients staying for over a month. In 2018-19, out of 353 patients that were transferred to a nursing home upon separating (including both existing and new nursing home residents) approximately 73% were discharged within two weeks, and 93% within one month.

Of the patients aged 65 years and older that were admitted for longer than one month in 2018-19, 868 bed days were coded as being for rehabilitation, 336 for psychogeriatric care, 320 for vascular surgery and 286 for orthopaedics.

One Nurse Practitioner who provides out of hospital care currently has a patient load of 60-80 patients per month. These patients are new patients who have not presented to the ED and are only seen once, due to time taken to travel and the large geographical area.

Key Issues Identified by Stakeholders

- Issues were frequently identified with discharge planning for medical patients. According to stakeholders, there is not a lot of pre or proactive planning, and:
  - *"patients are ready for discharge, but it seems the medical teams are more reliant on getting clearance from everyone rather than working with the patient"*
  - *"Some patients are ready by 10am but are waiting until 2pm for the VMOs to discharge them"*

  - *"Surgical patients follow a much clearer path and discharge processes are planned and executed from day of admission".*

- Stakeholders nominated one issue with discharge processes to be the follow through, stating that *"There are more and more complex people who are needing residential care but the residential services are becoming more and more risk adverse because of Reforms and as a result of the Inquiry, and are not willing to accept without a significant assessment process to confirm their care level"*
- By necessity, due to bed blockage patients are admitted to an available bed rather than a bed in a ward that can accommodate their condition, for example medical patients admitted to surgical beds, and women admitted to maternity for non-birthing care
- There are some blockages with HiTH accepting COVID-19 patients. Stakeholders also reported that there is not enough staff in HiTH to manage workload, so the patient must stay in hospital. HiTH does not accept nursing referrals from the ED, and HiTH is not utilised efficiently and still used for partial stays. IV antibiotics often require 48 hours to be sourced to commence on HiTH, and patients may be delayed receiving a PICC line for IV antibiotic therapy as there is not daily service provision
- There are difficulties recruiting staff. One stakeholder identified that "*for example, this year we have six or eight FTE vacancies for escalation yet only one application. We are employing everyone interviewed, they will end up in a permanent pool, but do not end up with permanent home after escalation*." Employment of allied health staff, particularly dieticians and social workers, is very difficult, and these staff are in very short in supply across the LHD
- There are a lot of junior nursing staff employed on wards but there is no time / capacity to implement nursing initiatives, and there are limited resources for education. One stakeholder reported *"a NUM of 30 bed unit will also be trying to do a Team Leader (TL) role, support patient flow, manage complaints, etc. If a ward had a TL they would improve patient flow, earlier discharge of patients, as well as increase upskilling and education opportunities"*
- There is no step down cardiology unit, so patients are admitted to the medical ward until discharge. Cardiac monitoring is an issue as there is not enough capacity across the hospital. Stakeholders considered that cardiology patients should be cared for in a step-down cardiology unit
- A number of patients are admitted to the ward for infusions where these could be done in an ambulatory care area, there are also patients admitted to the Medical Assessment Unit that could be seen in an ambulatory setting
- There is a growing need to expand outpatient clinics, non-admitted spaces and outreach models to address increased demand and to support hospital substitution strategies. A formal Medical Ambulatory Care (MAC) unit could provide an alternative to inpatient admission and could provide a day-only service for patients requiring medication via an infusion (excluding chemotherapy, but including some haematology, for example, iron infusions) and blood transfusions
- Post COVID-19 demand for respiratory services has increased significantly and the current wards in the PMBH 1994 Building are not appropriate to keep good separation and isolation as required
- Stakeholders nominated that Acute Geriatric Evaluation and Management (AGEM) patients could go home with a Package, but the wait for package is a year. As such the discharge of these patients is delayed and they end up a longer stay in the ward as a nursing home type patient, as they cannot access services to support discharge to home. Also, there appears to be a trend to push older people to AGEM rather than address the patients' needs for their admitted diagnosis
- There is only one Nurse Practitioner who covers psychogeriatric and delirium in the hospital, and another Nurse Practitioner does out of hospital (community based) avoidance work. There are four Geriatricians, including one who works at Kempsey. While these staff are available for consult, they have a large patient workload. Particularly given the elderly population profile of the LHD and HMCN, stakeholders considered that another Nurse Practitioner is required
- 3D is a bariatric ward, located on 3rd floor of PMBH. Stakeholders raised concerns that if there was a fire it would be difficult to get these patients down the fire stairs. Rather, bariatric beds are required on the ground floor. Also, spaces are not fit for purpose. Bathrooms have narrow doors and as such staff are unable to move in a patient on chair and have to take the sides

off the bariatric beds to get them through the bedroom door (as doors are no wider than normal doors). A redevelopment would need to deliver infrastructure to support the needs of bariatric patients

- WIFI / mobile reception / connectivity a major issue across the campus, hindering many aspects of service provision, including virtual care. The WIFI / WAPS system requires replacement, particularly in the older parts of the building. Mobile phone reception results in delays to escalation of care as often nurses cannot contact doctors to review patients. All stakeholders considered this to be a clinical risk.
- There is a lack of onsite staff accommodation and meeting / training space.

Opportunities

Service Expansion	• Look at implementing nurse led models that support more direct admissions and discharge opportunities • Increase the number of Psychogeriatric Nurse Practitioners – currently one Nurse Practitioner works in the inpatient and one in the outpatient/home setting. There is no coverage for leave nor no capacity to overlap care from inpatient to home. Recruit to a new psychogeriatric Nurse Practitioner role to meet population demand. • Employ more CNCs to provide education and support opportunities across the medical stream. • Look at expanding and better utilising the Transit Lounge – once a person is confirmed for discharge they could be moved to lounge and any follow up with doctor could be done there. Currently only have eight to 10 patients on any day, there is room to be more proactive and get people off the ward • Look at linking at other sites in the HMCN with telehealth to reduce transfers, currently all the strokes are managed through telehealth and pulmonary rehabilitation use telehealth. The modality could be rolled out for difficult respiratory cases, acute wound management, or fracture clinic • 24/48 hour follow up phone call to patients from MAU to ensure follow through from discharge and prevent readmission • Expand HiTH model and review referral criteria including the acceptance of nurse referral • Look at opportunities to expand access to specialist outpatient services at spoke hospitals with the HMCN • Create a stepdown cardiology unit to manage telemetry/cardiac monitoring • Introduce prevention and hospital avoidance strategies, particularly for vulnerable groups. An expanded outpatients area may assist in delivering on this initiative. • Invest in more falls prevention equipment and staff training.
Model of Care	• NSW Health Agency for Clinical Innovation have developed an optimal aged health care model and can be embedded in all acute models of care in all settings • Ambulatory Medical Day Unit • Virtual Care

7.1.2 Surgical services

Current Service Profile and Scope

PMBH provides a wide range of surgical services including orthopaedics, vascular surgery, non-subspecialty surgery, diagnostic GI endoscopy, colorectal surgery, upper GIT surgery, gastroenterology, urology and gynaecology.

Surgical services are predominantly provided at Role Delineation Level 5 with the exception of the Burns service which is Level 4 and the Ophthalmology and ENT services which are currently Level 3.

PMBH has an important referral role within the MNCLHD. Approximately 66% of surgical/procedural separations are provided to residents of PMBH's Primary Catchment with a further 25% for other MNCLHD and a small proportion of Hunter New England LHD residents.

The volume of emergency and elective procedures performed at PMBH over the last four years is shown in Table 27 below. The largest volumes of surgical procedures are for orthopaedics, general surgery and urology.

Table 27 – PMBH Surgical Activity 2018-19 – 2021-22

Surgical Indicators PMB	2018-19	2019-20	2020-21	2021-22
Total Surgical Operations - Elective and Emergency (Actual)	7,863	7,796	9,098	8,339
No. of Surgical operations - Elective Planned	4,817	4,719	5,511	5,473
No. of Surgical operations - Elective Actual	4,764	4,478	5,606	4,978
Variance to Target	-53	-241	95	-495
No. of Surgical operations - Emergency Planned	2,984	3,099	3,099	3,099
No. of Surgical operations - Emergency Actual	3,099	3,318	3,492	3,361
Variance to Target	115	219	393	262

Source: MNCLHD Surgical KPI Reports for 2018-19, 2019-20, 2020-21 and 2021-22

Surgical KPI reports for the month of June over the last four years show that the PMBH exceeds the target performance for the percentage of day surgery and for day of surgery admission. Performance in relation to first case on time, overall cancellations and total theatre utilisation has consistently not met target (Table 28).

Table 28 – PMBH Surgical and Theatre Performance Report 2019 - 2022

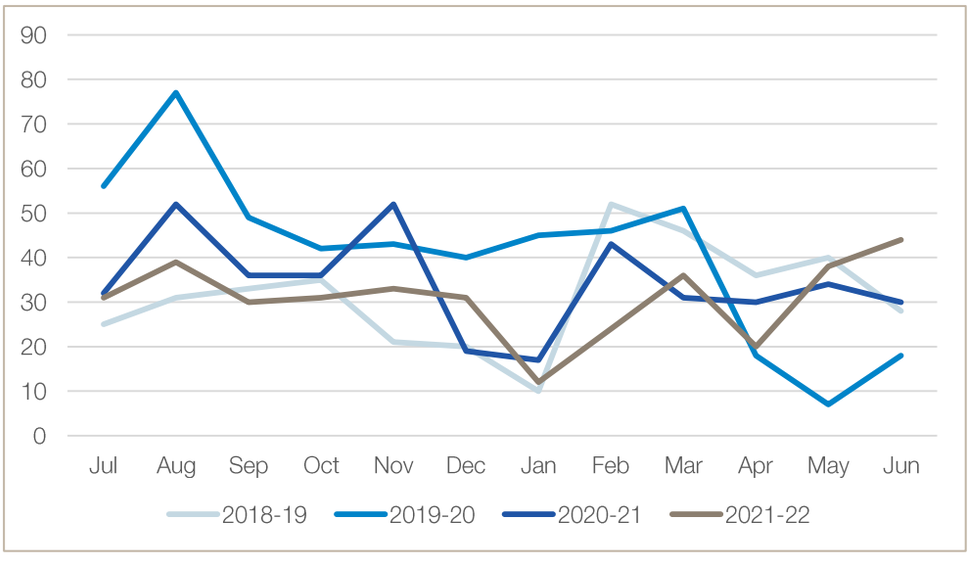
Indicator	Target	Jun-19	Jun-20	Jun-21	Jun-22
KPI Cancellations Overall %	<2%	8.8%	6.0%	7.4%	13.6%
KPI Total Theatre Ut % Total	80.0%	70.2%	72.3%	69.8%	78.6%
DoSA %	90.0%	97.7%	94.8%	98.6%	98.4%
Day Surgery Admit %	60.0%	62.7%	68.4%	72.5%	81.0%
First Case on Time	95.0%	30.5%	88.9%	20.0%	66.4%

Source: MNCLHD Surgical KPI Reports for 2018-19, 2019-20, 2020-21 and 2021-22

Key Issues identified by Stakeholders

- Elective surgery cancellation is an increasing problem creating dissatisfaction within the community and staff
- Cancellations are the result of several issues including the amount of emergency and trauma surgery needing to be done (including caesareans), increasing complexity and frailty of the patient cohort, and inability to ensure access to a postoperative inpatient bed due to bed block across PMBH. In many instances, particularly in orthopaedics, last minute cancellation incurs significant cost through wastage of equipment and clinical supplies that are patient specific and have time-limited used by dates.
- In 2022, the overall cancellation rate was 13.6% (increased from 7.4% in 2021). In 2021-22, 369 patients were cancelled by the hospital on the day of surgery. Hospital related reasons accounted for 75% of cancellations on the day of surgery. The monthly trend in cancellations for the last four years is shown in Figure 8 below.

Figure 8 – PMBH Cancellations Day of Surgery 2018-19 – 2021-22



Source: MNCLHD Surgical KPI Reports for 2018-19, 2019-20, 2020-21 and 2021-22

- Surgical wards are accommodating large numbers of medical patients. Anecdotally, there are significant delays in the discharge of these medical patients which is exacerbating bed pressure. This is felt to be the combination of a number of issues including limited systematic identification of a planned discharge date on admission of medical patients, lack of criteria led discharge and frequent last minute ordering of additional tests.
- There are limited after-hours/weekend allied health services which has been identified as a major contributing factor to delays in discharge.
- The implementation of a 23 hour unit had been trialled in previous years but was not continued as the beds were unable to be quarantined for surgical patients and were required 24 hours per day to cater for the volume of medical patients needing to be admitted on a daily basis.
- Gaps in services in the stomal therapy and community wound management services (including access to VACC dressings for residential care and NDIS patients) is resulting in prolonged and/or unnecessary admissions.
- Issues with timeliness of access to the HiTH service also results in increased length of stay for some people requiring drain removal (or they are told to attend the Urgent Care Centre at Wauchope District Memorial Hospital instead).

- A significant number of patients require transfer from Kempsey District Hospital due to the lack of overnight medical cover, insufficient allied health resources and the need for some additional theatre equipment to support more minimally invasive surgery at Kempsey District Hospital.
- There is no 24 hour medical cover at Wauchope District Memorial Hospital which restricts criteria for transfer and is resulting in a very narrow definition of "medically stable" for example requiring an INR once per week is defined as medically unstable.
- There is currently no ENT service due to the inability to recruit an ENT surgeon. ENT patients are therefore having to be referred to John Hunter Hospital in Newcastle for procedures that could be safely performed locally.
- There is only one specialist at Coffs Harbour who can do ERCP's and when they are not available patients are being transferred to PMBH. Coffs Harbour urology cover also problematic resulting in pts transferred to PMB during times of leave.
- The pre-admission process is still very paper dependent. Linkages between the pre-admission clinic and other services could be improved to ensure that complex discharge planning needs are flagged, and the patient is assisted with pre-habilitation prior to admission.
- The key constraint to enhancing the virtual capability of the surgical service is poor Wi-Fi connectivity related to the currently inadequate IT infrastructure in clinical areas.
- The hybrid theatre is too small to accommodate contemporary gantry equipment and is therefore underutilised.
- There are significant nursing workforce challenges due to the large numbers of junior staff combined with what was reported as insufficient CNC and CNE resources.

Opportunities

Service Expansion	• The surgical service will remain a predominantly Level 5 service. • The immediate priorities are to recruit to fill vacant medical positions including ENT. • There is potential to expand networked surgical services across the HMCN and consolidate the role of PMBH as provider of acute, complex and emergency services. Expansion of surgical services at Kempsey District Hospital would require fit out of the shelled theatre space. There is an opportunity to consider enhancing the role of Wauchope District Memorial Hospital to provide day orthopaedic services. • There is an urgent need to provide allied health after-hours/weekend services (physiotherapy, occupational therapy, speech pathology) to improve discharge efficiency and reduce bed pressure.
Model of Care	• Establish a 23 hour surgical ward • Enhance telehealth capability between Emergency Department's across the LHDs to prevent unnecessary patient transfers • Increase surgical HiTH virtual bed capacity • Enhance the role of Kempsey District Hospital for the provision of surgery. This would require operating theatre fit out and equipment upgrade, provision of after-hours medical cover and an increase in allied health support. • Assess the feasibility of providing short stay surgical services from Wauchope District Memorial Hospital • Expand provision of public outpatient clinics and outreach services through recruitment of additional staff specialists. • Address requirements for medical accreditation relating to workspaces and accommodation for registrars • Agree and document model of care across the surgical continuum including pre-admission, pre-habilitation and post discharge care

Service Expansion	• The surgical service will remain a predominantly Level 5 service. • The immediate priorities are to recruit to fill vacant medical positions including ENT. • There is potential to expand networked surgical services across the HMCN and consolidate the role of PMBH as provider of acute, complex and emergency services. Expansion of surgical services at Kempsey District Hospital would require fit out of the shelled theatre space. There is an opportunity to consider enhancing the role of Wauchope District Memorial Hospital to provide day orthopaedic services. • There is an urgent need to provide allied health after-hours/weekend services (physiotherapy, occupational therapy, speech pathology) to improve discharge efficiency and reduce bed pressure.
	• Consider implementation of future Leading Better Value Care initiatives such as Direct Access Endoscopy (streamlined referral and access).

7.1.3 Maternity and Special Care

Current Service Profile and Scope

PMBH provides Level 4 maternity and Level 3 neonatal services to the HMCN via a range of antenatal, peri-natal and post-natal services. The service is currently funded for five Medical Specialists comprising three VMOs and two Staff Specialist (1 SS currently unfilled). These services are delivered onsite, as inpatient, outpatient, ambulatory and consultation services. Some services are delivered via telehealth or virtual care with access to John Hunter Hospital.

The service has 19 maternity beds (funded for 15) and three birthing suites, two with baths, that are separated from the maternity unit and an additional consultation room that can be used for birthing when necessary. The Special Care Nursery (SCN) includes eight cots, provides immediate care for newborns over ≥ 34 weeks and ongoing care for back transfers of preterm and convalescing babies and has two NETS (Neonatal Emergency Transfer Service) cameras. Maternity beds are also used for non-maternity activity which was reported in 2020-21 as being 23.0% (479 separations/1,135 bed days) for women admitted for surgery or medical care, and 13.0% (267 separations/547 bed days) for women receiving gynaecology care.

Antenatal clinics (4 consult rooms) are available onsite although they are limited in space and a limited post-natal service is provided where women are visited in their homes. Gynaecology clinics are also provided. The outpatient care for obstetrics is provided within PMBH and there are up to six clinic rooms (one room is used as an office) used five days per week, this also includes the Gynaecology OPD sessions.

There is currently a limited postnatal service in Port Macquarie (i.e. 1 FTE to cover all births), with the majority of women receiving no postnatal midwifery care.

Planning has been undertaken jointly for the HMCN resulting in maternity and neonatal services being linked in a formal network arrangement with John Hunter Hospital to optimise safe, high-quality care for women and newborns with complex needs. PMBH is partnered with Kempsey District Hospital, a level 3 GP lead maternity Unit, and provides higher level of care for mothers and babies in the HMCN.

PMBH also receives neonatal back transfers for residents of Kempsey LGA. The number of births has been increasing over the last four years, see table below, and are averaging around 850 births per year. It is uncertain as to whether this trend will continue, as such there has been an assumption for future planning that there will be up to 1,000 births per annum at PMBH.

Table 29 – PMBH Reported Births

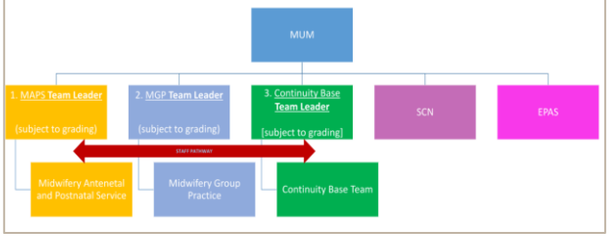
Births	2018-19	2019-20	2020-21	2021-22
PMBH	771	805	898	907

Source: Cerner PAS, Bed Summary Report, MNCLHD Inpatient Report - Performance Hub

The current maternity models of care include both high risk doctors clinic and low risk midwifery clinic. Both models of care are collaborative with women moving between the models as risk change and addressing the individual needs of the women. The transition to midwifery continuity of care models is planned to commence at the end of 2022.

The MNCLHD is committed to support the development and implementation of midwifery led continuity models of care across the clinical networks and this model is a component of the MNCLHD First 2000 Days Implementation Plan 2020 – 2025.

Figure 9 – Currently proposed Midwifery Continuity of Care model for PMBH, March 2022



Source: PMBH

This continuity model will result in current traditional antenatal clinics being replaced by a Midwifery Antenatal and Postnatal Service (MAPS) program at Kempsey District Hospital and PMBH and a Midwifery Group Practice (MGP) model (at PMBH), and function alongside a Continuity Base Team. A clear triage protocol has been developed to support the streaming of mothers into the most appropriate model. These models have good buy-in with the local midwives, and both work with the medical and midwifery PMBH model as this will still be an optional choice for women within the HMCN. These models will be supported by ongoing high risk medical clinics and strong medical governance consistent with the policies and guidelines of MNCLHD and NSW Health.

The Aboriginal Maternal and Infants Health Service (AMIHS) is already operating as a MAPS continuity of care model. The AMAPS model is offered at both Kempsey District Hospital and PMBH and provides clinical care in accordance with the mainstream continuity model, and continues to work in close partnership with both hospitals to ensure the needs of Aboriginal women are met locally and appropriately culturally. The Port Macquarie service runs from the Child and Family Health Services and the Kempsey service is funded through Durri Aboriginal Medical Service. The AMIHS acknowledges and builds on the awareness, knowledge and understanding of Aboriginal families and communities about pregnancy and child health.

The PMBS maternity service recognises that the first 2000 days of life is a critical time for physical, cognitive, social and emotional health. What happens in the first 2000 days has been shown to have an impact throughout life. Recognising that mothers and babies are inextricably linked, and planning needs to be undertaken jointly for both maternity and neonatal services.

Maternal health directly affects an infant's physical and psychological health. Strong relationships and linkages between maternity, neonatal and other specialist services are vital to quality maternity care.

There are private midwifery services available in Port Macquarie. A very small number of midwives offer a service very similar to MAPS. It was reported that there is good communication with the public maternity service.

Key Issues identified by Stakeholders

- Birthing numbers have significantly increased over the last few years, if the trend continues staff believe the number of births could reach 1,000 per year.
- There are also a very large number of outpatient reviews that occur within the birth suite environment, utilising the same space and staffing – it was reported this could be as many as 10+ women per day.
- Increasing numbers of mothers are presenting with more comorbidities, diabetes, high BMI and blood pressure.
- Current NSW Health Guidelines such as *Safer Baby Bundle, Care pathway for women concerned about fetal movements* and *Management of Pregnancy Beyond 41 weeks* increase frequency of review and interventions such as induction of labour.
- Many women from the Kempsey LGA have complex pregnancies related to co-morbidities as well as psychosocial issues. Due to these risk factors many women require transfer for birth at PMBH, and this is particularly difficult for Aboriginal women who then are no longer able to birth on country.
- Wi-Fi is poor therefore limits capacity to provide virtual care.
- There is a poor layout and lack of space for a contemporary maternity and birthing service, that is also not culturally appropriate for Aboriginal women when birthing. The service is currently located in a section of the hospital requiring significant maintenance and repair. The layout is very inefficient and with insufficient space for birthing, inadequate room for antenatal clinics and early pregnancy assessment care. Inpatient beds are used for care that could be more appropriately provided in a day assessment unit (currently Maternity utilises unfilled ward beds to complete required same day obstetric care - infusions, CTGS, extended reviews etc), and birthing rooms do not have ducted Air and Oxygen outlets for the neonatal resuscitaire to connect with so using bottle gas. Transfer or movement of patients to the operating theatre and paediatrics requires using PMBH 'main street' public corridor which is not private for women and families.
- The maternity ward also accommodates general patients at times, which is difficult for staffing.

- There is lack of office space for medical staff, the current space is built around a VMO model and with a move toward Staff Specialists there is no room to accommodate them. Office space for midwifery leaders is also limited. Additionally with the transition to midwifery continuity of care there is no available space to accommodate offices for these clinicians. Further, the new "intake" / referral phone line will need to be in a clinical space for the Midwives attending to the intake.

Opportunities

Service Expansion	• 'Safer Baby Bundle' is a best practice model that requires an increase in monitoring and outpatient visits with the continuity of care model playing a significant role. • The introduction of MAPS and MGP in the HMCN could support the establishment of satellite clinics at Laurieton and Wauchope in the future. • Establishment of a dedicated space for a day assessment unit to provide infusions, CTGS, extended reviews etc. is required. • There is an urgent need for office space for both medical and midwifery teams.
Model of Care	• The Midwifery Antenatal and Postnatal Service (MAPS) program is to replace a significant amount of antenatal and postnatal inpatient care. • Midwifery Group Practice (MGP) is intended, where women will have a known midwife through the antenatal, birthing and postnatal period, and be supported clinically by the Continuity Base Team. • The Continuity Base Team works alongside both the MAPS and the MGP. All three teams will function in partnership with the medical team to manage both low and high risk pregnancies.

7.1.4 Paediatric Services

Current Service Profile and Scope

Level 4 paediatric medical and surgical services will continue to be provided at PMBH with care provided in both an inpatient and outpatient setting. The Unit was newly built in 2014 and has 15 beds (funded for 8). The majority of inpatients are admitted as emergency (76%), in total around 110 to 130 children are admitted each month, and over the last five years to 2019-20 the overnight average LOS has been 1.8 days.

Table 30 – PMBH Paediatric Inpatients by Stay Type 2015-16 to 2019-20

Day Only Name	2015-16	2016-17	2017-18	2018-19	2019-20
Day only Separations	395	464	411	362	357
Overnight Separations	990	994	891	1,051	922
Overnight Bed Days	1,722	1,967	1,568	1,864	1,695
Total Separations	1,385	1,458	1,302	1,413	1,279
Total Bed Days	2,117	2,431	1,979	2,226	2,052
ALOS (overnight)	1.7	2.0	1.8	1.8	1.8

Source: FlowInfo v21. Excl. unqualified and qualified neonates, chemotherapy, renal dialysis and ED only

There are four Consultant Paediatricians - two staff specialists and two VMOs (see patients in their private rooms). Four days a week a private clinic is provided in the hospital, the patients are bulk billed, and the service is run out of two outpatient clinic rooms for medical and behavioral and follows ups.

The service also provides ambulatory review, observation, clinical review from ED, iron infusion, observation for immunisation, device care issues and follow-up from chemotherapy. A patient lounge is used an ambulatory care area.

While no adult patients are admitted to the ward young adolescents (17 to 18 years of age) if in high school and considered appropriate for admission are accepted on a case-by-case basis.

The HMCN Youth, Child and Family Team provide a consultant liaison resource and while available for extended hours there is no 24 hour coverage. Ward staff are assisted by nurse / after-hours mental health worker for children admitted for a mental health condition and have access to a consultant Psychiatrist. Child and Adolescent Mental Health Service (CAMHS) beds are available at Lismore (6 beds) and Newcastle. CAMHS beds are part of a statewide networked service.

Key Issues identified by Stakeholders

- The paediatric ward is not a gazetted mental health unit. Some children are admitted if it is deemed safe to do so although the ward has no secure or safe mental health bed spaces from an infrastructure perspective. Finding an appropriate place for children with psychosis and behavioural issues is problematic.
- There are increasing numbers of preterm babies and increasing pressure to receive back transfers of neonates earlier from John Hunter Hospital. This requires 24 hour onsite coverage, a significant increase in neonatal trained nursing staff, and more training around ventilation/longer term care.
- Virtual care is an unsatisfactory modality for paediatric care as most care needs are provided through observation. It is very hard to maintain engagement, conduct an overall physical assessment (measure growth), and to pick up emotional and development issues etc. virtually.

- There is no paediatric HiTH, although stakeholders considered that this would be a good model for implementation in the future.
- There are not enough allied health staff. There is only one paediatric dietician who is currently on leave which is very unsuitable with babies coming back to PMBH from John Hunter Hospital who require feeding for months.
- Good follow up is required for first two years of life from allied health staff, and while there are good relationships, there is not enough support. There is an increasing gulf between public and private allied health providers. Families struggle to access privately provided allied health care.

Opportunities

Service Expansion	• Paediatric HiTH would be good for the child, particularly those with respiratory illness or who require IV treatment but needs good selection criteria and an appropriate lead consultant. It would shorten length of stay even further. • Ambulatory care space and dedicated space collocated with outpatients (ideally on ward) is required.
Model of Care	• Formalised Ambulatory Care model.

7.1.5 Intensive Care Services

Current Service Profile and Scope

The ICU operates as a closed Unit but works collaboratively with the medical teams to admit patients under their specialty, although the final decision made is by ICU. The service at PMBH is a 16 bed unit (funded for 10) that is linked to Kempsey District Hospital to assist patients under closed observation. The service will continue as role delineation Level 5 service.

In 2018-19, there were over 71,000 ICU / HDU hours (equivalent to approximately 11 beds of activity). Of this, approximately six beds worth of activity was for patients aged 65 years and over. ICU hours included (in order from highest to lowest hours) for respiratory medicine, tracheostomy, general medicine, colorectal surgery, vascular surgery, orthopaedics and cardiology.

Key Issues identified by Stakeholders

- Access block is increasingly becoming problematic although this is mostly for getting patients out to the ward. In the last six months nurse and medical staff issues have meant that there have also been issues getting people into the ICU. Exit block has resulted in 30-40% of discharges occurring out of hours.
- Permanent roles are able to be filled, however temporary vacancies are more difficult, and increasingly there are staff shortages due to COVID-19, influenza and injuries. The service is currently down a Registrar, so has had more reliance on locum support (which is becoming expensive and unreliable).
- The Medical Emergency Team (MET) is not a dedicated service and requires support from the ICU. Most calls are simple and can be done by junior staff, for example low blood pressure, with ICU reporting that 90% of MET services are non-ICU (but ICU has to provide the Doctor).
- Post-operative surgical patients (for example vascular patients) are still admitted to the ICU, but given there are more contemporary approaches and newer / quicker procedures there is a need to update some of these pathways
- Many Kempsey District Hospital patients transferred from the Kempsey District Hospital Close Observation Unit (COU) could be treated locally with appropriate medical specialist support through telehealth and telemetry when required
- ICU staff are often not involved in discussions regarding changes in medical or surgical services and in particular those that impact ICU
- Previously the service had an education room, which is now used by everyone but ICU. Simulation training is very valuable for ICU and medical staff, and as such it would be good to have access to this type of training.
- Some haematology falls back to ICU after hours and weekends. With the expansion of VMOs in that specialty area there should be an opportunity to provide a 24/7 haematology service.

Opportunities

Service Expansion	• Commence telehealth service provision for Kempsey District Hospital, providing support on daily rounds with local staff. • There are opportunities to upskilling ward staff to assist them to better manage their patients within their area. E.g. epidurals are currently managed in ICU, and going forward these procedures could be provided within a high acuity surgical ward.
Model of Care	• No change to current model is proposed.

7.1.6 Emergency Services

Current Service Profile and Scope

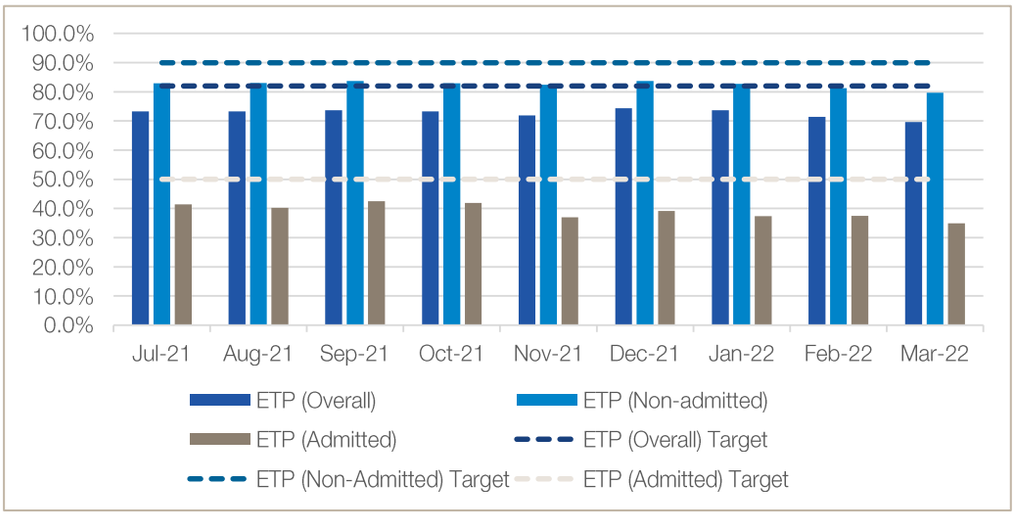
PMBH ED has the capability to manage the complete range of emergency presentations. It is the tertiary rural referral facility and trauma care centre for the HMCN, and functions at a role delineation Level 5. Service delivery within the ED is based on a multidisciplinary team model, led by senior medical officers and senior nursing staff. There are a range of nursing led initiatives such as ASET, Rapid Assessment and Clinical Initiatives. Patients are treated in different streams within the ED according to acuity, triage category and clinical requirements. These include:

- Resuscitation - three bays (1 paediatric)
- Adult Acute – 16 acute beds inclusive of five isolation
- Emergency Short Stay – eight beds. The Short Stay Unit has a 24 hour LOS and a formal criteria for admission
- Paediatric Acute – four (unfunded)
- Fast Track - (3 Rooms plus one procedure room) one Medical Assessment room, one Nursing assessment room, one Procedure and a 2nd assessment room. The team comprises one Senior MO/ FACEM and a senior RN for a model that supports quick patient turnover; the patients go to a separate waiting area; patients seen are lower acuity. The area operates two shifts a day (only one is funded).

There is also a respiratory assessment area seeing COVID-19 / respiratory flagged patients, from an unopened paediatric area. There are also four consultation rooms and a multipurpose room predominantly used for mental health patients. There is no satellite CT Scanner in the ED although there is timely access to the CT in the Imaging Department which is physically next to the ED.

Over the last two years the ED has reported at least 130 presentations per day and on average around 25% of those presentations are for people over the age of 70 years. The increase in ED presentations has put significant strain on the ED which is being reflected in the Emergency Treatment Performance (ETP) Report - during 2021-22 PMBH did not to meet Triage Benchmark targets for Triage Category 2 and 3, or to admit patients within four hours as shown in the ETP graph below and it should be noted that at the writing of this CSP (July 2022), PMBH was running at Escalation level.

Figure 10 – PMBH ED Emergency Treatment Performance Report July 2021 – March 2022



Source MNCLHD 2022 ED Activity Report (March 2022)

There is no telehealth provided from the ED. There are cameras in the resuscitation bay that are used for NET retrieval but there is no requirement to offer outreach services to Kempsey District Hospital or Wauchope District Memorial Hospital as they have access to their own staff or if required PMBH will send staff to the facility.

There is currently a project being developed by the PHN to improve access to GPs in the Port Macquarie area that uses a green card system to support patients to avoid representation to the ED (but instead receive priority access to a GP).

Key Issues identified by Stakeholders

- ED presentations have been increasing significantly, and in 2021-22 around 48,000 presentations to the PMBH ED are expected. While physical expansion is required to meet the increasing demand, the ED is also hindered by its overall layout. More recently it has been difficult to achieve ED benchmark performance targets particularly due to an inability to discharge patients to an inpatient bed. There is a significant amount of bed block in the hospital, and this has been the case for quite some time.
- There are several physical and functional issues associated with the layout of the ED, including:
  - The ambulance triage area space is very open (not private), small and located directly outside the resuscitation area (with only a curtain dividing these spaces)
  - The triage public entry side waiting room is too small
  - Resuscitation bays are awkwardly shaped and feel too small (the ED is only funded to operate two Resus Bays, however the third bay is often used)
  - The mental health safe assessment room is set up as multipurpose room and not able to be used appropriately due to its poor physical layout and location in the ED
  - Acute bays work well, however half of the bays are not used effectively as they do not have good observation from the main nursing desk. There are only four single rooms, and with increasing presentations the ED requires additional
  - The ED Short Stay Unit functions well, however, is located a long way from the ED acute bays and consequently it is difficult to staff both. Fast track, which requires consult rooms, is even further away.
- Staffing shortfalls were also highlighted as:
  - There is no social worker in the ED, there is access to a limited on-call service only
  - There is limited coverage by a Physiotherapist who attends the ED for consults
  - Stakeholders reported that they are unable to staff the Early Pregnancy Assessment Service (EPAS) in ED and that they are currently looking at removing the service
  - There is no full time Aboriginal Liaison Officer in the ED (only available two days per week) although there are two patient experience officers who both identify as Aboriginal
  - There are medical recruitment issues (there are open vacancies). Recently there have been staffing enhancements in the ED although these have only been temporary positions
  - The NUM works the floor and as such management duties are unable to be completed. There is no dedicated CNC to assist with tasks such as governance-related activities for the ED, although the ED does have access to the Critical Care CNC. This means that ED policies do not get updated as they should. There is no Nurse Practitioner in the ED and given the size and increase in demand stakeholders considered that it would be appropriate for one to be appointed. There is a significant amount of education for the CNE to manage, and this will increase more as the Emergency Protocols Initiating Care (EPIC) is further rolled out in the ED.

- There appears to increasingly be a number of presentations to the ED from the “worried well”. These are GP-type presentations, but they are either discouraged from visiting a GP (for example because of their cough) or are unable to get an appointment with their GP (for example so they present for a prescription)
- PMBH is a rural tertiary referral hospital, and ED services should be reflective of that role.

Opportunities

Service Expansion	• Implement a Nurse Practitioner model to assist with ED diversion and streamline patient care • Physical expansion is required to meet growth in demand • Increase allied health positions and the number of Aboriginal Liaison Officers in the ED.
Model of Care	• Introduce Aboriginal Health Practitioner Officers in the ED.

7.1.7 Renal Services

Current Service Profile and Scope

Renal services include the care of patients with acute renal impairment and chronic kidney disease (CKD), acute and maintenance dialysis, pre transplantation care, dialysis education and renal supportive care. There are two public renal dialysis units in the HMCN). PMBH is the renal services hub for the HMCN renal services providing support to outlying hospitals such as Kempsey District Hospital Dialysis Unit, and those on home dialysis.

PMBH has a 12 chair unit (funded for eight) that operates six days a week and two sessions per day (although for the last twelve months the chairs have been running at surge capacity with an overall growth of 24%. As at 30 June 2022 there are 47 patients in centre on haemodialysis (HD), eight patients on transplant list and two patients awaiting Peritoneal Dialysis (PD) catheter insertion. Under the current delivery model, they have capacity for 48 patients using the 12 physical chairs. The current nursing ration is 1:4 requiring an increase in 1:3 due to increased acuity of patients.

The Kempsey District Hospital service has a 10 chair satellite unit and runs two sessions Monday, Wednesday, Friday and then a daily session on Tuesdays, Thursdays and Saturdays. As at 30 June 2022 there are 26 patients on HD, one patient awaiting transfer from PMBH, one patient awaiting home training for HD and one patient currently being trained for home PD (although there is limited support available). The Centre has the capacity to treat 40 patients under their current delivery model. The current nursing ration is 1:4.

While there are no current statewide renal projections to 2031 or 2036, based on the last 15 years of activity to 2021 for HMCN, the average annual growth rate for In-Centre HD patients has been 7.7%, which in terms of patients represents a 100% increase from 2021 (62 patients) to 2031 (130 patients).

Table 31 – Actual and Calculated Average Growth Rate for HD Patients in HMCN 2021 - 2036

HMCN	2021	2027	2031	2036	AGR
Total Incentre HD	62	97	130	189	7.68%

Source: MNCLHD (pre and post COVID-19) Renal Dialysis Services provided June 2022

Across MNCLHD, at the end of 2021, 15.0% of the total renal dialysis patients were on home dialysis, for HMCN that was a total of 17 patients – five on HD and 12 patients using PD. NSW Health suggest for a rural area a target should be around 40%, which is an area for improvement. An outreach nurse educates and supports patients to remain in the home setting, attending to them in the home, via phone or remote patient monitoring.

PMBH renal service provides an acute care service to ICU and CCU and inpatients in other wards. Ideally, the patient comes to the Unit, if not the team attend for dialysis in ICU or CCU and provide a nurse who is on call Monday to Friday. There is no acute ward service at Kempsey District Hospital and unwell patients are transferred to PMBH for dialysis.

The Renal coordination team is based at PMBH, servicing the HMCN by providing case management education and support for patients referred by the Nephrologists to a) the CKD/pre-dialysis pathway, b) renal supportive care and c) kidney transplant preparation. The current case load includes 73 patients at various stages of kidney disease with 18 patients on the transplant preparation list and 32 patients on renal supportive care. The coordination team includes 1.15 FTE nurse case manager as well as 0.7 FTE of a Social Worker providing both inpatient and outpatient care, one dietician two days per week and a Supportive Care dietician one day per fortnight.

HMCN Renal Services Staffing

In order to maximise resources, the majority of staff in renal services work across the HMCN. This allows for flexibility of staffing and continuity of care as patients are also treated at various sites across the Clinical Network depending on acuity and home location. Table 32 summarises staffing by role, full time equivalent and base location.

Table 32 - HMNC Renal Services staffing

Role	FTE	Location
Director of Nephrology HMCN	VMO attends PMBH M/W/F for clinical rounds, contactable otherwise for consult – Network role	PMBH
Renal Physician/General Physician	0.5 FTE Renal and 0.5 FTE General Physician	Kempsey District Hospital
Nursing Unit Manager Level 2 HMCN Renal Services	1.0 FTE – Network role	PMBH
Nursing Unit Manager Level 1	1.0 FTE (full time clinical load)	Kempsey District Hospital
Administration Officer Level 4	0.9 FTE – supports both PMBH and Kempsey District Hospital	PMBH
Clinical Nurse Consultant Level 2	1.0 FTE – Network role	PMBH
Renal Case Manager (CNS2)	1.2 FTE – Network role	PMBH
Renal Outreach Nurse (CNS2)	1.0 FTE – Network role	PMBH
Social Worker Level 4	0.7 FTE – Network role	PMBH
Dietician Level 4	0.4 FTE – Network role	PMBH
Dietician Level 3 - Renal Supportive Care	0.1 FTE – Network role	PMBH
Registered Nurses	10.5 FTE – Network role	PMBH and Kempsey District Hospital
Enrolled Nurses	0.6 FTE – Network role	PMBH and Kempsey District Hospital

Source: HMNC Renal Department

Key Issues identified by Stakeholders

- Increased demand in renal dialysis services is expected in the future due to the evidence that a considerable proportion of the population has undiagnosed and untreated early to mid-stage renal disease. This demand is driven by ageing of the population, lifestyle choices and behaviours, the increasing prevalence of Type 2 diabetes (Diabetes Mellitus), and related chronic health conditions, and improved early kidney disease detection.
- Demographically, there are increasing numbers of elderly requiring support and very few young people receiving care as they are often transplant recipients.

- A Home Dialysis Training Unit has been built at Kempsey, however funding to run service has not been obtained. PD is the best option for home dialysis as it is much gentler, easier and less time consuming to train patients and there are senior nursing staff available locally to support these people.
- There is a need to increase permanently funded incentre HD capacity with a sustained surge occurring over the past 12 months indicating that increased medical and nursing support is required. Nursing staff ratio requires updating to 1:3 to safely manage acuity associated with Level 5 hospital service.
- PMBH caters for a high number of Aboriginal patients, however there is no dedicated Renal Aboriginal Liaison Officer (ALO) to participate in the renal multidisciplinary team and support patients in hospital or in the community setting.
- Renal supportive care funding is insufficient to provide adequate support across the network or engage palliative care physicians as per best practice recommendations. In order to meet the 2022/23 service agreement, nursing and allied health resources from other key renal programs such as CKD pathway case management and transplant workup are being redirected, potentially reducing the other service's effectiveness, including the ability to prevent or reduce acute hospitalisation.
- Recruitment of experienced specialist nursing staff is difficult with two nurses recently recruited from overseas. While there is a CNC, the position primarily supports the nephrologists in managing clinical risk, supports research and best practice and provides acute care advice across the Network. With increasing acuity and caseload, the capacity to provide formalised nurse education and competency assessment is extremely limited and once again takes resources away from other key areas. A dedicated renal nurse educator is required to provide consistent support and formalised training for new graduate nurses, allowing staff to be home grown. Models of care including the use of Assistants in Nursing and technicians in the incentre HD units could also be further explored.
- There has been 0.2 FTE enhancement to allied health over the last 15 years despite growing caseloads, resulting in increased length of stay and less patients treated in the community setting.
- An enhancement of administration officer hours is required at PMBH and Kempsey District Hospital dialysis units. In addition, the Kempsey District Hospital Unit has no onsite administrative presence with limited support from the AO4 who is located at PMBH renal unit. There has been a significant history of workplace health and safety issues associated with this lack of resourcing.
- No additional nursing hours or support has been provided to Kempsey Dialysis Unit in the past 15 years despite a 35% growth in patient numbers since 2016. The Nursing Unit Manager position was created from existing clinical nursing hours with no time allowed for nursing management duties such as rosters, performance appraisals, quality assurance etc.
- Telehealth is a good model but many of the patients are quite elderly (80 years plus) and therefore not very computer literate; web access is also difficult with some patients not having enough data capacity or internet connection is poor or too unstable to support the *myVirtualCare* platform.
- Dedicated Junior medical staff are required to support the increasing nephrology workload. The junior renal medical team is currently shared across five consultants. HMCN renal services currently doesn't have a formalised network with a tertiary renal service with patients being transferred to multiple tertiary sites across Sydney and Newcastle for transplantation. A formalised arrangement with Prince of Wales Hospital (POWH) for after -hours medical support and leave relief is currently being negotiated including hosting their transplant team twice per year. The cost of providing this service will be outweighed by the benefits to patients and medical teams, including a significant reduction in clinical risk for out of hours, strengthen relationships around medical support and prevention of burnout, participation in joint MDTs, ongoing continuing education for nephrologists, and development of junior medical staff who rotate between POWH and PMBH.
- Access to dedicated renal inpatient beds remains problematic at PMBH. Original agreement was that Ward 1C would be the renal ward, however this has not occurred consistently with many patients in outlier beds across the hospital. This poses an increased clinical risk that often results in prolonged stay in hospital. The commitment to dedicated renal inpatient beds would

also provide an opportunity for medical and nursing staff to develop their renal assessment skills and identify specialised needs for renal patients.

Opportunities

Service Expansion	The renal service at PMBH will remain at a role delineation Level 5 and Kempsey at Level 3. • Establishment of home training unit at Kempsey; increase the rate of home dialysis with initial focus on PD • NSW Health suggest for a rural area a home dialysis target should be around 35%, therefore a staff profile should be developed to increase access to home training and support • There is increasing demand to provide outpatient nephology clinics at Kempsey • A formalised network arrangement with a metropolitan tertiary service (POWH) is required, supporting the outreach team to provide out of hours medical support and leave relief. • Increased allied health and renal supportive care is required to support increasing demand, implement preventive programs and support patients on home therapies. • Consideration should be given to the feasibility and appropriateness of introducing dialysis technicians/AINs to support incentre HD staffing and prioritise home grown renal nurse training with the support of a dedicated renal nurse educator. • Finalisation of the formal agreement with POWH to support kidney transplant services • Continue to increase access to incentre HD services through the staged funding of dialysis chairs at PMBH and Kempsey District Hospital. • Additional support staff is required for Kempsey District Hospital renal unit including administration hours and support for NUM 1.
Model of Care	Future implementation of a Nurse Practitioner model for CKD to: 1. Increase awareness of early CKD and improve management in people with stage 1-4 CKD 2. Assist primary care with management of early CKD 3. Assist timely referral of CKD to nephrology services and for management of complex CKD

7.1.8 Cardiac Services

Current Service Profile and Scope.

Cardiology at PMBH comprises an array of preventative, screening, diagnostic, treatment and rehabilitative services provided as a role delineation Level 5.

The Cardiology Department comprises an eight bed Coronary Care Unit (CCU). There is a 24/7 cardiology on-call service that covers PMBH and Kempsey District Hospital. There are currently three VMO Cardiologists that facilitate the 24/7 cardiology on-call service with the support of a locum VMO Cardiologist. The aim is to recruit a 4th VMO Cardiologist so as to provide a one in four Cardiology roster.

The Cardiac Catheterisation Laboratory (CCL) provides diagnostic and interventional care with six recovery beds. The CCL operates in accordance with CSANZ guidelines with procedures undertaken by two Interventional Cardiologists on Monday, Wednesday and Thursday of every week. There is primary and rescue PCI capability Monday 8am to Friday 5pm. Outside of these hours thrombolysis is utilised for treatment of STEMI patients where appropriate. A formal Memorandum of Understanding (MoU) exists with POWH for complex PCI support and urgent cardiothoracic referrals. Cases can be reviewed remotely so as to facilitate patient management and transfer.

Transoesophageal echocardiogram (TOE) procedures and elective synchronised cardioversions (ESC) are performed in the TOE procedure room within the Cardiology Department on Tuesday mornings. An Anaesthetist is in attendance for the duration of the list. The six CCL recovery beds are utilised for TOE and ESC procedures.

A transthoracic echocardiogram and stress echocardiogram service is available from within the Cardiology Department six days a week (Monday to Saturday). Cardiac technicians are available to provide pacemaker and defibrillator checks Monday to Friday.

A Cardiology Advanced Trainee (AT) is seconded from POWH for six-month rotations. Two VMO Cardiologists have RACP Supervisor Accreditation so as to facilitate the Cardiology AT term rotations. There is also a Cardiology Basic Physician Trainee (BPT) and a Cardiology JMO assigned to the Cardiology Department.

Cardiac rehabilitation is currently in high demand with existing resources unable to meet the needs of the cardiac patients in the community. Translational research opportunities including use of smart phone applications are exploring ways to best utilise existing resources however there remains a clear need for additional funding to support cardiac rehabilitation services.

Key Issues identified by Stakeholders

- Recruitment of a fourth Cardiologist so as to consolidate a one in four on-call cardiology roster.
- Establish a step-down Cardiology ward. KPI's including LOS and readmission rates are enhanced with specialty cardiology nursing care.
- Expand existing operational days for procedures including TOE and CCL procedures to occur on Fridays so as to reduce LOS over weekends.
- There is overwhelming community expectation to establish a pacemaker implant service at PMBH.
- There is a requirement to fill key vacant nursing positions (for example Research nurse). This is made difficult by skills shortage in key areas.

Opportunities

Service Expansion	• Ensure primary and rescue PCI capabilities Monday to Friday. Key component is to ensure Cath Lab staff funding. • Commence pacemaker implant service within the MNCLHD (see attached model). • Expand existing operational days for procedures to reduce LOS for patients waiting on TOE and CCL procedures (for example additional inpatient CCL list Fridays and additional TOE list on Fridays).
Model of Care	• Initiation and implementation of pacemaker implant service.

7.1.9 Rehabilitation and GEM

Current Service Profile and Scope

Medical services also include an Acute Geriatric and Evaluation Management (AGEM) ward and differs from rehabilitation in that the objective is to prevent mobility decline while in hospital. Palliative Care is provided.

There are three models of care:

- Delirium MoC
- GEM MoC - slow stream rehab for geriatric patients comprising weekly multidisciplinary team meetings to look at patient needs, work with the patient to develop goals, for example the goal may be aiming to get back home with minimal assistance. Along with medical and nursing staff the ward has access to a physiotherapist, Diversional Therapist and Occupational Therapist.
- Psychogeriatric MoC – planned to be established in the future with patients currently housed in the geriatric ward. Patients have access to a Psychogeriatrician one day per week and are referred to the Psychogeriatric Nurse Practitioner.

There is a Psychogeriatric NP at PMBH who works with patients with depression, dementia, delirium or behaviours related to dementia. Over the last few years referrals have increased significantly although every patient referred does not necessarily get seen. To access care the patient is triaged and undergo a physical assessment and cognitive screening following which recommendations for care are determined. A Psychogeriatrician comes to the ward once a week to do rounds and see higher acuity patients.

There is NP for Aged Care and Hospital Avoidance. The NP works closely with the aged care facilities and works to avoid them having to be transferred to the ED. Geographically, the NP covers quite a large area in the Clinical Network. The NP contacts each facility early each morning to find out if there are any residents with deteriorating health issues from overnight and also liaises with the aged care community advisors. Demand for this service continues to grow.

Key Issues identified by Stakeholders

- The LOS for a number of these patients are quite long due to delayed access to nursing homes – currently a shortage due to lack of staff and facilities having to close beds; and patients needing National Disability Insurance Scheme (NDIS) support and being unable to have requirements in place before discharge
- While the AGEM is a medical ward the patients admitted have high and varied needs. AGEM tend to get all falls risks, people with dementia, people with delirium and quite elderly patients
- The ward is often bed blocked because “half the ward” currently is waiting for nursing home placement; don’t have enough staff to provide specials. There are eight close observation beds, but the rest of the beds are spread out and too unsafe for falls risks or delirium patients
- RACFs were at critical levels before the investigations and outcomes of the Inquiry – the Royal Commission had done a lot of damage to maintaining staffing in RACFs and this has been exacerbated by COVID-19
- PMBH is seeing increasing patients requiring guardianship and there are multiple steps involved, as such it takes a long time to work through even before an application can be lodged
- Limited availability for psycho-geriatrician to review (comes once a week). LOS increasing because they can only see patients three days a week, also patients may be waiting four days to see an OT particularly if they do a home visit to check the patient’s living environment is safe - the OT is out of the hospital for half the day
- Aged care facilities have poor workforce levels, high turnover of staff, providing education doesn’t necessarily mean the staff will stay

- Older people are going into aged care because there is nowhere else they can go if they need assistance or support and they are unable to get packages; they need help for them stay at home until a package comes up and until they are approved for a package the default is a long hospital stay
- There are very limited community services; even if they can be discharged early there is nothing to discharge to – until they get a package there is no support. ACAT don't do an assessment until they are well, then waiting for package and they deteriorate and end up back in hospital in poor condition – it is just an ongoing cycle
- Because of the limited available beds in RACFs, management can be very selective with who they accept. Connection between hospital and aged care is good, but when PMBH dictate to them who they should take, "*their barriers go up*"
- Long stay patients awaiting residential accommodation are often those with a new placement and often need a higher level of care; the existing RACF residents who come in and out of hospital should have discharge planning completed and the RACF need appropriate notification before their return
- Noticeable and increasingly functional decline of older patients due to extended lengths of stay in hospital which could be reduced by more allied health or appropriately staffed mobility enhancement program
- GEM model of care involves staff mobilising patients that is getting them out of bed going to meals in the lounge, get involved in diversion therapy. This is harder in more acute wards, the nurses do their best but this becomes difficult to implement as acuity and workloads are increasing
- RACFs invite the families in, teach the families to assist, set up food, take them for walks, start taking them out when they can and promotion of friendship circle. This has all stopped following COVID-19 and the reported staff shortages at the RACFs

Opportunities

Service Expansion	• Expansion of inpatient Rehabilitation and Palliative Care capacity at Wauchope District Memorial Hospital • Introduce Aboriginal Health Practitioner Officers in ED, Palliative care, Aged Care and Chronic Care
Model of Care	• Model of care for frail aged

7.1.10 Mental Health and Drug and Alcohol

Current Service Profile and Scope

MNCLHD has three acute adult inpatient units and one rehabilitation unit. The inpatient mental health units operate as a single service for the District resulting in consumers sometimes requiring admission and transfer between units based on needs and severity of illness. Mental Health Services at PMBH are provided at a role delineation level 5. The service model delivers care aligning with the key principles of *Recovery oriented approach* and *Trauma informed care*.

Port Macquarie Mental Health Inpatient unit (Ward 1A) is a 12 bed declared mental health inpatient unit that has the capability to segregate four acute beds to support the care of patients who have different care and observation needs. The bed configuration can comprise 2-4 beds as high observation, 8-10 beds low observation and two beds that can be used as swing beds. There are also 12 beds that have not been commissioned but have been used during COVID-19 or as decanting space during refurbishment, if required by the hospital. Health care staff include nursing staff, psychiatrist, psychiatric registrar, a junior medical officer, social worker, activity officer, health services assistants and administrative workers.

Kempsey Mental Health Inpatient Unit is a 10 bed voluntary unit. The Unit operates as an integrated service with the Port Macquarie Mental Health Inpatient Unit and patients who are declared under the Mental Health Act are admitted to the Port Macquarie or the Coffs Harbour Base Hospital inpatient unit. Kempsey District Hospital also has access to MHECRAP (Mental Health Emergency Care Rural Access Program) although it is reported that the service is not well used locally.

Specialist child and adolescent mental health inpatient units are provided at Lismore Kamala Unit and Newcastle Nexus Unit.

Mental Health acute care services across MNCLHD run with 100 consumers on the board at one time currently PMBH has 160 consumers and Kempsey District Hospital has 80 consumers.

Drug and Alcohol (D&A) Services are based at Port Macquarie Community Health Centre with access to counselling, opioid treatments and outpatient withdrawal management services. The preference of the service is to remain off the hospital campus. The service works closely with PMBH ED in regard to notification of drug use in the community with high potency and impact on presentations. The services use telehealth quite well and is seen as an important modality in the service.

The D&A service works collaboratively with clients and where appropriate other service providers such as mental health, court diversion programs, child protection and domestic violence agencies, accommodation and rehabilitation providers.

Key Issues identified by Stakeholders

- The mental health safe room in PMBH ED is not great, there was not enough consultation with MH clinicians during construction. The room has been put near an exit which is not appropriate, and it is noted that there is no need for dual access in safe assessment rooms (only treatment rooms)
- There is often criticism from other ward areas around some patients not accepted by MH staff. For example, a delirium patient needs a medical ward not mental health as delirium is not driven by psychological issues
- Beds are required for medically unwell MH consumers as there is often a struggle with these in the District and State. For example, chronically ill people living with mental health issues face poorer physical health outcomes, shorter lifespans and more frequent experiences of stigma and discrimination and there is really nowhere to appropriately treat them currently, as a result they are provided suboptimal care in a mental health ward (no drips, monitors etc.) or over treated in medical wards. There is a real need for medically trained MH clinicians
- Concerns raised about the amount of 'specialling' that goes on in the hospital
- Ongoing issues with transport particularly for people requiring MH intensive care as they are intubated while waiting and when transported to care with the closest Mental Health ICU at Newcastle (Mater Hospital)

- There are no inpatient withdrawal services within the LHD, there are a couple of rehabilitation centres in the community but generally the person needs to be detoxed
- Gaps identified through consultation included Older Persons Mental Health Services and accessible youth, child and adolescent mental health services

Opportunities

Service Expansion	• A MNCLHD Mental Health Plan is currently under development. This will inform any service expansion or changes in model of care within the HMCN

7.1.11 Outpatients and Community Care

Current Service Profile and Scope

There are dedicated outpatient clinics within PMBH comprising of consultation and treatment rooms along with a gym space (indoor and outdoor) to cater for adult and paediatric patients and a small number of offices. The consult and treatment rooms are used to conduct Fracture/Orthopaedic, Osteoporosis, Osteoarthritis, Surgical, Stroke, Paediatric, Diabetes Early Start and various medical and allied health clinics/services. Community services are provided by staff located at the Community Health Centre (Morton Street). These services target hospital avoidance, substitution, and prevention and facilitate early discharge from the hospital and therefore patient flow. It is noted that some community staff work from PMBH.

The range of outpatient and community care services available within the HMCN include Physiotherapy, Occupational Therapy, Podiatry, Dietetics, Social Work, Speech Pathology (children only), HiTH (although provided from a separate space in the hospital), and community services comprising Wound Care, Diabetes, Renal Diabetes, Palliative Care, Stomal Therapy, Aged and Extended Care (Transitional Aged Care Services), Aged Care Assessment Team, Respite, Audiology, Sexual Assault, Child and Family, Women's Health and Care in the Community services. Many of these services have no weekend service and they also support Kempsey District Hospital and Wauchope District Memorial Hospital and extend their services to outreach Community Health centres of Wauchope, Camden Haven, Kempsey and South West Rocks across the HMCN.

Care in the Community Service covers the areas of:

- COVID-19 Care including therapeutic treatments
- Enhancing Community Care (Chronic Care Allied Health Admission Prevention Services)
- Planned Care for Better Health (Preventing Hospital Readmissions)
- Emergency Department to Community (Admission Prevention).

HiTH has two pathways, either a direct admission as inpatients or via non-admitted patient referral. These referrals may also come from other hospitals such as POWH, from GPs or from the ED. HiTH at PMBH is a seven day a week service and staffed from 7am to 9pm which allows for twice daily visits. The doctor (who is shared with the MAU) is available until 4.30pm Monday to Friday and the inpatient medical teams are utilised on the weekends as required. The HiTH incentre space comprises two beds and one chair. Patients can be admitted up until 7pm. HiTH is also provided from Kempsey District Hospital as an eight hour service seven days per week and is nurse led seeing five to six patients per day.

Key Issues identified by Stakeholders

- There is no Central Intake and limited administration staff in outpatient reception, which serves as a barrier to getting a booking. There is a phone voicemail system, and individual clinicians have an application within the electronic medical record system for scheduling an appointment, but this is not visible to patients. The service often receives inappropriate referrals which the community health team is required to correct. Another benefit of Central Intake is that inpatient staff will understand the outpatient/community capacity.
- There is an outpatient administration section, but it is disjointed physically from the clinic and treatment space locations and not in a central location. Patients become lost on a daily basis and require assistance from staff. There is no COVID-19 concierge service so patients must travel quite a distance to the outpatient area and with some being quite frail it is a challenge to access the area.
- There are no dedicated outpatient clinic rooms available, services such as dietetics borrow other clinic rooms (when, and if, they are available).

- The inpatient service typically emails or leaves message to coincide with faxed or emailed written referrals (especially after hours when the service is not manned) to community and then move on, “wiping their hands of the patient”. Stakeholders stated that they (the staff who are reviewing and discharging patients) have no idea that there might not be capacity to take on a patient as soon as possible (they may require care within 24hours after referral/discharge) after being referred, the patient may be at home expecting visit, but no one can see them because the team is already clinically fully allocated.
- Access to care is currently managed through a prioritisation process for most services. Service provision, particularly for allied health, is restricted to responding to priority one and inconsistently getting to all the P2s, who are patients that are often able to be discharged after 24 hours and if not seen they cannot be discharged.
- Additional staff to begin discharge planning at an earlier time in their admission is required, and to support their functional improvement. This would reduce deconditioning, address patient safety concerns, reduce the risk of pressure injury, and falls prevention.
- Stakeholders reported seeing new models of care are introduced without the correct resources (according to what the evidence suggests).
- Services are reliant on the close relationship between outpatients and students from universities. This means getting the students to churn through waiting lists in an effort to manage demand. Also, there is very limited access to private occupational therapy and speech pathology, and the community are unable to access those services in time even if they can afford them.
- Dietetics have no paediatric service for either inpatients or outpatients, therefore children transferred back from a specialist tertiary centre have limited follow up and it is provided by an adult dietician who may not have paediatric expertise.
- There are no adult Speech Pathology outpatient services available in the Hastings Macleay Network. This is a huge gap compared to other Allied Health services. Patients requiring follow up for dysphagia and communication post discharge are encouraged to privately fund Speech Pathology, however, this is not an option for many patients. Patients often have lengthier hospital stays to optimally manage their dysphagia/communication prior to discharge, with medics aware of this service gap post-discharge. Dysphagic patients that do not receive appropriate follow up in the community are at significant risk of readmission to hospital with complications such as aspiration pneumonia.
- The only Speech Pathology outpatient service currently available is via MNCCI for Head and Neck Cancer patients.
- There is no ENT service at PMBH and minimal ENT outpatient services also. Patients requiring ENT follow-up require transfer to tertiary hospitals.
- Regarding allied health, at PMBH there have been insufficient enhancements particularly in the outpatient space. Stakeholders identified that recruitment processes are very inefficient, for example project roles are funded on a 12 monthly basis and there is no way for those contracts to roll over, leading to high turnover and recruiting to those positions on a yearly basis. There is difficulty attracting casual staff to support a flexible work arrangement, also people are being seconded out for projects over a long term basis and there has been an inability to backfill.
- There is a need for lactation consultancy through an outpatient clinic. There are several women re-presenting to the hospital due to lactation related issues.
- Medical coverage is the biggest barrier to direct admissions to HiTH particularly if patients need PICC lines, IV and Vascular access for treatment, cardiology or a greater workup that can be provided by a HiTH doctor.
- NDIS impacts upon LOS by being unable to discharge patients waiting for access to NDIS services. Allied health staff spend large amounts of time coordinating NDIS care for patients, taking time away from the direct therapy and care being provided to other patients.

- Consumers are coming into hospital with a simple health related issue like pneumonia or a respiratory infection and then the service providers (RACFs or NDIS) are refusing to take the patient's back and requiring PMBH to do the documentation and assessment related to their disability, which is completely separate from what they've actually presented for.
- In the past, there has been no feedback from Executive following and unsuccessful submission for service change or an enhancement proposal. Feedback could then help with reprioritising and preparing something that would have a chance of being supported. Staff feel that there is not enough advocacy for service development around allied and community health at an Executive level.
- The Fracture Clinic and Osteoporosis Clinic consult rooms do not comply with COVID-19 spacing (this was also an issue pre-COVID-19) particularly as this patient cohort is frail and often have a carer or family member with them at the appointment. There is also not enough space to support patient privacy.
- There are insufficient staffing profiles for some outpatient services, for example, the fracture clinic has grown 500% in activity over the last 10 years without any additional staffing. A recent business case to relocate part of the service to Kempsey District Hospital has been developed as a third of the patients come from Kempsey. This would better deliver "*the right service in the right location*".
- The Henry Review is currently being implemented and examines the current management of paediatric services and whether what is being provided currently is sufficient as a health service. PMPH will need to address these requirements and recommendations.
- The stroke service operates one team servicing both inpatient and outpatients, and there has been no staffing enhancement since the inpatient service was introduced in 2007/08 (based on the 2005 staffing model). Outpatient allied health stroke services have never received funding for FTE. Allied health outpatient services are supported by the inpatient allied health stroke clinician. PMBH are placed highest for incidence and stroke prevalence in Australia as per the Deloitte Report last year. PMBH have had to alter the Stroke service due to an inability to provide a level of service in line with best practice due to a lack of rooms and staff (space is shared with other services). About a quarter of patients come from Kempsey region after having a stroke, but given the driving restrictions following a stroke, this acts as a barrier and difficulty in accessing the service.
- Renal dietitian outpatient services have had no enhancements in more than 17 years despite increase in renal chairs at PMBH as well as the new renal unit in Kempsey. The dietician is only available two days a week to cover a huge patient load. The renal dietitian also attempts to delay commencement time to dialysis by providing outpatient clinics at PMCHC and KCHC. As such the service is unable to meet recommended service provision for this very high risk group.
- Within HMCN, almost 50% of the community nurses are funded by the Commonwealth (aged care). This relationship will change on 1 July 2023 when the Aged Care Reforms commence. Staff are already leaving because of the uncertainty of their role and position – this requires some immediate attention to ensure nursing staff are not lost.
- A publicly funded cardiology outpatient clinic is required at PMBH. Demand for cardiac rehab continues to increase while the FTE for cardiac rehab nursing and Physiotherapy remains unchanged. Physio is funded eight hours per week which does not meet the demand.
- A community social worker is required for all streams, and also for the Aboriginal community.
- Leave relief is not built into the positions, meaning that when staff take leave or are not available for duty the service ceases or is reduced temporarily.
- Early medical rounds for potential discharges would assist patient flow out of PMBH.
- Wauchope has a small FTE for physiotherapy and occupational therapy. Escalating numbers of rehabilitation beds means there is no time for an outpatient service. Patients need to travel to PMBH, which impacts on wait lists and patient experience.

- The Hydrotherapy pools at both PMBH and Kempsey District Hospital have been closed since March 2020 initially due to COVID-19. There is an opportunity to reopen the pools however both pools are deconditioned requiring significant investment and works. There are limited all season pools available in the community.

Opportunities

Service Expansion	• Implement a Central Intake System for outpatients, ambulatory care and community health, or centralised administration staff (Ref: GL 2019_11 NSW MoH Outpatient Services Framework). • Implement Henry Review recommendations and review service gaps to be targeted for establishment across the LHD and HMCLN. • Expand the allied health workforce to enable effective establishment of MDTs to address high needs areas, vulnerable patient cohorts and support an early discharge program. • Develop space to support increasing outpatient clinic/ambulatory care capacity, to introduce new public outpatient clinics such as Cardiology.

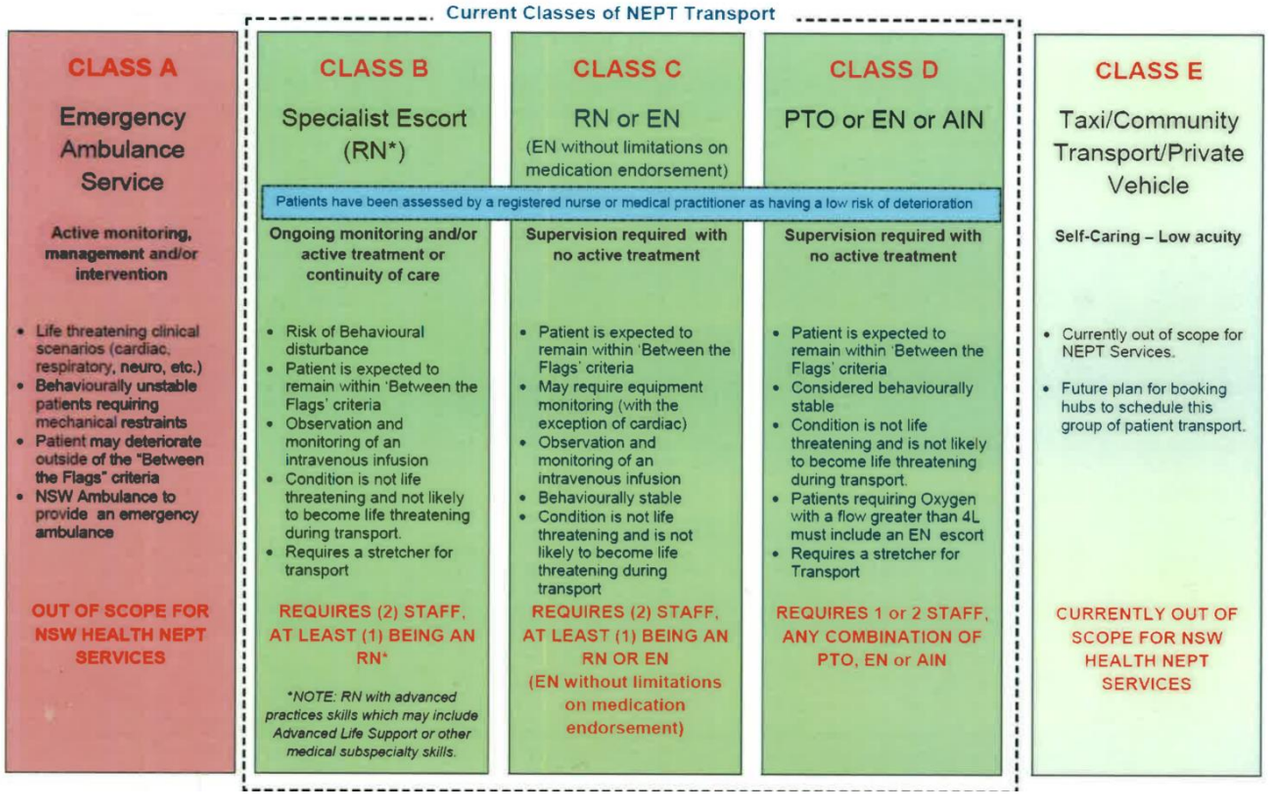
7.1.12 Patient Transport

Current Service Profile and Scope

There are three programs available to patients in the HMCN:

1. Isolated Patients Travel and Accommodation Assistance Scheme (IPTAAS) noting that recently the criteria has been expanded and additional funding is being provided by NSW Health to support the scheme.
2. Non-Emergency Health Related Transport (NEHRT) – provides transport assistance to transport disadvantaged members of the community to attend medical appointments at local health facilities. A minimal patient contribution is requested but can be waived. It operates under a brokerage model and utilises buses, taxis, community transport and trains.
3. Patient Transport Service (PTS) – used for non-emergency transport of inpatients. The classes of transport are summarised in the following figure.

Figure 11 – Classes of PTSs



Source: NSW NEPT Service Specifications V2.0

PTS Management attends the 0800 daily bed meeting with PMBH and 0830 Coffs Harbour huddle as well as escalation Code Black meetings with the Sites as requested. PTS is a District-wide service and resources are diverted to where the need is presenting. PTS staff are shared across the Network, there are three (3) crews in the HMCN Monday to Friday and two (2) PTS crews on Saturdays and Sundays.

The performance target for PTS prior day booking is 70%. In 2022, late bookings resulted in a booking rate of around 40%.

Reporting shows that very few Aboriginal people are using IPTAAS. A pamphlet was developed by the IPTAAS Aboriginal Trainee to assist Aboriginal people and Aboriginal organisations to access IPTAAS. This pamphlet is being updated for re-distribution with the new enhancements to the program, community consultation will also be conducted commencing August 2022. Since the

development of the pamphlet and the consultations with community and NGO's there was an increase from 1% to 5% uptake by Aboriginal people for the first year. PTS work closely with the Aboriginal Health Liaison Officer (AHLO).

PTS is committed to planning for the future needs of the MNCLHD Community and the following are priority focus areas:

- Development of Culturally Safe PTS Services- though close associations with the AHLO and community groups.
- Updating of PTS Fleet to prevent longer waiting times and travel times secondary to PTV maintenance and repair.
- Working closely with facility staff re: patient preparations for PTV transfers and streamlined pickup and drop off at MNCLHD facilities.

Key Issues identified by Stakeholders

- COVID-19 has restricted PTS from doing multiloading. There are two (2) stretchers available in the vehicles but currently only using one (1) for ED and nursing home transfers as required by the State-wide protocols. Staffing numbers have also been impacted by COVID-19
- Old vehicles in the fleet have been challenging. PTS can hire private provider vehicles however, this is very expensive (one job can cost $4,000). One vehicle has been off the road for four (4) weeks awaiting mechanical repair. The MNCLHD Executive has provided support to purchase an additional vehicle from Healthshare and a new PTV has been ordered.
- There are a number of challenges impacting the maximum utilisation of the available vehicles which includes:
  - late bookings. PTS is often only given 2 hours notice before transport is required
  - facilities such as Wauchope Palliative Care and Nursing Homes have a cut off time to receive patients
  - patients are sometimes not ready for pickup when PTS arrive at the Wards - can be awaiting a signed discharge summary, medications, requiring toilet, and/or shower. Crews are sent to another job if the patient is not ready in 15 minutes, as a general rule, however exceptions are made based on need and other work.
- PTS is not well understood and lacks a profile. Healthshare charge Hospitals a penalty of $250 when patients are not ready on time and the Crew must be re-booked.
- PTS is constantly getting ramped at ED, this has a snowball impact on delaying all following bookings.
- As a general rule, there is more capacity in the mornings and pressure points in the afternoon due to pick up delays.

Opportunities

Model of Care	• "Two by Nine" model which is two nursing home patients ready by 9am to be discharged and ready to return to Residential Aged Care Facility (RACF)

7.1.13 Teaching and Research

Current Service Profile and Scope

The hospital will have an increasing role in the provision of education and training for undergraduate and post graduate medical staff, nursing and allied health disciplines. PMBH is a teaching hospital for the University of NSW and is affiliated with the University of NSW (UNSW) Rural Clinical School. The Shared Health Research and Education Centre (SHREC) is located on the PMBH campus within the Rural Clinical School (RCS) building. This centre provides additional facilities, including biomedical science, anatomy/pathology laboratories and classrooms that are shared across the tertiary institutions. The RCS and SHREC support the delivery of the full six-year undergraduate UNSW Medicine curriculum in Port Macquarie.

Port Macquarie is also home to a campus of Charles Sturt University (CSU). Nursing, paramedicine and various allied health undergraduate and post-graduate courses are offered locally. Researcher/Academics from CSU are involved in a number of research projects with MNCLHD, and processes are being established to work with the post-graduate and honors allied health students to collaborate on local research projects.

With regard to nursing, the MNCLHD with its relationship with NSW Regional Health Partners is building research capacity through the ClinicalRCB Program. This Program has been co-designed with academics from the University of Newcastle and Clinical Nurse and Midwifery Consultants from MNCLHD, HNELHD and CCLHD. This will support a systemic approach to ensure research and its translation aligns with strategic themes of the LHD.

The Health Education and Training Institute (HETI) Rural Research Capacity Building Program (RRCBP) is a two-year program for novice rural and regional LHD staff who wish to develop their research capabilities. This program offers structured learning, mentors, support and funded backfill for the development, conduct, analysis and reporting of a locally developed and relevant research project. All staff from the MNCLHD are eligible to apply with a limit of approximately 17 candidates per year across NSW.

There are also opportunities for funding of research through NSW Ministry of Health Translational Research Grant Scheme and other funding bodies such as the Federal Government's Medical Research Futures Fund and the National Health and Medical Research Council. These grants are highly competitive and necessitate collaboration with universities and other healthcare partners (for example, other LHDs).

Key Issues identified by Stakeholders

- The University of Newcastle has decided to withdraw from PMBH. At one point, there were 17 staff and 20 collaborative projects around nursing, and this is now down to 0.5 FTE staff who will finish up at the end of June 2022. Charles Stuart University will be replacing Newcastle although their intended scope is unknown.
- Hospitals and health services do not fully understand nor take advantage of their leverage when negotiating with the Universities and this should be an area for improvement.
- ED demand research is a key focus area and is important to identify gaps and where population demand is growing.
- It is important to preserve and ensure space for clinical trials in the future. A lack of research infrastructure is one of the biggest barriers to research, that is a clinic space to undertake trials and see patients. There is a pressing need to consider clinical trial growth although this has implications regarding staffing needs and equipment. PMBH is already doing well in Oncology but there are opportunities in other therapeutic areas which may involve industry sponsored trials and other forms of research. There is also opportunity for larger scale research grant funding given the appropriate space, staff and infrastructure.
- A future area of development and expansion is tele-trials.

7.1.14 Clinical Support / Diagnostic Services

Current Service Profile and Scope

Clinical support services such as medical imaging, pathology and pharmacy have normally been provided at PMBH under private contract.

At the time consultation there were some changes occurring around pharmacy and pathology arrangements. As part of the next iteration of planning these three services should be included in discussions and the final arrangements documented to inform the model of care into the future.

7.1.15 Integrated Care

Current Service Profile and Scope

NSW Health is delivering integrated care strategies and plans to enable transformation of the NSW Health system with Value Based Healthcare as the over-arching approach to healthcare delivery and system design. Integrated Care involves the provision of seamless, effective and efficient care that reflects the whole of a person's health needs:

- from prevention through to end of life,
- across physical, psychosocial, and mental health and
- in partnership with the individual, carers and family members.

MNCLHD is working towards embedding a one District model to ensure equity of access and reduce duplication. It is also recognised that cohesive partnerships between providers will give rise to well-connected and integrated care supporting patient centred care. In 2022 priority activities to support integrated care models being implemented across the MNCLHD include:

- Work to improve the health outcomes of our community informed by need
- Use of predictive analytics to direct service planning
- Work to better define the role of health services
- Improving the patient journey
- Ensuring our health and community-based services are aligned with the needs of our community
- Connect care and maximise efficiencies to deliver the right care at the right time and in the right place.

The future direction is that HiTH and Care in the Community (CiC) could be supercharged in the future. The roll out of CiC is currently occurring.

From 2021 until June of 2022, COVID-19 Care in Community is supporting the management and monitoring of people with COVID-19 across the MNCLHD through Virtual Care. This model has evolved to Care in the Community (CiC) with a broader focus on supporting patients with respiratory illness to avoid hospital presentations

Key Issues identified by Stakeholders

- The organisational structure seems to support silos and service investments are more often targeted at touch points rather than the whole patient journey.
- Discharge planning on admission is being done at Coffs Harbour Base Hospital but not PMBH. The issue is around care planning and patient discharge destination as is not occurring until the end of the patient stay.

- CiC and HiTH should ideally come together and combine although it is only in the early stages of development. HiTH wants to hand over virtual monitoring for the last two (2) days of the admission to CiC, while this would be ideal, resources/workforce need to be in place, and this should be a pathway not just be a shift in care.
- To implement a sustainable integrated care model Allied Health staff are important, but there is a need to consider enhancing investment in the Allied Health workforce. There has been no or very little growth in primary care or community nursing workforce numbers.
- The implementation of Rehabilitation in the Home (RiTH) is currently felt that it would not function efficiently until there is a critical mass of patients. The service needs a multidisciplinary team approach, and RiTH should be reconsidered once the rehabilitation service has grown and Allied Health staff numbers have increased.

Opportunities

Service Expansion	• Look at where Care in the Community can intercept the Emergency Department presentations and realise some hospital diversion or avoidance. This could be through the introduction of proactive outreach and working with NSW Ambulance. • Strengthen HiTH to be more interventional rather than monitoring. HiTH should maximise high level specialty services already provided in the hospital and support early supported discharging that require the specialist clinical intervention at home • There are future opportunities to link residential aged care with HiTH.
Model of Care	• Implement CiC • Review and update models of care for: – Whole of Health – Transit Lounge – Discharge Planning.

7.1.16 Leading Better Value Care

Current Service Profile and Scope

The Leading Better Value Care (LBVC) program is an initiative of the NSW Ministry of Health, supported by the NSW Agency for Clinical Innovation (ACI) and Clinical Excellence Commission (CEC). The LBVC program represents a refocus for the NSW Health system.

LBVC is a state-wide program that improves the health outcomes and experiences of people with specific conditions. It does this by identifying and scaling evidence-based initiatives to deliver care in the most appropriate setting. LBVC uses consistent, rigorous measures and evaluation to show the impact of care on outcomes. In NSW, value based healthcare means improving health outcomes, the experiences of receiving and providing care and the effectiveness and efficiency of care. LBVC is one of the ways NSW Health is accelerating the move to value based healthcare to deliver what matters to patients and the community.

Within the Mid North Coast Local Health District (MNCLHD, the first tranche of eight (8) initiatives was rolled out in 2017 and the second tranche has been implemented since 2019. This has provided an opportunity for clinicians, medical staff and managers to participate in clinical audits, professional development opportunities, trial new ways of delivering health care, network with other clinicians, and focus on patient reported feedback to improve their health outcomes.

Key Issues identified by Stakeholders

- Since COVID-19 there have been varying degrees of success. Several of the earlier initiatives have been quite resilient through COVID-19. The funding received to support the initiatives has been through small enhancements and relies heavily on clinical

staff to deliver but there is no funding for ongoing change management to support embedding the initiative into everyday practice

- Not all initiatives are rolled out evenly across the Clinical Networks. For example, inpatient diabetes is a very successful project assisting with patient flow through the hospital, however this is only being implemented in Coffs Harbour Base Hospital, and wound management, although has guidelines developed, its effectiveness has been impacted by siloed practice.
- Many of the initiatives are very small scale and only operate in an outpatient setting, for example COPD and Heart Failure, and renal supportive care which is supposed to be medically led but no lead has been able to be recruited.

8. Future Strategies for Development / Change Management

8.1 Immediate and Short-Term Priorities

This section provides a summary of the outcomes from a series of consultations with frontline clinical and support staff, District and Clinical Network Management and external stakeholders undertaken to inform the development of the Clinical Services Plan. Consultation was undertaken virtually and involved single participants, small groups and a virtual workshop with oversight by a formal Steering Committee. The consultation focused on the current scope of service delivery, issues impacting service delivery and possible change initiatives that may significantly change service delivery / patient volumes / patient cohort characteristics in the foreseeable future.

This Clinical Services Plan was undertaken with the knowledge that there is no capital investment forthcoming, and in the environment of stressed health services and health staff involved in delivering care during a worldwide pandemic. Across Australia, hospital services are operating at escalation levels in response to red, amber and black alerts. That is, nationally, health services have been under severe pressure, and even at the completion of the writing of this Clinical Services Plan (July 2022), PMBH had been on and off escalation consistently and is expected to continue that same pattern for some months into the future.

Whether due to the pandemic, or a trend that has been developing over the last few years, recruitment, retention and managing the sick leave of health staff has contributed to the inability of the health system to be able to respond to demand and day to day care. The impact has not only been within hospitals, but also support services such as home care, community nursing and RACFs which has meant that patients cannot be safely discharged. Consequently, they are staying in hospital longer as it is the only functioning option for care. This also results in significant deconditioning of many individuals due to having to reside in a non-homelike space until a permanent placement can be found.

NSW Health has also highlighted implications of the pandemic and changes that need to be considered in planning for the care of patients in a post-COVID-19 world. A report produced by the Ministry of Health highlighted that LHDs "will need to accommodate the demand from new and recovering COVID-19 patients as well as any pent-up demand from 'business-as-usual' patients who deferred their care during the pandemic. And while the COVID-19 pandemic has already dramatically changed the way care is delivered in NSW, the economic fallout may place further pressure on the NSW health system" (page 12, NSW MoH Insight Paper Series for Planners – Trends in Activity and Cost – Part 2).

> *As a result of the limited access to private services, districts that serve outer regional and remote NSW will continue to face uneven cost pressures as almost all of their patients will need to rely on publicly funded care. Due to the older demographic in these regions higher utilisation of public admitted care can also be expected.*
> *NSW MoH Insight Paper Series for Planners – Trends in Activity and Cost*

Moving forward, future strategies and planning will be undertaken in the context of managing the immediate impact of the pandemic within MNCLHD in the short to medium term. Consideration has been given to how demand for healthcare has changed while concurrently considering how to respond to growth in demand due to population growth, the trend of people relocating to regional areas and the changing age profile of catchment residents.

PMBH will need further capital investment in the future to support bed base and service expansion to meet this growth in demand over the next 10 to 15 years, and consequently master planning has been undertaken to inform any future investment. However, there are strategies and actions that can be implemented in the immediate / short to medium term to assist PMBH to meet the pressures of the changing demand. As improved health outcomes are key to improving the LHDs response to these challenges and to deliver against the strategic outcomes of the *NSW Health Future Health: Guiding the next decade of care in NSW 2022-2032,* the initiatives proposed have concentrated on the delivery of patient centred care, the wellbeing of staff and their ability to physically cope with this demand.

Initial consultation highlighted what stakeholders considered key priorities for service development if capital funding became available, and these priorities have been addressed in a separate 2022 Capital Investment Proposal (CIP). These priorities include:

- Addressing major issues with the PMBH 1994 building, including leaks, mould, poor functionality, insufficient boiler capacity and lack of space.
- Maternity services have been identified as the highest priority clinical service area for investment. The service is implementing a continuity of care model and have been dealing with increasing numbers of births. Consequently, the current space has a very poor layout and lack of space for a contemporary maternity and birthing service and is also not culturally appropriate for Aboriginal women when birthing. Currently located in a section of the hospital requiring significant maintenance and repair, the layout is very inefficient with insufficient space for birthing, and inadequate room for antenatal clinics and early pregnancy assessment care.
- Emergency Department (ED) presentations have increased significantly - higher than originally projected. The service has already exceeded planned capacity previously built when the ED was expanded in 2014. While there are some strategies that can be introduced to assist with patient flow, the current ED at PMBH has some significant capacity, design and layout issues that impact functionality and timely patient care.
- There is no dedicated medical ambulatory care space and a very limited outpatient space
- WIFI / mobile reception / connectivity is a major issue across the campus and within the hospital ward areas, hindering many aspects of service provision, including virtual care.

Non-Capital Strategies to Address Demand – Workshop Outcomes

The greatest source of concern from clinicians is the consistent high level of access and exit block across the hospital in all clinical areas. A workshop was held to develop and consider strategies and actions that should be considered for implementation in the immediate and short to medium term. It was also important that these strategies are able to be implemented by HMCN staff (and importantly within their sphere of influence). It should be highlighted that there is a recurrent impact with most of these strategies and as such the process for funding requires further discussion and endorsement by the MNCLHD Executive along with overcoming the challenge of successfully recruiting clinical staff for delivery.

Workshop Questions:

Q1. What would you most like to see change, or what could you build on, that would improve patient flow within the hospital in the short to medium term?

Q2. A) From question 1 responses - discuss benefits and barriers. B) Identify top 3 – 5 options that should be progressed.

Workshop participants were asked to consider previous business cases and successful one-off funded initiatives that had been commenced or discontinued that might be worthy of reconsideration as a response to addressing current service delivery constraints.

The main themes from the discussion were:

- Patient Flow: While the discharge of patients has been discussed within this Clinical Services Plan, participants specifically highlighted that general physician ward rounds do not occur on the weekends, and daily ward rounds at senior level are undertaken at VMOs availability. Discharge doesn't occur unless the patient sees a doctor and any imaging or testing only happens at daily rounding (which if it occurs at 5pm, there is no discharge). There is no 24/7 discharging service – there is a bare minimum medical staffing available to support patient discharge over the weekend. There is a need to designate surgical beds, recognising that they are currently full of medical patients – "surgery flows well if they have their own beds".
- Staffing and Workforce: Physically, there are not enough Registrars to round with each Consultant. Even if they attend at 7am each morning there is a shortage of nursing staff (even if all available beds were opened - there is not enough nursing and allied health staff to provide care and keep them open safely). There have been some initiatives were enhancement in nursing at CNC level has demonstrated benefits, improving patient outcomes and flow. for example, a CNS2 orthopaedics initiative with proven benefits through a reduction in LOS.

Attracting staff has been difficult due to local accommodation shortages, access to schools, affordable child care and employment for partners after relocation. Staff are wanting variable/flexible work arrangements in that they want permanency in their position but do not want to work unsustainable hours. There is a greater desire for a good work life balance, and there doesn't appear to be any transparency around vocational guidance for school leavers in their consideration of a future in the health workforce.

- Outpatient and Community Health Services: A lack of outpatient services leads to inpatients being used as a one stop shop, with everything occurring at the one time (scans etc.). Cost is an impediment for patients to access this follow up privately so their LOS is extended to cover the time to deliver these tests publicly; The wound nurse only provides services five days out of seven, stomal therapy is only provided two days a week, and psychogeriatric nursing is only a five day service (not seven days). Greater use of telehealth and virtual care is required but staffing should be in place to support this service delivery modality. There are no public nurse-led clinics available in outpatients. There is a need for thinking around all outpatient allied health, community care, Leading Bette Value Care (LBVCs) and other programs, and how to consolidate them to come together and support each other rather than shifting/sharing staff to operate on a project basis model rather than an ongoing initiative without any real staff enhancement.
- External Barriers: It was estimated by the group that currently around 20% of beds are taken up by aged care and NDIS patients who are unable to be discharged to a RACF or appropriate accommodation to support their ongoing care.

From these themes there was further discussion between workshop group members who produced, with a high level of consensus, the priorities for the immediate and short term. In order of priority, they were:

1. Implementation of a seven day a week discharge service to support more regular rounding of patients to move them along their patient journey. Daily physician ward rounds to include weekends to improve discharge rates.
2. Increased community support to target hospital substitution, telehealth and hospitalisation prevention services, increased utilisation for RiTH/HiTH models including virtual follow up to promote early discharge for surgical patients, and increased patient education pre-op for expectations of stay and discharge planning.
3. Increase in the number of allied health staff rostered on every weekend, with the ability to back fill against leave.

8.2 Priority Actions

This section will form the basis of an action plan that will be used to deliver the service development required to address healthcare demand and patient flow as discussed within this Clinical Service Plan. The immediate and short term priority actions have been linked to NSW Health Future Health, specifically the Strategic Outcomes, and are derived from the individual discussions with clinicians. Priority actions are aligned with best practice evidence-based care targeted at reducing duplication, will improve networking within HMCN, and incorporate care approaches including integrated care and multidisciplinary teams that match the population profile of the Port Macquarie Hastings LGA.

In order to meet the current and future demand of the catchment population integrated service models are critical, also serving as a driving principle to mitigate adverse patient outcomes and promote patient safety. This is particularly important for MNCLHD's older population and the large number of first nation's residents who often have co-morbidities requiring a more comprehensive care approach.

Contemporary models of care for emergency departments focus on the ability to effectively stream patients based on complexity and needs. This includes the need for appropriately designed and located areas for the management of children, older people and people with mental health, alcohol and drug issues which account for significant volumes of ED presentations. There are also major opportunities to improve patient streaming at PMBH through the implementation of a new innovative model of care which integrates emergency department services with expanded outpatient services for lower acuity, lower complexity patients in order to reduce unnecessary ED presentations and overnight inpatient admission.

The physical infrastructure of the PMBH maternity unit is significantly out of date and is a major constraint to the implementation of contemporary service models. Current maternity models of care include both a high risk doctors clinic and low risk midwifery clinic. A transition to midwifery continuity of care models is hoped to commence at the end of 2022. The MNCLHD is committed to supporting the development and implementation of midwifery led continuity models of care across the clinical networks and this model is a component of the MNCLHD First 2000 Days Implementation Plan 2020 – 2025.

It is also critical that the maternity service and the emergency department appropriately service the needs of vulnerable communities and in particular the needs of Aboriginal and Torres Strait Islander people.

In addition to these infrastructure changes which have been proposed in a separate Capital Investment Proposal (CIP) submitted to the NSW Ministry of Health, several initiatives that target, streamline and expand a range of clinical service areas have been identified during the writing up of the clinical service profiles for consideration, and have been suggested with an indicative timeframe as shown in Table 33 below. These have been linked to the Future Strategy Strategic Outcomes and indicated as:

1. Patients and carers have positive experiences and outcomes that matter
2. Safe care is delivered across all settings
3. People are healthy and well
4. Our staff and engaged and well supported
5. Research and innovation, and digital advances inform service delivery
6. The health system is managed sustainably.

It is recommended that the action and care concepts below are reviewed and consolidated into agreed work streams to support change management processes and flow through to an implementation approach. A dedicated Working Group should have oversight of the final set of agreed priority actions. The timeframe, feasibility and implementation will need to be formalised and lead management responsibilities identified for endorsement by the MNCLHD Executive Management Team.

Table 33 – PMBH Clinical Services Plan – Suggested Priority Actions

Implementation Priority	Actions and Care Concepts	Strategic Outcomes
Immediate	• Implement a seven day a week discharge service to support more regular rounding of patients to move them along their patient journey; daily physician ward rounds to include weekends to improve discharge rates	6
	• Increase community support to target hospital substitution, telehealth and hospitalisation prevention services; increase utilisation for RiTH/HiTH models including virtual follow up to promote early discharge for surgical patients; increase pre-operative patient education for expectations of stay and discharge planning	2,5
	• Increase in the number of allied health staff rostered on every weekend and to have the ability to back fill against leave	2
	• Roll out of the maternity Continuity of Care model	1,2,6
	• Seek to influence on time starts in operating theatres – monitor KPIs and address barriers.	6
Short	• Review bed management policies and practices including consideration of nurse initiated / criteria led discharge for high volume medical patients (for example COPD)	6
	• Develop a generalist perspective, and clinical skills for all staff involved in care of older patients – embed on all care delivery models the key components of the ACI service model to enhance care of older people (see Appendix F for highlights)	6
	• Undertake workforce planning and develop risk mitigation strategies to address recruitment and retention, along with an ability to uplift clinical capability. Increase the number of permanent allied health positions and review the contract renewal process.	4
	• Expand the allied health workforce to enable effective establishment of MDTs to address high needs areas and support the early discharge program.	4,2
	• Employ adequate allied health staff for all inpatient areas (this requires a refashioning of the whole system).	4,6
	• Consolidate Better Value Care funding to support priority programs for reducing bed pressure – wound management / high risk foot / inpatient diabetes / COPD and CCF	2
	• Finalise the roll out of EPIC in the ED	2,5
	• Implementation and roll out of the Care in the Community (CiTH) Program.	2,3
	• Expand wound care management / VAC dressings / drain removals delivered through community services	2,3,6
	• In-reach to Nursing Homes / after-hours telehealth support	2,5,6
	• Increase capacity for MEP (Mobility Enhancement Program)	2,5
	• Incorporate and consider patient survey information in the development of service proposals and initiatives	1,6
	• Include feedback from conversations with Aboriginal patients and carers in service delivery changes and approaches to care	1,3
	• Proactively engage patients and carers in the discussion around changes in service delivery and models of care	1,2,3

Implementation Priority	Actions and Care Concepts	Strategic Outcomes
Medium	Service Expansion and Models of Care Implementation: • Develop and establish a Rehabilitation in the Home / Geriatrics in the Home/ Paediatrics in the Home • Expand telehealth services to improve linkages between ED's to reduce transfers • Develop the and implement "Two by Nine" – two nursing home patients ready by 9am to be discharged and ready to return to RACF • Virtual Care acute ward; expand virtual technology for HiTH, RiTH and CiTC • Introduce prevention and hospital avoidance strategies, particularly for vulnerable groups • Implement a Central Intake System for HMCN and outpatient services • Make greater use of networked facilities such as: – Wauchope District Memorial Hospital – establish overnight medical cover to expand admission criteria for medically stable / consider use for GEM patients. – Kempsey District Hospital – provide after-hours medical cover and increased allied health / theatre fit out / equipment. Consider expanding services for low-risk surgery / outpatient clinics. • Establish a Medical/Ambulatory Day Stay Unit for patients admitted for infusions / representations for hypertension etc., additional HiTH. Consider incorporating a Rapid Access Clinic in outpatients for representations to ED requiring follow up / surgeon review / admission to day surgery • Introduce Aboriginal Health Practitioner Officers in the ED, Palliative care, Aged Care and Chronic Care • Consider use of an ACE Clinical Nurse Consultant and Geriatrician to provide care on a consultation basis • Proactively identify priorities for nursing research rather than respond to student suggestions in order to focus on translation into practice • Investigate and support the development and expansion of tele-trials across the HMCN and MNCLHD • Manage the balance between VMO numbers and the need for more staff specialists • Recruit additional Nurse Practitioners: ED NP, Psychogeriatric NP for community / Continence NP • Consider the engagement of a Volunteer Coordinator • Enhance general allied health staffing to EDs and deploy geriatric medicine advanced trainees to the ED (note funding and workforce issues).	6,1 1,2,6 1,2,6 1,2,6 3,5,6 1,6 5 6 1,6 1,2.6 2,3,6 2 5 5 4 4 4,1 4
Long	• Finalise the approach to universally adopt a geriatric medicine model of care for all older inpatients • Implement a shared care model – psychogeriatric and older person's mental health • Integrate in agreed key areas dedicated CNC and Clinical Nurse Educators to undertake care coordination roles and enable clearer accountability within existing roles.	5,6 2,3,6 4,6

9. Implementation Approach

Transitioning from planning to implementation requires a considered approach. The first steps in this process should include:

- Widely communicating the outcomes of the planning activity (i.e., share with all stakeholders the planning recommendations and next steps in the process). For example, a written plan or report could be augmented with visual presentations, posters or charts to maximise the reach and effectiveness of the key messages from planning
- Consider the need for detailed implementation planning to operationalise and monitor application of the recommendations
- Consider the need for any other additional planning (for example service enabler capital planning) that may be required to fully support the implementation of the planning recommendations.

Prior to proceeding to full implementation, the availability of the required resources should be confirmed.

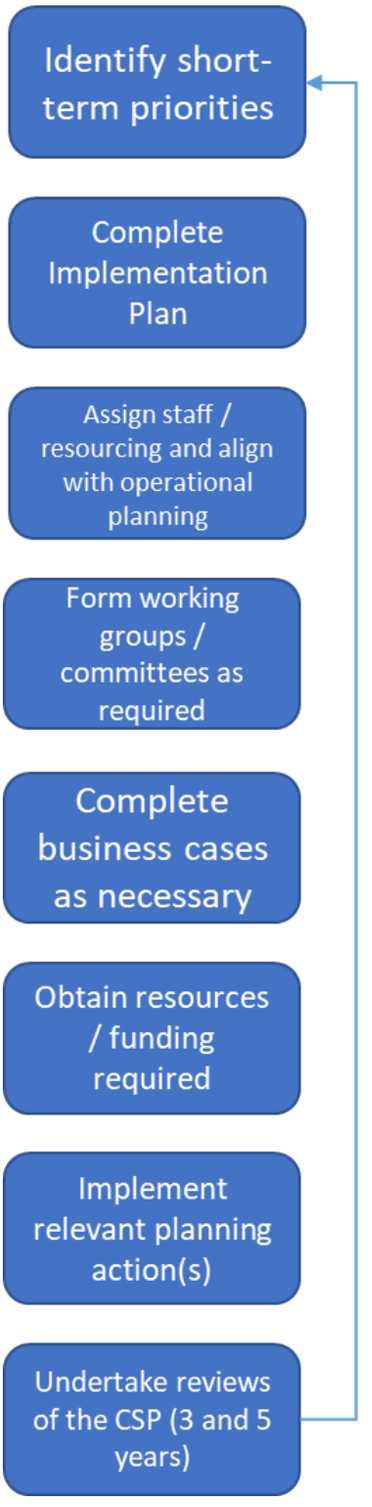
In terms of next steps, determining the short-term priorities for PMBH and assigning clear accountabilities aligned with operational planning is required. It is expected that some priorities will be able to be progressed on a continuing basis, whereas others may require business cases to support their implementation. It is important to note that endorsement of this Plan by MNCLHD does not commit the Service to fund any additional capital and/or operating costs that may be required for implementation in the future.

Recognising the importance of collaboration with other service providers, a short-term priority should be to maintain the momentum gained during the development of this Plan, and continue conversations towards the development of sustainable, structural arrangements. Implementation requires:

- Development of future-focused, patient-centred, holistic models of care
- Consideration of the whole care continuum from promotion and prevention through to end of life
- Clinician driven change with authentic engagement
- Workforce planning driven by contemporary, detailed models of care.

Lastly, service planning is not a static process. Changes to leadership, Commonwealth and State policy, local economies and demographics, technology, funding allocations and identified priorities are almost certain in the coming years.

It will be necessary to review and monitor the implementation of this Plan on a regular basis. The priority planning actions articulated will be updated in 3 and 5 years time, supported by new quantitative data as available.



Appendix A – Catchment Profile and Health

This appendix provides detailed data on the profile and health characteristics of the Port Macquarie-Hastings LGA population and Kempsey LGA population, relative to the population of NSW.

Vulnerable Population Groups

Table 34 – Selected statistics for vulnerable population groups for the Port Macquarie-Hastings LGA and Kempsey LGA residents

Indicator	Port Macquarie-Hastings LGA	Kempsey LGA	*NSW*
% Aboriginal and/or Torres Strait Islander people (2020 ERP)	5.1%	15.1%	*3.5%*
% Persons with a profound or severe disability (includes people in long-term accommodation) 2016	7.7%	9.3%	*5.6%*
% Persons with a profound or severe disability and living in the community (2016)	6.6%	8.0%	*4.9%*
% Born in predominantly non-English speaking countries (2016)	4.1%	3.1%	*21.0%*
Estimated number of people with mental and behavioural problems (ASR per 100, 2017-18)	19.8	25.4	*18.8*
% Unemployment (June 2020)	5.6%	9.8%	*5.0%*

Source: Public Health Information Development Unit, Social Health Atlas of Australia, NSW, Data by Local Government Area, Published April 2021

Potentially Preventable Admissions

Table 35 – ASR per 100,000 for admissions for potentially preventable conditions for the Port Macquarie-Hastings LGA and Kempsey LGA residents, public hospitals, 2018-19

Indicator	Port Macquarie-Hastings LGA	Kempsey LGA	*NSW*
Admissions for all potentially preventable conditions	2,039.2	2,913.7	*2,626.9*
Admissions for chronic angina	49.8	81.8	*98.7*
Admissions for chronic asthma	109.8	137.1	*114.6*
Admissions for chronic congestive cardiac failure	177.5	269.6	*242.8*
Admissions for chronic obstructive pulmonary disease (COPD)	217.3	373.4	*293.6*
Admissions for chronic diabetes complications	143.0	200.6	*178.8*
Admissions for chronic iron deficiency anaemia	243.5	402.5	*190.3*
Admissions for other chronic conditions	84.6	84.0	*89.6*
Admissions for total chronic conditions	1,011.1	1,542.4	*1,213.6*
Admissions for total vaccine-preventable conditions	85.9	195.8	*238.6*
Admissions for total acute conditions	938.4	1,148.3	*1,174.9*

Source: Public Health Information Development Unit, Social Health Atlas of Australia, NSW, Data by Local Government Area, Published April 2021

Health and Wellness Indicators

Table 36 – Selected health and wellness indicators and risk factors of the Port Macquarie-Hastings LGA and Kempsey LGA residents

Category	Indicator/Risk Factor	Port Macquarie-Hastings LGA	Kempsey LGA	*NSW*
Screening Program (*2015 and 2016, +2016 and 2017)	% Bowel screening participation+	43.6%	39.5%	*38.3%*
	% Positive bowel screening result+	7.5%	9.7%	*7.9%*
	% Cervical screening participation*	63.4%	54.8%	*55.3%*
	Cervical screening outcomes: low grade abnormality* (ASR per 1,000)	39.1	39.3	*35.9*
	Cervical screening outcomes: high grade abnormality* (ASR per 1,000)	11.5	11.4	*10.6*
	% Breast screening participation+	61.5%	56.2%	*52.8%*
	% Breast screening outcomes: cancer+ (ASR per 10,000)	30.7	44.5	*35*
Chronic Disease (ASR per 100, 2017-18)	Estimated number of people with diabetes mellitus	4.4	5.7	*5.2*
	Estimated number of people with asthma	13.3	13.6	*10.6*
	Estimated number of people with heart, stroke and vascular disease	4.6	4.6	*4.9*
	Estimated number of people with mental and behavioural problems	19.8	25.4	*18.8*
	Estimated number of people with arthritis	16.9	17.1	*15.5*
	Estimated number of people with chronic obstructive pulmonary disease	2.5	2.7	*2.2*
	Estimated number of people with osteoporosis	5.6	3.5	*4.2*
Cancer (ASR per 100,000 2010-2014)	Colorectal	72.7	91.7	*65.3*
	Melanoma	83.3	81.0	*55.5*
	Lung	46.4	56.7	*48.8*
	Lymphoma	20.2	22.5	*23.2*
	Leukaemia	16.7	13.8	*14.9*
	Breast	136.6	120.3	*135.5*
	Prostate	188.2	187.2	*183.9*
	Pancreatic	13.3	11.0	*13.4*
Risk factors (ASR per	High blood pressure	23.3	23.2	*23.1*
	High or very high psychological distress	12.9	15.6	*12.4*
	Overweight (not obese)	34.1	33.5	*35.0*

100, 2017-18)	Obese	36.0	41.3	*30.9*
	Current smokers	16.6	22.8	*14.4*
	More than two standard drinks per day on average	20.1	20.7	*15.5*
	Adequate fruit intake	52.1	46.5	*52.5*
	No/low exercise	64.1	71.6	*65.3*
Other (ASR per 100,000)	Death from for all avoidable causes, persons 0 to 74 years (2015-2019)	140.1	204.3	*117.2*
	Admissions for falls, all hospitals (2018-19)	839.6	669.0	*868.9*
	Admissions for intentional self-harm, public hospitals (2018-19)	161.9	133.8	*86.4*
	ED Total presentations (2018-19)	38,026	99,263	*36,053*

Source: Public Health Information Development Unit, Social Health Atlas of Australia, NSW, Data by Local Government Area, Published April 2022

Children's Health Profile

Table 37 – Indicators and risk factors of children's health for Port Macquarie-Hastings LGA and Kempsey LGA residents

		Port Macquarie-Hastings LGA	Kempsey LGA	*NSW*
Indicators	Overweight (not obese) children aged 2-17 years (ASR per 100, 2018)	16.8	17.0	*17.0*
	Obese children aged 2-17 years (ASR per 100, 2018)	11.1	11.3	*7.4*
	% Children developmentally vulnerable on one or more domains (2018)	21.0%	28.8%	*19.9%*
	% Children developmentally vulnerable on two or more domains (2018)	11.1%	15.5%	*9.6%*
Risk factors	% Low birthweight babies (2016 to 2018)	6.6%	8.1%	*6.3%*
	% Smoking during pregnancy (2016 to 2018)	15.3%	32.6%	*8.8%*
	% Children fully immunised at 5 years of age (2018)	94.7%	96.8%	*94.6%*

Source: Public Health Information Development Unit, Social Health Atlas of Australia, NSW, Data by Local Government Area, Published April 2022

Appendix B – Role Delineation

Table 38 – Current role delineation levels for PMBH services

PMBH Service			Role Delineation Level
Core Services		Anaesthetics & Recovery	5
		Operating Suite	5
		Close Observation	NPS
		Intensive Care	5
		Nuclear Medicine	5
		Radiology & Interventional Radiology	5+
		Pathology	5
		Pharmacy	6
Clinical Services	(A) Emergency Medicine	Emergency Medicine	5
	(B) Medicine	Stroke (Adult)	4
		Cardio & Interventional Cardiology	5
		Chronic Pain Management	5
		Clinical Genetics	4
		Dermatology	4
		Drug & Alcohol Services	5
		Endocrinology	4
		Gastroenterology	5
		General & Acute Medicine	5
		Geriatric Medicine	5
		Haematology	4
		Immunology	4
		Infectious Diseases	5
		Neurology	4
		Medical Oncology	5
		Radiation Oncology	5
		Palliative Care	5
		Rehabilitation Medicine	5
		Renal Medicine	5
		Respiratory and Sleep Medicine	5
		Rheumatology	5
		Sexual Assault Services	6
		Sexual Health	4

	(C) Surgery	Burns	4
		Cardiothoracic Surgery	NPS
		ENT Surgery	3
		General Surgery	5
		Gynaecology	5
		Neurology	NPS
		Ophthalmology	3
		Oral Health	5
		Orthopaedic Surgery	5
		Plastic Surgery	NPS
		Urology	5
		Vascular Surgery	5
	(D) Child & Family Health Services	Child and Family Health	4
		Child Protection Services	4
		Maternity	4
		Neonatal	3
		Paediatric Medicine	4
		Surgery for Children	4
		Youth Health	4
	(E) Mental Health	Adult Mental Health	5
		Child & Youth Mental Health	4
		Older Person Mental Health	4
	(F) Aboriginal	Aboriginal Health	6
	(G) Community Health	Community Health	4

Appendix C – Clinical Grouping Mapping

To present the "FlowInfo v21" data in a meaningful manner in this document, ESRGs were allocated to clinical groups, as listed in the table below.

Note, the Paediatrics clinical group consists of all activity for 0 -14 year old's, excluding ESRG 731 - Qualified Neonate and ESRG 741 - Unqualified Neonate.

The table below details which clinical group each ESRG has been allocated to for tables in this document with the "Clinical group" heading and "FlowInfo v21" source.

Table 39 – ESRG mapping to clinical groups

ESRGName	Clinical group
111 - Chest pain	Medical
112 - Unstable angina	Medical
113 - Heart failure & shock	Medical
114 - Non-major arrhythmia & conduction disorders	Medical
115 - AMI w/o invasive cardiac inves proc	Medical
116 - Syncope & collapse	Medical
117 - Coronary atherosclerosis	Medical
118 - Valvular disorders	Medical
119 - Other cardiology	Medical
121 - Invasive cardiac inves proc	Surgical/Procedural
122 - Percutaneous coronary angioplasty	Surgical/Procedural
123 - Pacemaker procedures	Surgical/Procedural
129 - Other interventional cardiology	Surgical/Procedural
131 - Dermatology	Medical
141 - Diabetes	Medical
149 - Other endocrinology	Medical
151 - Oesophagitis, gastroent & misc digestive system disorders	Medical
152 - Gastroscopy	Surgical/Procedural
153 - ERCP	Surgical/Procedural
154 - Cirrhosis, alcoholic hepatitis and other liver disease	Medical
155 - Digestive malignancy	Medical
156 - Gastrointestinal haemorrhage	Medical
157 - Inflammatory bowel disease	Medical
159 - Other gastroenterology	Medical
161 - Diagnostic colonoscopy	Surgical/Procedural
162 - Diagnostic gastroscopy	Surgical/Procedural
174 - Bone marrow transplant	Surgical/Procedural

175 - Lymphoma and leukaemia	Medical
179 - Other haematology	Medical
181 - Immunology	Medical
184 - Infectious diseases	Medical
201 - Chemotherapy	Chemotherapy
211 - Stroke	Medical
212 - TIA	Medical
213 - Seizures	Medical
214 - Headache	Medical
215 - Dysequilibrium	Medical
216 - Nervous system neoplasm	Medical
219 - Other neurology	Medical
221 - Renal failure	Medical
229 - Other renal medicine	Medical
231 - Renal dialysis	Renal Dialysis
241 - Bronchitis & asthma	Medical
242 - Chronic obstructive airways disease	Medical
243 - Respiratory infections/inflammations	Medical
244 - Bronchoscopy	Surgical/Procedural
245 - Respiratory neoplasms	Medical
249 - Other respiratory medicine	Medical
251 - Rheumatology	Surgical/Procedural
261 - Pain management	Medical
271 - Kidney & urinary tract infections	Medical
272 - Cellulitis	Medical
275 - Injuries - non-surgical	Medical
277 - Septicaemia	Medical
278 - Surgical follow up	Medical
279 - Other general medicine	Medical
280 - Delirium	Medical
281 - Dementia	Medical
282 - Ear and upper respiratory infections	Medical
283 - Venous thrombosis	Medical
284 - Nutritional and metabolic disorders	Medical
411 - Breast surgery	Surgical/Procedural
421 - Coronary bypass	Surgical/Procedural
429 - Other cardiothoracic surgery	Surgical/Procedural

432 - Anal, stomal & pilonidal procedures & pilonidal procedures	Surgical/Procedural
439 - Colorectal surgery	Surgical/Procedural
441 - Cholecystectomy	Surgical/Procedural
442 - Disorders of biliary tract & pancreas	Medical
443 - Bariatric procedures	Surgical/Procedural
449 - Other upper GIT surgery	Surgical/Procedural
461 - Head Injury	Medical
462 - Craniotomy	Surgical/Procedural
463 - Neurosurgery - non-procedural	Medical
469 - Other neurosurgery	Surgical/Procedural
471 - Dental extractions & restorations	Surgical/Procedural
481 - Tonsillectomy & adenoidectomy	Surgical/Procedural
482 - Myringotomy w tube insertion	Surgical/Procedural
483 - Non-procedural ENT	Medical
484 - Head & neck surgery	Surgical/Procedural
489 - Other procedural ENT	Surgical/Procedural
491 - Injuries to limbs - medical	Medical
492 - Wrist & hand procedures incl carpal tunnel	Surgical/Procedural
494 - Knee procedures	Surgical/Procedural
495 - Other orthopaedics - surgical	Surgical/Procedural
496 - Hip replacement/revision	Surgical/Procedural
497 - Knee replacement/revision	Surgical/Procedural
498 - Hip fracture	Medical
499 - Other orthopaedics - non-surgical	Medical
502 - Non-procedural ophthalmology	Medical
503 - Glaucoma & lens procedures	Surgical/Procedural
509 - Other eye procedures	Surgical/Procedural
511 - Microvascular tissue transfer/skin grafts	Surgical/Procedural
512 - Skin, subcutaneous tissue & breast procedures	Surgical/Procedural
513 - Maxillo-facial surgery	Surgical/Procedural
519 - Other plastic & reconstructive surgery	Medical
521 - Cystourethroscopy	Surgical/Procedural
522 - Urinary stones and obstruction	Medical
523 - TURP	Surgical/Procedural
524 - Other non-procedural urology	Medical
529 - Other urological procedures	Surgical/Procedural
531 - Vein ligation & stripping	Surgical/Procedural

532 - Non-procedural vascular surgery incl skin ulcers	Medical
539 - Other vascular surgery	Surgical/Procedural
541 - Injuries	Medical
542 - Abdominal pain	Medical
543 - Appendicectomy	Surgical/Procedural
545 - Inguinal & femoral hernia procedures Age>0	Surgical/Procedural
546 - Post-operative infections & sequlae of treatment	Medical
547 - Thyroid procedures	Surgical/Procedural
549 - Other general surgery	Surgical/Procedural
611 - Transplantation	Surgical/Procedural
621 - Extensive burns	Medical
631 - Tracheostomy or ventilation >95 hours	Surgical/Procedural
711 - Abortion w D&C, aspiration curettage or hysterotomy	Surgical/Procedural
712 - Endoscopic proc for female reproductive system	Surgical/Procedural
713 - Conisation, vaginal, cervix & vulva proc	Surgical/Procedural
714 - Diagnostic curettage/hysteroscopy	Surgical/Procedural
715 - Hysterectomy	Surgical/Procedural
717 - Non-procedural gynaecology	Medical
718 - Gynaecological oncology	Surgical/Procedural
719 - Other gynaecological surgery	Surgical/Procedural
721 - Antenatal admission	Maternity
722 - Vaginal delivery	Maternity
723 - Caesarean delivery	Maternity
724 - Postnatal admission	Maternity
731 - Qualified Neonate	Qualified Neonate
741 - Unqualified Neonate	Unqualified Neonate
751 - Perinatology	Maternity
812 - Drug & alcohol dependence and withdrawal	Mental Health (inc. D+A)
813 - Poisoning/toxic effects of drugs and other substances	Mental Health (inc. D+A)
823 - Mental health treatment, sameday (excl. ECT)	Mental Health (inc. D+A)
824 - Mental health treatment, sameday with ECT	Mental Health (inc. D+A)
825 - Schizophrenia, paranoia & acute psychotic disorders	Mental Health (inc. D+A)
826 - Major affective disorders	Mental Health (inc. D+A)
827 - Other affective and somatoform disorders	Mental Health (inc. D+A)
828 - Anxiety disorders	Mental Health (inc. D+A)
829 - Other psychiatry	Mental Health (inc. D+A)
881 - Eating and obsessive-compulsive disorders	Mental Health (inc. D+A)

882 - Personality disorders and acute reactions	Mental Health (inc. D+A)
831 - Psychiatric – Non-Acute	Mental Health (inc. D+A)
999 - Unallocated	Medical
842 - Rehabilitation Stroke - Sameday	Subacute
843 - Rehabilitation Stroke - Overnight	Subacute
844 - Rehabilitation Brain Dysfunction	Subacute
845 - Rehabilitation Neurological Conditions	Subacute
846 - Rehabilitation Spinal Cord Injury	Subacute
847 - Rehabilitation Amputation of Limb	Subacute
848 - Rehabilitation Arthritis	Subacute
851 - Psychogeriatric Care	Subacute
862 - Palliative Care - Cancer Related	Subacute
863 - Palliative Care - Non-Cancer	Subacute
869 - Palliative Care - Sameday	Subacute
871 - Maintenance	Subacute
891 - Rehabilitation Orthopaedics Fractures - Sameday	Subacute
892 - Rehabilitation Orthopaedics Fractures - Overnight	Subacute
893 - Rehabilitation Joint Replacement - Sameday	Subacute
894 - Rehabilitation Joint Replacement - Overnight	Subacute
895 - Rehabilitation Other Orthopaedic - Sameday	Subacute
896 - Rehabilitation Other Orthopaedic - Overnight	Subacute
897 - Rehabilitation Cardiac	Subacute
898 - Rehabilitation Pulmonary Conditions	Subacute
901 - Rehabilitation Other - Sameday	Subacute
902 - Rehabilitation Other - Overnight	Subacute

Appendix D – Detailed Projected Activity

Inpatient Activity

Table 40 – PMBH projected adult medical activity by stay type to 2031 (and 2036)

Stay type	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Day Only	4,191	4,548	4,947	4,191	4,548	4,947
Overnight	7,728	8,960	10,189	31,370	35,949	41,716
Total	11,919	13,508	15,136	35,561	40,498	46,663

Source: NSW HealthAPP. Incl D+A

Table 41 – PMBH projected adult surgical/procedural activity by stay type to 2031 (and 2036)

Stay type	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Day Only	3,604	3,594	3,917	3,604	3,594	3,917
Overnight	3,993	4,708	5,184	18,510	19,505	21,229
Total	7,597	8,301	9,101	22,114	23,098	25,145

Source: NSW HealthAPP

Table 42 – PMBH projected paediatric activity by stay type to 2031 (and 2036)

Stay type	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Day Only	444	428	465	444	428	465
Overnight	895	1,315	1,465	1,662	2,018	2,201
Total	1,339	1,743	1,930	2,106	2,447	2,666

Source: NSW HealthAPP

Table 43 – PMBH projected maternity activity by stay type to 2031 (and 2036)

Stay type	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Day Only	286	168	170	286	168	170
Overnight	1,116	1,193	1,220	2,989	3,494	3,569
Total	1,402	1,361	1,390	3,275	3,663	3,738

Source: NSW HealthAPP

Table 44 – PMBH projected qualified neonate activity by stay type to 2031 (and 2036)

Stay type	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Day Only	17	7	7	17	7	7
Overnight	252	219	211	1,450	1,244	1,140
Total	269	226	218	1,467	1,251	1,147

Source: NSW HealthAPP

Table 45 – PMBH projected subacute activity by SRG to 2031 (and 2036)

SRG	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Rehabilitation	338	537	601	3,816	8,205	10,642
Psychogeriatric Care	30	30	32	716	747	811
Palliative Care	140	476	527	503	3,133	4,011
Maintenance	41	38	47	545	202	250
Total	549	1,081	1,207	5,580	12,286	15,714

Source: NSW HealthAPP

Table 46 – PMBH projected acute HiTH activity to 2031 (and 2036)

Clinical group	Separations			Bed days		
	2021 (actual)	2031	2036	2021 (actual)	2031	2036
Medical	430	561	634	3,517	4,126	4,727
Surgical/Procedural	73	76	83	1,574	1,351	1,432
Subacute	3	4	4	40	106	134
Maternity	2	5	5	5	13	11
Total	508	645	726	5,136	5,596	6,304

Source: NSW HealthAPP

Emergency Department Activity

Table 47 – PMBH projected emergency department activity to 2031 (and 2036)

Age group	Admitted / non admitted	2021 (actual)	2031	2036
Adult	E1 - Admitted	12,639	15,662	17,434
	E2 - Non Admitted	25,281	31,993	35,991
	Adult total	**37,920**	**47,655**	**53,425**
Paediatric	E1 - Admitted	1,129	1,477	1,689
	E2 - Non Admitted	7,750	9,328	10,234
	Paediatric total	**8,879**	**10,805**	**11,922**
Grand total		46,799	58,459	65,347

Source: NSW HealthAPP

Appendix E – Non-Admitted Activity Growth Projections

To project the community non-admitted activity, HealthAPP growth rates (2015 – 2036) were applied to 2020-21 actual activity, The table below details which growth measures and rates were applied to each non-admitted service unit.

Table 48 – HealthAPP activity growth measures mapping to outpatient non-admitted activity

Service unit	Activity growth measure	AGR
PMBH Fracture Clinic Services	SRG 49 – Orthopaedics separations	1.5%
PMBH Pre-admission Services	Adult surgical/procedural separations	1.6%
PMBH Antenatal Medical Clinic	Adult maternity separations	0.4%
PMBH Antenatal Clinic	Adult maternity separations	0.4%
PMBH Pre-anaesthetic	Adult surgical/procedural separations	1.6%
PMBH Osteoarthritis Chronic Care Program	Adult acute separations	1.8%
PMBH Physiotherapy Services	Adult acute separations	1.8%
PMBH Maternity Services	Adult maternity separations	0.4%
PMBH Occupational Therapy Services	Adult acute separations	1.8%
PMBH Early Pregnancy Services	Adult maternity separations	0.4%
PMBH Staff Health Services	Adult acute separations	1.8%
PMBH Pulmonary Rehabilitation Services	SRG 24 - Respiratory medicine separations	2.3%
PMBH Paediatric Staff Specialist Services	Paediatric acute separations	1.7%
PMBH High Risk Post Natal Review Services	Adult maternity separations	0.4%
PMBH Stroke Service	SRG 21 - Neurology separations	2.5%
PMCH Chronic Care Cardiac Rehabilitation	SRG 11 - Cardiology separations	1.7%
PMBH Cardiac Catheter Unit Outpatient Services	SRG 11 - Cardiology separations	1.7%
PMBH Paediatric Early Start Service	Paediatric acute separations	1.7%
PMBH Osteoporosis Refracture Prevention Program	SRG 49 - Orthopaedics separations	1.5%
PMBH Post Natal Review Services	Adult maternity separations	0.4%
PMBH Endocrinology Clinic	SRG 14 - Endocrinology separations	2.4%
PMBH Surgical Staff Specialist Services	Adult surgical/procedural separations	1.6%
PMBH Paediatric General Services	Paediatric acute separations	1.7%
PMCH Child & Family Aboriginal Maternal Infant Health Service	Adult maternity separations	0.4%
PMBH Obstetrics and Gynaecology Services	SRG 71 - Gynaecology separations	0.2%
PMBH Nursing Diabetes Service	SRG 14 - Endocrinology separations	2.4%
PMBH Maternal Foetal Medicine	Adult maternity separations	0.4%
All other small volume clinics	Adult acute separations	1.8%

Appendix F - Enhance Care of Older People: ACI Aged Care Services in NSW 2021

Table 49 – Key Components of Service Model - (ACI - Aged Health Services in NSW 2021)

Service Model	Importance	Provider
Acute Aged Health Inpatient Care Model	Critical	PMBH
Behaviour Unit	Critical	PMBH
Rapid assessment unit	Critical	PMBH
Specialist shared care services: acute care of the elderly (ACE) unit	Critical	PMBH
Specialist shared care services: orthogeriatrics	Critical	PMBH
Specialist shared care services: surgogeriatrics	Critical	PMBH
Inpatient geriatric rehabilitation	Critical	PMBH
Medical outpatient clinics	Critical	PMBH
Consultation Services (Specialist advice/shared care)	Critical	Depends on Model
Medical home visits	Critical	Depends on Model
Hospital in the Home or specialist geriatric outreach	Critical	Depends on Model
ACAT	Critical	Depends on Model
Rapid response services	Critical	Depends on Model
ED Aged Care Services Team	Important	PMBH
Community Case Management	Important	Community
Dementia services (community based)	Important	Community
Transitional aged care services	Important	Community
Home-based rehabilitation (post-acute)	Less important	Community

Source: NSW Agency for Clinical Innovation. Aged Health Services in NSW. Sydney: ACI; 2021.

Appendix G - Port Macquarie Base Hospital – CSP Workshop – 14 July 2022

Workshop Questions:

Q1. What would you most like to see change, or what could you build on, that would improve patient flow within the hospital in the short to medium term?

Q2. A) From question 1 responses - discuss benefits and barriers. B) Identify top 3 – 5 options that should be progressed.

The workshop had around 20 participants representing hospital and community health services across the HMCN. Besides the questions above the workshop participants were asked to also consider previous business cases and successful one-off funded initiatives that had been commenced or discontinued that might be worthy of reconsideration as a response to address the current service delivery constraints.

The main themes from the discussion were:

- Patient Flow: While discharging of patients has been commented on within this CSP, participants specifically highlighted that general physician ward rounds do not occur on the weekends, also daily ward rounds at senior level are undertaken at VMOs availability; discharge doesn't occur unless the patient sees a doctor and any imaging or testing only happens at daily rounding (which if it occurs at 5pm, there is no discharge); there is no 24/7 discharging service – there is a bare minimum medical staffing available to support discharging occurring over the weekend. There is a need to designate surgical beds, recognising they are currently full of medical patients – surgery flows well if they have their own beds.
- Staffing and Workforce: Physically there are not enough Registrars to round with each Consultant (even if they came in at 7am each morning); there is a shortage of nursing staff (even if all available beds were opened - there is not enough nursing and allied health staff to provide care and keep them open safely); there have been some initiatives were enhancement in nursing at CNC level have demonstrated benefits improving patient outcomes and flow for example CNS2 orthopaedics initiative with proven LOS decreasing benefits.

  Attracting staff has been difficult due to local accommodation shortages, access to schools, affordable child care and employment for partners after relocation; staff are wanting variable/flexible work arrangements in that they want permanency in their position but do not want to work unsustainable hours – a greater desire for a good work life balance; there doesn't appear to be any transparency around vocational guidance for school leavers and their consideration for a future in the health workforce.

- Outpatient and Community Health Services: Lack of outpatient services leads to inpatients being used as a one stop shop with everything occurring at the one time for scans etc. otherwise the cost is an impediment for patients to access this follow up privately (increases the LOS); Wound Nurse only provides services five days out of 7, stomal therapy only provided two days a week, and Psychogeriatric nursing is only a five day service not seven days; greater use of telehealth and virtual care is required but staffing should be in place to support the service delivery modality. There are really no public nurse led clinics available in outpatients. A need for consolidated thinking around all outpatient allied health, community care, LBVC s and other programs in how they come together and support each other rather than shifting staff operate on a project basis model rather than an ongoing initiative without any real enhancement.
- External Barriers: It was estimated by the group that currently around 20% of beds are taken up by aged care and NDIS patients who are unable to be discharged to a RACF or appropriate accommodation to support their ongoing care.

From these themes there was further discussion between workshop group members who produced, through a high level of consensus, the priorities for the immediate/short term. In order of priority, they were:

1. Implementation of a seven day a week discharge service to support more regular rounding of patients to move them along their patient journey; daily physician ward rounds to include weekends to improve discharge rates

2. Increased community support to target hospital substitution, telehealth and hospitalisation prevention services; increased utilisation for RiTH/HiTH models including virtual follow up to promote early discharge for surgical patients; increased patient education pre-op for expectations of stay and discharge planning
3. Increase in the number of allied health staff rostered on every weekend and to have the ability to back fill against leave.

The remaining initiatives were grouped and recorded in the sequence of support from stakeholders:

4. Satellite services rather than centralised; greater utilisation of Network service to decrease travel and improve access to care
5. Declared surgical beds to ensure surgery continues for our community and staff MDT engagement in NETWORK beds, recruitment retention; 72-hour model with eight beds short stay within current ward model i.e. laparoscopic cholecystectomy, appendix; 4-8 beds on surgical ward being quarantined beds / short stay 72 hours would prevent cancellation of elective surgery
6. ED redevelopment, starting with front of house, resus and acute areas, 2nd waiting room space, MH safe assessment spaces, Safer vision of acute ED spaces; streaming spaces within ED, Paediatric ED space
7. Opening of next day review clinics referred from ED
8. Timely radiology reporting
9. CNS2 for efficient flow of orthopaedic patients; programs in orthopaedics to decrease length of stay, for example for total hip replacement
10. Use of digital platforms / telehealth from Kempsey District Hospital to PMBH rather than every patient being transferred
11. Paediatric acute review clinics
12. Rehab unit at PMBH for subacute patients; open a waiting for nursing home ward
13. CSSD - move off site and be purpose built- bigger.

Appendix H – Strategic Support Summary

Table 50 – Strategic Support Services Summary

Service	Impact of proposed changes	Brief description of impact
Linen services manage the supply of linen to NSW public hospitals, providing sheets, blankets, towels and surgical gowns	Medium	**Moving to greenfield site:** New Clean and Dirty Linen Floor Space. Impact of opening 16 - 20 bed ward (1B) equated to 18% increase in linen usage therefore annual recurrent budget and FTE must be considered. **Remaining On site:** Limited space, Roll on roll of model to be considered from HS.
Food services provide quality meals including breakfast, lunch, dinner and mid meals to patients in NSW public hospitals	High	**Moving to greenfield site:** New kitchen will be required. **Remaining on site:** Refurbished kitchen is required.
Cleaning services perform cleaning for both patient and non-patient areas in accordance with infection control procedures	High	**Moving to greenfield site.** New cleaners room every ward, bulk storage for cleaning stock, Capital investment cleaning equipment, walk behind floor cleaners, scrubbers, floor polishers Financial Impact Statement - major impacts to back of house services. Access to annual recurrent budget and FTE for Cleaning staff workforce for new areas. **Remaining on site:** Full Staffing review against CEC SOP footprint for new and existing.
Internal waste management services including collection from point of source and transfer to waste zone may be provided by LHD staff, HealthShare NSW or a private provider. Removal from site is usually outsourced to an approved supplier	High	**Moving to greenfield site**: Internal and external spaces for waste for wards and departments. **Remaining on Site:** Need designated space for General, recycling Waste to fit waste compactor, truck movement and turning space. No Perimeter Fencing, looting and dumping occurs on site. No capacity to increase area to meet current MoH Policy for Clinical and Related Waste. Management for Health Services PD2020_049.
Clinical Waste	High	**Moving to greenfield site**: Internal and external spaces for waste for wards and departments. **Remaining on Site:** Need larger storage space.

Service	Impact of proposed changes	Brief description of impact
Loading docks are the areas of buildings designated for the loading and unloading of shipments brought to or taken from the facility by distribution and delivery vehicles	Medium	**Moving to greenfield site:** Require site large enough to future proof transport movement (Large Truck) that's not located in the facility evacuation area. **Remaining on site:** Require to install security swipe boom gate at entry point for Delivery Transport, security fencing and increase in CCTV.
Security services have a key role in ensuring the safety and security of patients, staff, and assets of a healthcare facility	High	**Moving to greenfield site:** New Department for Security as per AusHFG, including Emergency lock down on all external doors. **Remaining on site:** Require a designated hub for security, installation of external alarms on doors in the 1994 Building, install emergency shutdown on external doors at ED, Main Reception, Fast Track, install CCTV viewing room, Office spaces, Reception area for ID Access, introduce governance of the facility keys.
Porterage services will provide internal patient transport and a variety of services including clinical equipment and medical gases transfer throughout a hospital	Low	**Moving to greenfield site:** New Service implementation. **Remaining on Site:** HSAs currently undertake this role.
Procurement and Supply Chain manages high value state-wide contracts, state-wide purchasing, central inventory, NSW Health catalogues, clinical product management, fleet management, supply and management of NSW Health uniforms, supply of medical consumables among others	High	**Moving to greenfield site:** Designated area required with improved trucking transportation movement workflow. **Remaining on Site:** HSS occupy original soft space in EP building designated as Clinical Space.
The **Patient Transport Service** provides non-emergency transport service to patients, to or from a health facility such as a hospital or rehabilitation unit	Medium	Demand for services will continue to increase in the short term, however increased networking and virtual connections with other HMCN facilities should result increase less than they otherwise would have.
Mortuary is a facility with one or more rooms or a building, which is used for the storage of bodies, including a refrigerated body storage facility and may	High	**Moving to greenfield site:** New Body Holding facility. **Remaining on Site:** Engage Stage 3 of planning for BHF increase current space by eight trolley spaces, inclusive of external venting, ID access control, CCTV.

Service	Impact of proposed changes	Brief description of impact
include, body viewing area, body preparation room and an autopsy suite		
The **help desk** provides information assistance to patients and visitors in the planning and preparation of their stay or visit to the hospital	High	**Moving to greenfield site:** New dedicate space required with new technology with way finding available. **Requires dedicated space:** Limited space availability.
Grounds and Gardens (including pest control) are services associated with maintenance, repair, modification of hospital buildings, plant, equipment, grounds and gardens	High	**Moving to greenfield site:** Consideration for full perimeter fencing with duress to boundary. **Remaining on Site:** Require to install full perimeter fencing with Duress to boundary.
Internal Courier	High	**Moving to greenfield site:** Purchase of new vehicle fleet, dedicated parking spaces.
Loan Equipment/Medical Equipment loan pool service provides assistive technology and related services on loan to people in NSW with specific, short term or ongoing health needs to assist them to live safely at home	High	**Moving to greenfield site:** Suitable **s**torage spaces.
Main Reception and Administration Services, Admissions	High	**Moving to greenfield site:** Consideration of all listed below to be included. **Remaining on site:** Capital expenditure required as per Protecting People and Property - No Automatic facility lock down available, No duress to boundary of facility. CCTV Screen for Viewing Only for external to main entry. Limited CCTV throughout facility and car park. No external Door alarms in the 1994 Building, Wifi issues. No Safety Screens available at Main Reception. Acoustic Risks. No disabled consideration or signage / Hearing impaired/ Deaf. No Electronic Information Centre and Way finding including maps. For consideration, electronic signage board for Main reception areas to identify entry requirements (cost saving A4 A3 printing and laminating the FTE to change over signage).

Service	Impact of proposed changes	Brief description of impact
Volunteers	Medium	**Moving to greenfield site:** Consideration of all listed below to be included. **Remaining on site:** No Designated Area currently located in a clinical area on level 3 No ability to fund raise similar to CHHC shop
PCBU - New Project Car parking / Charging Cashier	High	..
Patient Television	High	**Moving to greenfield site:** Consideration of all listed below to be included. **Remaining on site:** Full upgrade required analogue to digital similar to Macksville
Call Centre - Touchpoint A call centre is a workplace that receives and transmits a large volume of customer requests by telephone. The main focus of call centre is generally to provide product support and information to customers by telephone and occasionally by mail, fax or email.	High	**Moving to greenfield site:** Consideration of all listed below to be included. **Remaining on site:** No patient phone at bed side Hands free manually delivered to patient when family members call. In absence on ward clerk on Weekends, RNs undertaking tasks. Upgrade of cabling required analogue to digital.
Postal Services Processing Australia Post items within the workplace a large volume of manual tasks. The main focus of the mail room is generally to provide distribution and processing of postal related items for the business and provide information to staff.	Medium	**Moving to greenfield site:** Consideration of all listed below to be included. **Remaining on site:** Increase due to pandemic with pts document signatures post infection requiring follow up with discharged pts No designated Mail Room impacting confined work area limitations to movement
Reception End Of Month A month-end close is an accounting procedure that ensures all financial transactions have been accounted for in the previous month. To ensure that they are giving accurate data, accountants will have to review, record, and reconcile all account information.	Medium	**Moving to greenfield site:** Consideration of all listed below to be included. **Remaining on site:** Current storage of documentation for audit purposes. Streamline processes and eliminate complex processes.

Table 51 – Service Provider Engagement

Short statement to describe service	Strategic Support Service	Service Provider	Service Provider Engagement
Linen Services manage the supply of linen to NSW public hospitals, providing sheets, blankets, towels and surgical gowns	**Linen Services**	HealthShare NSW	Consulted
Food Services provide quality meals including breakfast, lunch, dinner and mid meals to patients in NSW public hospitals	**Food Services**	HealthShare NSW	Consulted
WHSmith provide meals breakfast, lunch, dinner and mid meals to all in NSW public hospitals	**Cafeteria**	Private Supplier	Not Consulted
Cleaning Services perform cleaning for both patient and non-patient areas in accordance with infection control procedures	**Cleaning Services**	LHD / SHN	Consulted
Internal waste management services including collection from point of source and transfer to waste zone may be provided by LHD staff, HealthShare NSW or a private provider. Removal from site is usually outsourced to an approved supplier	**Waste Services**	Private Supplier	Consulted
Loading docks are the areas of buildings designated for the loading and unloading of shipments brought to or taken from the facility by distribution and delivery vehicles	**Dock Services**	HealthShare	Consulted
Security services have a key role in ensuring the safety and security of patients, staff, and assets of a healthcare facility	**Security Services**	LHD / SHN	Consulted
Porterage services will provide internal patient transport and a variety of services including clinical equipment and medical gases transfer throughout a hospital	**Porterage Services**	Other	Consulted

Short statement to describe service	Strategic Support Service	Service Provider	Service Provider Engagement
Procurement and Supply Chain (including medical consumables) manages high value state-wide contracts, state-wide purchasing, central inventory, NSW Health catalogues, clinical product management, fleet management, supply and management of NSW Health uniforms, supply of medical consumables among others	**Procurement and Supply Chain** (including medical consumables)	HealthShare NSW	Consulted
The Patient Transport Service provides non-emergency transport service to patients, to or from a health facility such as a hospital or rehabilitation unit	**Patient Transport Services**	LHD / SHN	Consulted
Mortuary is a facility with one or more rooms or a building, which is used for the storage of bodies, including a refrigerated body storage facility and may include, body viewing area, body preparation room and an autopsy suite	**Mortuary**	LHD / SHN	Consulted
The help desk provides information assistance to patients and visitors in the planning and preparation of their stay or visit to the hospital	**Patient and Visitor Help Desk**	LHD / SHN	Consulted
Grounds and Gardens (including pest control) are services associated with maintenance, repair, modification of hospital buildings, plant, equipment, grounds and gardens	**Grounds and Gardens (including pest control)**	Private Supplier	Not Consulted
Loan Equipment/Medical Equipment loan pool service provides assistive technology and related services on loan to people in NSW with specific, short term or ongoing health needs to assist them to live safely at home	**Loan Equipment/Medical Equipment Loan Pool**	LHD / SHN	Consulted

Table 52 – Service Opportunities Assessment

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
Linen Services: Clean linen store, soiled linen store, Linen access (access to cleaning loading dock and soiled loading dock), staging area/s, ward level storage areas	Ward Trolley Service Model. PMBH distribution of clean linen and collection of soiled linen transported to centralised dirty linen room, has access to loading dock however this is limited and has open roller doors impacting on the clean linen area. Monday to Friday inclusive of delivery of Clean and Soiled by HealthShare NSW.	No roll on roll off service and linen trolleys too high WH&S issue. **Soiled Linen Space** No weekend servicing this impacts Mondays being over loaded requiring dirty linen to sit an extra day for removal. 0900am Friday soiled linen will sit with no service delivery for removal and some remains until the Tuesday due to no room on the transport truck. Infection Control Issue with smell. Linen overflow can also sit in Main Corridor at back of house due to insufficient space near CSSD entry. Limited trolleys and dirty linen placed on floor. Hospital utilisation of linen has increased, and more is required to cover the seven (7) day a week utilisation. With no increase to FTE for distribution of new services opening.	Additional delivery of clean and collection of soiled linen on Weekends.	In line with the recommendations of this Services Plan, it is projected that as a result of an increase in beds by (number) and increased separations by (number) that additional linen will be required, particularly in wards, buildings etc. As a result, additional assets (for example FTE, Tugs, linen trolleys etc.) will be required for management, transport, storage etc. of the linen.

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
Food Services (Kitchen):	One central Kitchen. Kitchen has access to clean loading area. There are dishwashing, reheating facilities, storage areas and separate food preparation areas.	The Site has moved to a new Food Service Model My Food Choice. Current mould problems in office areas. If facility grows to an extra 50-100 the kitchen will require extra space.		The existing kitchen can be refurbished to meet future demand. The kitchen design/layout needs to be flexible enough to accommodate different food service models.
Loan Equipment/Medical Equipment Loan Pool: Equipment storage room with charging bays	Equipment storage rooms within wards, storage room/s for community and allied health equipment.	TBD	TBD	New building / refurb should include equipment storage rooms and consider a central shared storage room.
Shared Areas (Staff Amenities): Lockers, shower area, WC etc.	Limited spaces	Due to COVID-19 distancing impact, outgrown staff dining area, only limited numbers where staff and sit for their breaks. Limited locker, WC and change rooms for staff.	45 toilets across PMBH 14 requiring refurbishment in 1994 building to be fit for purpose.	Capital required to design and develop a large outdoor dining areas with cover. Capital outlay across the 1994 outdated and old, all staff and public WC and change rooms require upgrading.

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
Cleaning Services: Workspace for supervisory staff, consumable store (bulk cleaning materials and supplies), equipment stores (with parking and charging bays), secure chemical store/cupboard, cleaner's rooms, disposal rooms	7 day a week service. Separation of Service delivery. ED cleaning is 24 hours day.	..	..	Increase cleaning requirement if a new building with predominately clinical spaces. Approaches are likely to change such as the introduction of eWater, introduction of updated and tested sanitising techniques. Any new build will include cleaners' rooms.
Waste Services: Bin washer/bin washing area, clean bin holding area, compactor/bailer, external covered waste compound for general and cardboard waste collection, clinical waste holding area, recycling waste holding area/compactor	Private Supplier.	Need designated space for General, recycling Waste to fit waste compactor, truck movement and turning space. No Perimeter Fencing, looting and dumping occurs on site.	Investigate addition waste streams.	Increase in amount of waste and waste collection points.

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
Dock Services: Receivals/dispatch, bulk store, equipment bay, medical gas store, flammable material store, computer/electronic recording system for inventory management, dock levellers, sufficient turning circle capacity for large trucks and semitrailers	TBD	TBD	TBD	TBD
Security Services: Reception space, security room, CCTV monitoring room, store-general, Wi-Fi coverage	Service Model is Health and Security. Duress team each shift consists of four HSAs	Temporarily located in a soft space of the 1994 building not to AHFG.	Require the implementation of Security Services inclusive of training, reception, office, break away space, security room, CCTV monitoring room, store-general, Wi-Fi coverage.	
Porterage Services: Equipment stores, charging bays	Health and Security Assistance assist	Not available at PMBH		Increased demand.

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
Procurement and Supply Chain Ward medical consumables storerooms	TBD	Limited space for patient equipment storage such as beds, wheelchairs, I.V pole, bed heads and patient mattresses for both pressure and normal mattresses.	TBD	Any new build or refurbishment to include storerooms.
Patient Transport Services: Fleet office, electronic key cabinet, mail room (sorting bench, pigeonholes, bench space for parcels, write-up area, empty trolley storage), e-parcel tracking	Fleet Service run by Main Reception Supervisor Volunteer Buggy.	Inability to meet current expectation for Fleet Operating Procedure's i.e. daily individual fleet checks, first aid checks and auditing, follow up current licences, timely tyre rotation, and servicing, Claims, tracking damages. Fleet position is not separated as per other facilities	Separate this services as an AO3 position, leaving EFY and monthly Finances with AO5. Recommend build or install a demountable in the location of fleet to ensure Fleet Operating Procedures can be met.	..
Mortuary: Body holding areas (separate areas for stillborn and neonate), provision for storage of decomposing bodies and deceased bariatric patients, viewing room, culturally sensitive waiting room, direct access to external car park	Maximum Capacity nine Rack Space with two trolley spaces	No Separate area for (stillborn and neonate), limited provision for storage of decomposing bodies and deceased bariatric patients, no direct access to external car park.	Current Project Briefed and listed for work to be conducted to increase the Body Holding Facility at PMBH with an extra eight trolley spaces to ensure decomposing bodies	As per comments on left.

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
			and deceased bariatric patients can be held with minimal impact to staff servicing this area and the deceased.	
Patient and Visitor Help Desk: Office room			Looking at UHA Volunteers to assist similar to Coffs Harbour Health Campus	..
Grounds and Gardens (including pest control): Equipment store with charging bays	Gardens are maintained by external contractor.	No bus stop seating or awning. Limited seating for visitors and staff. Insufficient bicycle storage. Insufficient Motor Bike parking	Opportunity exists to introduce volunteers to work with Gardener.	..
Volunteers		No Designated Area currently located in a clinical area on level 3. No ability to fund raise similar to CHHC shop		Designated area to be considered.
Call Centre - Touchpoint A call centre is a workplace that receives and transmits a large volume of customer requests by telephone. The main focus of call centre is	..	No patient phone at bed side. Hands free manually delivered to patient when family members call. In absence of ward clerk on weekends, RNs undertaking tasks.	Upgrade of cabling required from analogue to digital.	Upgrade tech during refurb or new build.

Strategic Support Service	Current Service Overview	Current Service Gaps	Current Service Opportunities	Projected Change to Service Requirements
generally to provide product support and information to customers by telephone and occasionally by mail, fax or email.				
Postal Services Processing Australia Post items within the workplace, a large volume of manual tasks. The main focus of the mail room is generally to provide distribution and processing of postal related items for the business and provide information to staff.	..	Increase due to pandemic with patient document signatures post infection requiring follow up with discharged patients. No designated Mail Room impacting confined work area, limitations to movement		Designated area to be considered.

Appendix I – List of Stakeholders Consulted

Table 53 – Stakeholder consulted to inform the PMBH Clinical Services Plan

Name	Position
Malcom Leek	HMCN Director of Medical Services
Jill Wong	Director of Integrated Care, MNCLHD
Fiona Leslie	Clinical Director Obstetrics and Gynaecology, Chair HMCN Medical Clinical Council
Penny Jones	Director of Integrated Mental Health, Alcohol and Other Drugs, MNCLHD
Marie Beswick	District Integrated Aged Care Manager, MNCLHD
Colleen Ryan	HMCN Manager, Community and Allied Health
Helene Jones	HMCN Manager, Aboriginal Health
Tegan Schmitzer	A/NUM, HMCN Renal Services
David Noble	District Manager, Community Mental Health, MNCLHD
Penelope Pink	Director of Nursing and Midwifery, PMBH
Sharon Gouck	Deputy Director of Nursing and Midwifery, PMBH
Ann Bodill	Director of Nursing/Executive Officer, Wauchope District Memorial Hospital
Alison Wilson	NUM Medical Ward 1B, PMBH
Kathy Boom	NUM Medical Ward 3D and MAU, PMBH
Lucille Niddrie	Acting NUM Medical Wards' 1C and AGEM, PMBH
Nyssa Roberts	Team Leader AGEM Ward, PMBH
Chantelle Newton	NUM Surgical Ward, PMBH
Natalie Schmude	Acting NUM, Surgical Ward, PMBH
Belinda Garvey -	Perioperative Nurse, PMBH
Bruce Hodge	Surgeon, MNCLHD
Patrick Thompson	Staff Specialist Paediatrician & Neonatologist
Craig Hore	Medical Director ICU, PMBH
Kelli Coleman	NUM ICU, PMBH
Chris Alexopoulos	Director of Cardiology, PMBH
Kathleen Bohannon	NUM Cardiology, PMBH

Dawn Martin	HMCN Director of Emergency
Digby Hone	Director ED, PMBH
Scott Pomroy	Clinical NUM ED, PMBH
Colette Scott	Psychogeriatric Nurse Practitioner, PMBH
Debbie Deasey	Aged Care and Hospital Avoidance Nurse Practitioner, PMBH
Daniel Abel	NUM Community General Nursing, Manager Community Palliative Care
Michael Rohr	NUM Specialist Teams (HiTH, Dietetics), PMBH
Cassie Deans	A/NUM, Kempsey District Hospital Community Health
Katrina Russell-Cargill	Manager, Aged and Extended Care Service, PMCH
Kate Forbes	Manager, Child and Adolescent, HMCN
Kristen Haveland	A/Manager Speech Pathology, HMCN.
Jennifer Burgess	CNC for HiTH, HMCN
Siggy Haveland	A/Health Reform Manager, MNCLHD
Andrew Wong	Health Reform, MNCLHD
Amanda Ryan	District Manager Aboriginal Health Strategy Policy & Performance, MNCLHD
John Miles	Asset Management Specialist, Capital and Asset Management, MNCLHD
Leigh Kinsman	Professor of Evidence Based Nursing, University of Newcastle and MNCLHD
Melainie Ison	Facility Support Manager, PMBH
Debbie Fowler	Supervisor, Support Services, PMBH
Julie Dodds	Area Manager, Patient Transport Services