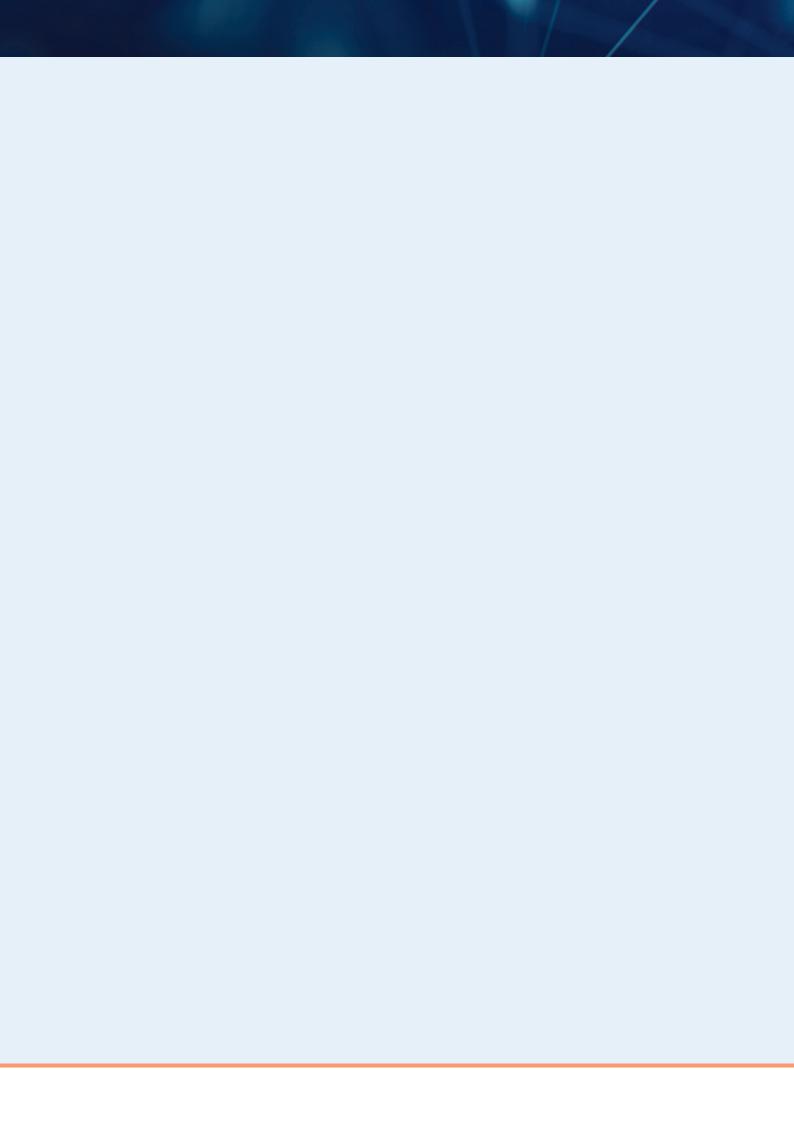


Mater Health

Clinical Services Plan





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1. Mater Health. It's all about you.

Mater Health is redesigning the way that we deliver care for our patients and their carers, through the implementation of our *Exceptional Every Time* program of work. That means we will continue to provide the highest quality healthcare when you need it at the same time as building greater capability to provide more support to be relevant in your healthy life.

Working with General Practitioners, government partners, clinicians and other providers we will strive to build a connected and logical pathway which delivers a world-class standard of care for all of our patients across all stages of their healthcare journey. We will extend our care platforms to ensure that your clinical needs are met both within the hospital context, at home and in the community.

Mater People acknowledge the privilege to provide support for our community and we have devised our Clinical Services Plan in Mater Health as an extension of our goal to continuously improve our service for you.

Our promise

- Mater Health will continue to strive for the perfect balance of personalised care and precision medicine which is focused on you.
- We will seek ways to continuously improve our information, products and services to meet your needs.
- We will deliver evidence-based clinical care which delivers improved outcomes each and every time.
- We will build a stronger, more sustainable health service for you and your loved ones.
- Improving the quality of your experience will guide us to excellence and relevance, and we will treat you with respect and dignity regardless of your wealth, your faith, your creed or your social status.

A Clinical Services Plan designed for you

Mater is a Catholic, not-for-profit, private organisation that has provided healthcare services to the people of Queensland since 1906 when the Sisters of Mercy opened the first Mater Private Hospital at North Quay in Brisbane. Since that time Mater Health has grown to be an iconic provider of hospital-based healthcare for the community, striving to deliver an exceptional standard of care in line with our Mission to meet unmet needs.

As our community evolves and your healthcare needs change, Mater Health must also transition in order to provide relevant and financially sustainable clinical services both within, and beyond the hospital setting.

Our Clinical Services Plan helps to frame our approach to a changing environment whilst continuing the high standards of care and customer service to which Mater has always aspired. It guides our response to the health needs of the community and ensures that we meet those needs in a financially sustainable, ethical and socially appropriate manner.

This plan directly connects our commitment to clinical care with the operational decisions that guide our future. It is a critical document in the management and delivery of Mater Health's services and an enabler for Mater Group's strategy to genuinely enhance the standard and quality of community health through a commitment to health, education and research.

Mater Health's Clinical Services Plan is built upon a strategic framework which takes into account the dynamic healthcare funding environment, the complexities of differentiated public and private healthcare expectations, changing market needs and the broad impact of technological advancement.

This framework, known at Mater as 'Exceptional Every Time' (EET), leverages all aspects of Mater's expertise to deliver the highest quality, evidence-based healthcare for all Mater patients. It requires a genuine and consistent integration of Mater Health, Mater Education and Mater Research across a unique clinical stream-based structure to effect significant and continual improvement in clinical safety and quality.

In line with EET outcomes this Clinical Services Plan commits Mater Health to five priorities which form the points of the Mater Performance Star; Safety, Experience, Quality, Efficiency and Future Viability.



Figure 1: Exceptional Every Time Strategy

The performance star aligns with Mater's Mission and Values and helps all Mater People to focus on meeting your needs. It sets an important foundation for our Clinical Services Plan which then drives our response through service configuration, activity projections and infrastructure investment.

Utilising the EET framework, our Clinical Services Plan is designed to maximise Mater's market leading capabilities in key specialty areas which will drive our services growth, and community benefit. This approach and our commitment to Mater's Mission will continue to guide our development and ensure a strong future for Mater.

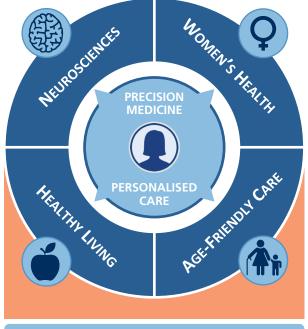
Our focus areas

Neurosciences.

The strong forecast growth in neurology and neurosurgery opens the potential for Mater to continue to focus on our public and private neuroscience service.

Healthy Living.

Taking account of the determinants for disease, engaging in a personalised approach to care and providing integrated services which meet our patients' needs will ensure that Mater Health makes a significant and positive contribution to health outcomes throughout the healthcare journey.



Women's Health – maternity, newborn and gynaecology services.

Mater will enhance its position as the pre-eminent provider of public and private maternity and neonatology services by enhancing its service catalogue for women's health.

Age-Friendly Care.

Mater will provide tailored, age-relevant care which takes into account the various stages of life. This will be most notable in our service provision for the elderly, a significantly growing proportion of our population which is currently under-serviced, but will also become prominent in young adult services.



Figure 2: Clinical Services Plan – Focus Areas

Driving relevant, focused growth

As with any community-engaged business, and particularly for not-for-profit health services, the future of Mater Health is heavily dependent on our relevance to the community we serve. Extending our excellent reputation and expertise in some key areas for growth while also building capability where there are service gaps in the community will help Mater Health to maintain and improve its position for the future. More importantly, it will ensure that we are providing the services that you need, when and where you want them.

An assessment of community need, socio-economic factors and the geopolitical environment has helped Mater Health to identify key areas of clinical focus. As we progress in building these services we will seek further connection with you, our community, to guide our development and partner in ensuring that you receive exceptional care and a health experience which exceeds your expectations.

Our focus areas for relevant growth are;

Age-Friendly Care

Mater Health provides healthcare services both within the hospital and beyond, which are designed to meet the needs of a diverse demographic population; from newborns to the elderly. Given this broad spectrum of expertise and commitment, Mater has the opportunity to devise and implement tailored, age-relevant care which takes into account the various stages of life. This will be most notable in our service provision for the elderly, a significantly growing proportion of our population which is currently under-serviced, but will also become prominent in young adult services.

Women's Health

Through Mater Mothers', Mater Health has a long-standing connection to growing families in Queensland. Over time, our commitment to maternity and neonatology has grown to include gynaecology, gynaecological oncology, breast and women's health services which draws a genuine link to the health of our community. Mater Health will continue to build this expertise into new models of care and specialised services as a leader in integrated health, education and research.

Neurosciences

The strong forecast growth in neurology and neurosurgery opens the potential for Mater to continue to focus on our public and private neuroscience service. Mater Health has developed a strong reputation for high quality neurosciences and boasts the team, facilities and expertise to meet this need. Our commitment to integrated clinical care, research and education will help to ensure that Mater leads the way for neurosciences in Queensland.

Healthy Living

As a part of Mater Group's broader commitment to the health of our community, Mater Health will continue to play a significant role in providing a comprehensive care platform for healthy living. Taking account of the determinants for disease, engaging in a personalised approach to care and providing integrated services which meet our patients' needs will ensure that Mater Health makes a significant and positive contribution to health outcomes through all stages of the healthcare journey including palliative care services to support 'dying well'.

Mater Health is committed to delivering the highest quality care in our key focus areas through the EET framework and in line with the Mater Group strategy to improve the health of our community. At Mater this means improving operational excellence, defining and embedding evidence-based care, reducing unwarranted clinical variation and setting a sustainable foundation for growth. It means engaging you in your care and building a model which meets your individual needs while also supporting our community as it evolves.

We all benefit from Mater's commitment to operational excellence

Our emphasis on improving operational excellence will be a lived experience for Mater People, our patients and the community. We will deliver the highest standard of clinical care and service experience as we continue to improve cost-effectiveness and efficiency. Standardisation of clinical pathways, more integrated patient journeys and continued commitment to the reduction of unwarranted clinical variation will provide greater transparency and improved outcomes. This model supported by a culture of continuous improvement and integrated with education and research across every specialty area attracts great clinicians, delivers value for the community and ultimately improves health outcomes for all the communities we serve.

The first steps in this next phase of our journey toward operational excellence will commence in our core services of urology, orthopaedics, ophthalmology and general surgery and will rapidly expand to drive a new standard of excellence in young adult, cancer and general medicine services.

It is our commitment and passion for operational excellence which will ensure Mater Health's long-term viability and community relevance. A balance between excellent clinical care and logical application of sustainable business practices positions Mater for a future that is measured by health outcomes and funded on value-based care.

Designing our services around you, makes us all better

As an extension of operational excellence, Mater acknowledges the need to deliver an exceptional experience for all Mater consumers; be they patients, students, donors, clinicians or any other stakeholder. Mater People value customer service and consumer experience as a crucial part of each and every interaction. We know that the same motivation which drives us to deliver exceptional clinical outcomes should drive our approach to service.

We recognise that what has previously been defined as 'the patient experience' must now be broadened to include the whole journey through wellness and extend to family and community. A key element of implementing our new Clinical Services Plan is our commitment to meet or exceed each and every person's service expectations each and every time.

To do this effectively we will engage with our consumers to co-design a holistic service which goes beyond traditional care delivery. We anticipate that this approach will shift not only the configuration of our service, but will help to supplement gaps through strong alliances and partnerships with a range of providers (including those outside of the traditional care environment).

Improved technology improves access to care and information, which means better health outcomes

Your health can be significantly improved through appropriate application of current and emerging technologies. As Mater Health is committed to providing the highest standards of evidence-based care, we are equally committed to enhancing our services through virtual, digital and physical technology.

A key part of the Mater Health Clinical Services Plan is to improve access to support better health outcomes. By making it easier for you to access healthcare and information closer to your home, or in your home, or wherever you choose, we are creating a more relevant and sustainable health service. Building a network of technologies across all Mater services, and using that platform to innovate and improve telehealth, out-of-hospital monitoring and condition-specific applications, we will be more available when you need us.

Scope and purpose of the Mater Health Clinical Services Plan

In a changing healthcare landscape, it is important to implement a plan which allows Mater Health to be dynamic while maintaining a strong commitment to service excellence. Our Clinical Services Plan plots a ten year course for Mater Health to become even more relevant to you and your family and outlines the organisation's approach to infrastructure and service models to ensure growth. It has been devised to also incorporate a degree of flexibility to allow for a rapidly changing industry, new technologies and shifts in community needs.

While this plan sets the path for Mater Health for the next ten years, it is integrated with Mater's Exceptional Every Time strategic framework and is devised to respond to the larger forces impacting public and private healthcare nationally and locally. There is a direct link between activity outlined in this Clinical Services Plan and the broader Mater Group Strategy which incorporates all of Mater's activities and focus in South East Queensland.

The scope of the plan includes considerations of current campuses and services. Mater Health provides clinical services through hospital facilities at South Brisbane, Springfield and Redland. These facilities are enhanced by services provided at home, through technology platforms such as telehealth and within the community through people-focused programs including those which reach out to the most underprivileged and marginalised.

With the implementation of Exceptional Every Time, and in recognition of the need to alter the centricity of care models, Mater Health transitioned to a 'clinical stream' structure in 2016. All of our services, facilities and clinical activity are now delivered through five clinical streams which enables direct line-of-sight to ensure the safest, highest quality care for our patients. Designed to revolve around people, patients and carers rather than buildings and beds, the Mater Health clinical streams are:

- Medical / Chronic Disease Services
- Surgical / Acute Care Services
- Mothers, Babies and Women's Health Services
- Cancer Care Services
- Neurosciences.

Each stream is governed by a Medical Director who is supported by a Director of Nursing / Midwifery and a Director of Business (i.e. Triumvirate Leadership) to ensure consistent focus on your needs while maintaining a sustainable, evidence-based model of care.

Our clinical streams operate across all of our campuses and have been designed to be scalable to facilitate growth and uphold exceptional standards of care for every patient, every time.

Our Clinical Services Plan provides a clear outline and roadmap to highlight the connection between Mater Health's infrastructure and service development, and the needs of the community. It draws attention to areas in which Mater has specific capability and can deliver optimal support, and in consideration of these factors helps to;

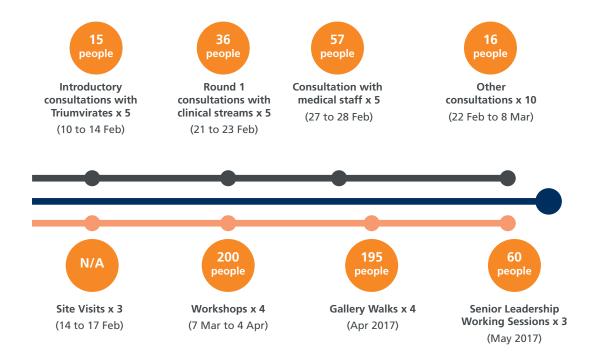
- provide an overview of changing health needs within the community over the next ten years
- outline Mater Health's response to community need
- deliver a roadmap in each clinical stream area to drive action
- establish tangible connections between planning of infrastructure and service delivery.

Our approach to developing this plan

In formulating this plan Mater Health has consulted broadly and engaged significantly with internal and external stakeholders. We recognise the importance of building a plan and a service which is relevant for all our stakeholders and we acknowledge the time, commitment and input from;

- Our consumers
- Mater People including clinicians, administrators and leaders
- Our colleagues in Mater Education, Mater Research and Mater Foundation
- Queensland Department of Health
- Brisbane South Primary Health Network
- Metro South Hospital and Health Service
- West Moreton Hospital and Health Service
- Children's Health Queensland Hospital and Health Service.

Figure 3: Consultation and engagement for the Clinical Services Plan



Using the *Exceptional Every Time* Performance Star as a guide, this plan has been developed to extend Mater Health's capability and relevance within the parameters of continuously delivering safe, high-quality healthcare. To ensure we build a plan which meets the needs of our community we examined key trends in health service delivery, made an assessment of opportunities and challenges facing Mater Health (both internal and external) and deeply investigated areas in which Mater can lead for the future.

At the detailed level we also considered;

- baseline activity projections for each of our campuses and clinical streams
- potential changes in service delivery models at the specialty level
- planning undertaken by our public hospital partners (Metro South and West Moreton Hospital and Health Services)
- service planning scenarios which sought to estimate the future activity and infrastructure requirements considering factors such as growth rates and population changes, and service delivery options for our clinical streams and facilities.

The resultant Mater Health Clinical Services Plan and accompanying implementation agenda proposes a number of initiatives and objectives to position Mater Health for a strong and sustainable future which is aligned to your health goals. We look forward to sharing this plan and the many aspects of its implementation with our partners and the community as we continue to engage and improve.

What this means practically for Mater Health



Growth per year in our private inpatient activity, between 2017 and 2027 (excl. Springfield)



Growth per year in private activity in 17 key specialties (2017 to 2027)



Growth in private activity at Springfield, between 2017 and 2020



Additional private occupied bed days per annum 2017 and 2027



Additional private inpatient beds utilised within our existing network of infrastructure, between 2017 to 2020



Beds potential development as part of Springfield Stage 2 by 2027 (public and private)

2. Our environment and broader policy directions

Our role as a private and public healthcare provider

As a provider of both private and public health services, it is important that we recognise the strategic priorities of our partners (in particular, the Queensland Government); as well as being cognisant of broader policy directions that will also impact our private services.

Our public services are delivered through a formal Service Agreement with the Queensland Department of Health, with a supplementary contractual arrangement to provide public services at Mater Private Hospital Springfield on behalf of Metro South and West Moreton Hospital and Health Services.

In recognition of this important role in the Queensland public health system, it is imperative we consider the strategic priorities of the Queensland Government, as well as other partners in our local community (including private health insurance funds).

My health, Queensland's future: Advancing health 2026

Like any other health system, Queensland is facing significant challenges including an ageing population, increasing chronic disease, rapidly changing technology, and increasing consumer expectations. In 2016, the Queensland Government released My health, Queensland's future: Advancing health 2026 to "outline aspirations for how the entire Queensland health system can support Queenslanders to maintain and improve health and wellbeing in the future."

The strategy outlines the vision for Queensland's health system, that "by 2026 Queenslanders will be among the healthiest people in the world."

Advancing health 2026 then provides five principles to guide decision making and how partners should work together; and four directions with specific indicators to measure progress. These all align broadly with Mater Health's priorities and direction.

The principles are:

- **Sustainability** ensuring available resources are used efficiently and effectively for current and future generations.
- **Compassion** applying the highest ethical standards, recognising the worth and dignity of the whole person and respecting and valuing our patients, consumers, families, carers and health workers.
- Inclusion responding to the needs of all Queenslanders and ensuring that, regardless of
 circumstances, the most appropriate care and service is delivered with the aim of achieving better
 health for all.
- **Excellence** delivery of appropriate, timely, high quality and evidence-based care, supported by innovation, research and the application of best practice to improve outcomes.
- **Empowerment** recognition that the healthcare system is stronger when consumers are at the heart of everything that is done, and they can make informed decisions.

The directions are:

- **Promoting wellbeing** improving the health of Queenslanders, through concerted action to promote healthy behaviours, prevent illness and injury and address the social determinants of health.
- **Delivering healthcare** the core business of the health system and improving equitable access to quality and safe healthcare in its different forms and settings.
- **Connecting healthcare** making the health system work better for consumers, their families and communities by tackling the funding, policy and delivery barriers.
- Pursuing innovation developing and capitalising on evidence and models that work, promoting research and translating it into better practice and care.1

As a significant provider of public health services in south-east Queensland, it is imperative we consider and contribute to achieving the strategic priorities of the Queensland Government and Department of Health in meeting the health needs of Queenslanders.

Metro South Hospital and Health Service (Metro South Health)

Mater Health operates largely within the geographic catchment of Metro South Hospital and Health Service (MSHHS); with the main catchments for our South Brisbane and Redland campuses coming from within the boundaries of MSHHS.

As such, MSHHS is an important strategic partner for Mater Health. MSHHS provides services from five main hospitals:

- Princess Alexandra Hospital
- Logan Hospital
- Queen Elizabeth II Hospital
- Redland Hospital
- Beaudesert Hospital.

MSHHS' vision is "to be renowned worldwide for excellence in health care, teaching and research"; and have three focus areas:

- clinical excellence and better health care solutions for patients through redesign and improvement, efficiency and quality
- technology that supports best practice, next generation clinical care
- health system integration.

In 2017, MSHHS also prepared a Health Service Plan for the period to 2022. The Plan outlines the future requirement for service and infrastructure growth to meet population demands in the region, with four service directions - promoting wellbeing and health equity, delivering healthcare to support population growth, connecting healthcare and putting patients first, and pursuing innovation for smarter healthcare.

Mater's Clinical Services Plan considers the needs and priorities of MSHHS, including estimating future activity for Mater Health taking account of services provided by MSHHS and the infrastructure constraints at MSHHS.

West Moreton Hospital and Health Service

West Moreton Hospital and Health Service (WMHHS) is a strategically important partner for Mater Health, given our expanding services and role within the 'Health City' at Springfield which is in the WMHHS catchment. This significant population growth corridor will be both a challenge and an opportunity for WMHHS and Mater Health into the future.

Queensland health, 2016, My health, Queensland's future: Advancing health 2026. May 2016. Accessed 15 May 2016 from https://www.health.gld.gov.au/__data/assets/pdf_file/0025/441655/vision-strat-healthy-gld.pdf

WMHHS' vision is "quality care and wellbeing provided locally in our community". Their Strategic Plan (2017-2021) outlines a commitment to four priorities, including:

- Person-centred care listening to, involving and empowering patients, consumers and their families.
- **Caring for their teams** inspiring a workplace where staff, volunteers and partners can thrive, contributions are valued and performance excels.
- **Interconnected care** advocating, championing and growing the local health network services to deliver truly integrated care.
- **Excellent care** transforming service models to set new standards for excellence, deliver a range of complex clinical services and care closer to home through a focus on innovation, research and education.

WMHHS is also currently updating their Health Service Plan to further understand and plan for the growing needs of their population and exploring options to address that need in the context of infrastructure constraints.

Our Clinical Services Plan considers the needs and priorities of WMHHS, and specifically outlines what role we believe we can play in the public and private health sector in the West Moreton area – particularly in growing our services at Springfield.

Responding to system challenges and opportunities

As part of developing the Clinical Services Plan, we scanned the external environment to ensure we had a detailed understanding of the challenges and opportunities facing us. This analysis of the system challenges and opportunities was contextualised through consultation with our clinicians and partners, and a summary is outlined below.

Ageing population and burden of disease

The ageing of the population and increasing burden of disease is a factor facing all communities and health and human service providers. As the population ages, and treatments and technology improve, people are living longer with chronic health conditions. This is driving increasing demand for health services, and different ways of delivering care.

The populations we serve at Mater Health are a mixture of socioeconomically advantaged and disadvantaged groups, older age groups, vulnerable populations (such as the refugee population), as well as those at the beginning of life.

The introduction of the National Disability Insurance Scheme (NDIS) will also impact on a population that we may currently serve; but also represent a cohort of patients we can coordinate services for and part of our drive towards providing more holistic, all-inclusive care.

To continue to keep pace with the demand, we will need to optimise our existing physical capacity and human resources, and develop new and innovative ways of treating patients in their own communities and homes.

New ways of delivering care, underpinned by technology

To continue to deliver high quality care that improves our communities' health in line with the changing requirements of our funders, we will need to develop and implement new ways of delivering care. This includes improving our focus on prevention and early intervention, adopting new clinical advances and technology platforms, and integrating our services internally and with our partners to provide more holistic care.

Opportunities include:

- Prevention and early intervention innovative and proactive approaches to managing the health of a population lowers costs and improves outcomes. These types of services are becoming more important to manage demand and limited resources more effectively, and research shows improved outcomes and lifestyle if we intervene earlier. This is a significant opportunity for Mater Health, especially in developing more holistic service offerings that include a wellness focus.
- Integrated care health systems around the world and Australia are investing significantly in integrated care; including in Queensland, where the Queensland Government is investing \$35 million in the Integrated Care Innovation Fund. Integration between clinical specialties and across the health continuum improves health outcomes and patient experience. At Mater Health, we have started this through the introduction of our clinical streams; however, have significant opportunity to build on that through developing more holistic service offerings, and partnering effectively with other organisations to deliver care to our patients.
- Virtual care virtual care and digital health programs are designed around the needs and preferences of consumers, providing more timely information and access to care in a range of different settings (often more convenient to patients and their families). With the rapid advancements in technology, virtual care and digital health programs can improve the quality of care for patients, increase compliance to treatment regimes, and reduce health system inefficiencies and cost (including through preventing unnecessary use of acute facilities).² Our Digital Strategy for Mater Health is the start of the journey to improving and capitalising on this kind of technology.
- Taking advantage of clinical treatment advances technology is driving rapid changes and improvements in the way patients are treated. Significant advancements in fields such as precision medicine – customised diagnosis and treatments that consider genes, environment and lifestyle – are gaining momentum in many areas and fields across the world. In addition, the rise of the informed and empowered consumer will drive demand for the latest treatments, delivered in different ways. At Mater, we already have a well-renowned Neurosciences centre and one of the largest co-located public and private maternity services in the southern hemisphere. Building on our integration with Mater Research and Mater Education will be critical to staying at the forefront of advancements in clinical treatments.

Our Clinical Services Plan has outlined our strategic responses to many of these challenges, including delivering a different care experience and improving our use of virtual care and digital health.

Funding and cost pressures

The rising cost of healthcare is well documented, with demand for health services far outweighing the funding available. This, combined with increasing consumer expectations, is one of the greatest challenges facing the health system. As such, funders and providers are increasingly facing the challenge of needing to demonstrate value, while also containing cost growth.

These challenges will only continue, with an end to the 'uncapped' activity-based funding agreement between the Australian Government and the States and Territories for public hospital activity, and the Queensland Department of Health signalling the need for capped public hospital growth in activity and funding.

At Mater, we have not been immune to these challenges, and have set ourselves on a path to improving our operational excellence – ensuring we have a strong, sustainable foundation on which to build in the future.

In response, health systems are starting to shift from volume to value-based healthcare, where value is determined by the outcomes achieved compared to the costs of delivering care. Public and private funders are also increasingly moving away from fee-for-service payment mechanisms, to more performance-based reimbursement.

This is a critical consideration for Mater in developing our Clinical Services Plan.

² P A Jennett et al., 2011, The socio-economic impact of telehealth: A systematic review, Vol 9 Issue 6 2003; Infoway Canada, Telehealth Benefits and Adoption of Connecting People and Providers across Canada.

The changing private hospital market

The private hospital market in Australia is being challenged on a number of fronts – including funding model and reimbursement reviews, stagnant private health insurance growth among consumers, and lower margins.

Given Mater Health's position as a private hospital operator, these challenges and potential changes in the market are significant in the context of growth and sustainability:

- **Private health insurance membership** private health insurance membership has remained steady in its growth in recent years, with younger members in particular opting out of insurance due to significant annual premium increases. In addition, as significant investment in public hospital infrastructure and performance has filtered through the public system, there is less immediate differentiation between public and private hospitals; making 'no-insurance' a more attractive option for many people.
- Quality of private health insurance products in addition to the slow rate of growth in membership overall, the rise of private health insurance policies with significant gap payments or exclusions has also resulted in many people with insurance still opting for treatment in a public hospital. This has also contributed to the stagnant growth in activity and margins for private hospitals overall.
- Commonwealth Government reviews into the Medical Benefits Schedule (MBS) and prostheses funding the Australian Government is currently reviewing the Medical Benefits Schedule and the pricing arrangements for prostheses in private hospitals, which is likely to result in changes to the funding arrangements for private hospitals.
- **Different funding arrangements** private health insurers are increasingly looking to alternative funding arrangements, including bundled payments or packaged care arrangements; and more focus on linking payments and contracts to treatment outcomes.
- Private patients in public hospitals private patients have always been treated in public hospitals,
 however State and Territory Governments have taken proactive steps to incentivise public hospitals to
 increase private patient revenue. This is a further factor impacting margin pressure and stagnant growth
 being experienced in the private hospital market, and an ongoing challenge under active discussion
 between the private hospital market and Governments, particularly in terms of the appropriate mix of
 private patients in public hospitals.

Despite these challenges, we value our primary role as a private health organisation and have developed our strategic responses and areas for growth in our Clinical Services to address these challenges which are reflected in our Clinical Services Plan (in the following sections).

3. Population health profile

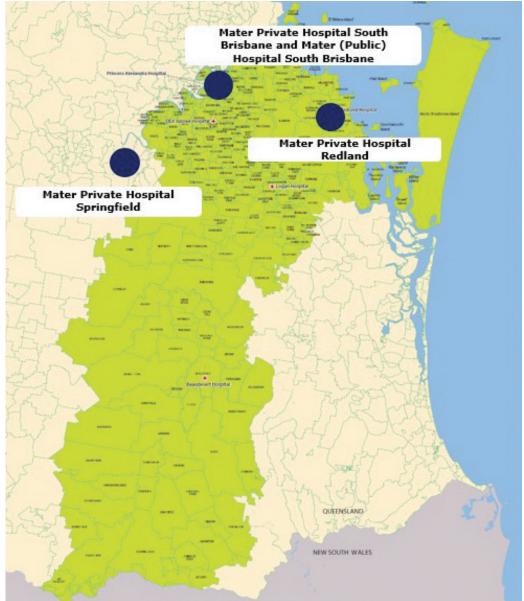
Our population and geography

As a private not-for-profit health services provider, and unlike Hospital and Health Services in Queensland, Mater Health does not have a prescribed geographic catchment. Notwithstanding this, Mater Health provides core public services to residents primarily within the northern sector of the Metro South Hospital and Health Service (HHS) region.

Individuals accessing Mater Health's private services are more dispersed, with residents from a broad range of locations travelling to our South Brisbane private facilities to access care.

The Metro South HHS catchment has been assessed as the primary catchment given approximately 73% of public patients, and approximately 61% of private patients are from this catchment.

Figure 4: Geographic map of the area serviced by MSHHS.



Of Mater Health's remaining 27% of public patients, approximately 25.5% are from 'Other' Queensland, 1.3% are from interstate and 0.1% are from overseas. Of Mater Health's remaining 39% of private patients, 37% are from 'Other' Queensland, 1.8% are from interstate and 0.1% are from overseas.

Mater Private Hospital Springfield and Mater Private Hospital Redland provide services to a much greater concentration of the population located in close proximity to each hospital.

The demographic and disease burden profile of a patient catchment is a key strategic health services planning input – used to guide the development of services and models of care that are tailored to meet the health and well-being needs of the local population. An understanding of the underlying characteristics of the patient population is particularly pertinent for Mater Health, given that serving community need in a sustainable and socially relevant way is central to the organisation's mission as a tertiary healthcare provider.

The locally defined geographic regions for each Mater Health facility are summarised in Table 1. As noted in Table 1, Mater Health's facilities fall across three campuses. They have varying levels of demographic growth, socio-economic status, and health need – this detail is provided in the following sections.

Table 1: Mater Health Catchment Overview

		Catchment			
	South Brisbane	Redland	Springfield		
Campus					
Catchment Definition	Metro South HHS	Redland LGA	Springfield, Redbank, Forest Lake – Oxley, Centenary SA3s		
2016/17 Estimated Resident Population	1,129,661	85,775	193,480		

Source: Queensland Government population projections, 2015 edition. Projected population (medium series), by five—year age group and sex, by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2011 to 2036. Note: The three catchment regions overlap in certain geographic areas.

Population growth projections

Over the ten years to 2026/27, the resident population within the Springfield catchment is forecast to grow at a considerably faster rate than the Queensland average, with a growth projection of 27.4% to 246,564 persons in 2026/27. This is a result of new housing developments in the South West 'growth corridor', namely at Springfield and Ripley Valley. While this represents the broader Springfield area, as noted in Table 1, we have identified a conservative, smaller catchment for the purposes of the Clinical Services Plan (CSP) and planning what activity we may provide in the future at Springfield.

Conversely, the number of individuals residing within South Brisbane and Redland catchment regions are projected to grow at slightly slower rates (15.4% and 16.3%) relative to Queensland as a whole (18.1%), with an estimate of 1.3m and 99,797 persons in 2026/27, respectively.

Table 2: Projected population growth for Mater Health's local catchment regions. 2016/17 – 2026/27.

	Pc	pulation Projection	ns	Growth (2016/17 - 2026/27)			
	2016/17	2021/22	2026/27	Absolute Growth	% Change	CAGR	
Campus							
South Brisbane	1,129,661	1,192,301	1,303,139	173,478	15.40%	1.40%	
Springfield	193,480	214,705	246,564	53,084	27.40%	2.50%	
Redland	85,775	91,077	99,797	14,022	16.30%	1.50%	
Catchment total	1,408,916	1,498,083	1,649,500	240,584	17.10%	1.70%	
Total (Queensland)	4,853,048	5,159,440	5,730,062	877,014	18.10%	1.70%	

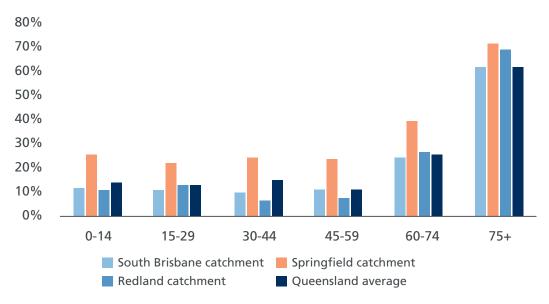
Source Queensland Government population projections, 2015 edition. Projected population (medium series), by five—year age group and sex, by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2011 to 2036

Projections by age group

In the ten years to 2026/27, the number of individuals aged 60 years and over is forecast to grow considerably – a State-wide trend consistent across all three Mater Health catchments.

For the South Brisbane catchment alone, growth of 24.6% is expected among the 60-74 years age bracket, while rapid growth of 61.1% is estimated for residents aged 75 years and over. Analysis at a more granular level (Statistical Area Level 3) indicates that population growth is fastest in the oldest age bracket (75 years and over), in all regions across the South Brisbane catchment.

Figure 5: Mater Health Patient Catchment Population Growth by Age Bracket. 2016/17 - 2026/27.



Source: Queensland Government population projections, 2015 edition. Projected population (medium series), by five-year age group and sex, by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2011 to 2036

As reflected in Figure 6, when compared with the current state, the expected age structure of the South Brisbane catchment in 2026/27 is slightly more skewed toward the elderly. People aged 60 years and over are projected to comprise 20.9% of the population in 2026/27, representing an increase of 3.1 percentage points from a base of 17.8% in 2016/17.

2016/17 21% 18% 2026/27 19% 21% 14% 0% 20% 40% 60% 80% 100% 0-14 15-29 30-44 45-59 60-74 75+

Figure 6: Age Distribution of the South Brisbane Catchment. 2016/17 vs. 2026/27.

Source: Queensland Government population projections, 2015 edition. Projected population (medium series), by five—year age group and sex, by statistical area level 2 (SA2), SA3 and SA4, Queensland, 2011 to 2036

Implications of an ageing population

The ageing population – a product of increased life expectancy and lower birth rates – presents many challenges for the South Brisbane, Redland and Springfield catchment regions. The mix of services required by residents, and the ways they are funded and delivered will need to adapt in response to changing health profiles, increased demand for health services, and rising health costs.

At a high level, these challenges and their implications for the health system should be viewed as two-fold:

- First, residents aged 75 years and over, are likely to drive an increase in the proportion of admissions related to age-related health conditions, such as arthritis, dementia, and cancer
- Second, among the younger cohort entering the 60 years and over age bracket, there is a larger burden
 of lifestyle-related chronic diseases (e.g. type 2 diabetes and Chronic Obstructive Pulmonary Disease)
 compared to previous generations a trend that is likely to shift the demand case-mix to high-volume
 and low-complexity conditions.

Mater Health's strategic focus on the elderly is, therefore, well aligned with the clear and growing need for acute system providers to alleviate unsustainable pressures on hospitals by:

- a) Enhancing existing capacity and capability with regard to the provision of ageing care, including joint surgery, ophthalmology and ENT; and
- b) Working innovatively and collaboratively with partners in the community to deliver care in alternative settings.

Socio-economic disadvantage³

Socio-economic disadvantage is a well-documented predictor of health status and driver of increased need for health services. Indeed, overall health improves with each step up the socio-economic ladder, commonly referred to as the 'social gradient of health'.4

The Socio Economic Index For Areas (SEIFA) score of socio-economic disadvantage for the MSHHS region (1,015) is slightly higher than it is for the state as a whole (1,002), indicating less disadvantage on average among residents of the MSHHS catchment area. Metrics for Mater Health's three catchment regions indicates that they are all more advantaged relative to the broader population.

Table 3: SEIFA Index score of socio-economic disadvantage. 2011.5

	Metro South HHS	Queensland State	Brisbane LGA	Redland LGA	Springfield SA2
Region					
SEIFA index Score	1,015	1,002	1,035	1,029	1,032

Note: those areas with a score of equal to or greater than 1,000 are deemed as advantaged, whereas those with a score of less than 1,000 are classified as disadvantaged relative to the national weighted average. Source: ABS, Index of relative Socio-Economic Disadvantage, 2011 – disaggregated by Statistical Area Level2 and Local Government Area.

³ The following sections of this chapter compare health indicators for the MSHHS region (i.e. the South Brisbane catchment) to the Queensland state-average. In addition, proxy indicators for each of the three immediate catchment regions (e.g. Brisbane Central – LGA, Redland LGA and the Springfield - Redbank - North SA3) have been provided in some sections.

⁴ Australian institute of Health and Welfare, 2016, Australia's Health 2016, 'Determinants of Health'. Australia's health no. 15. Cat. no. AUS 199.

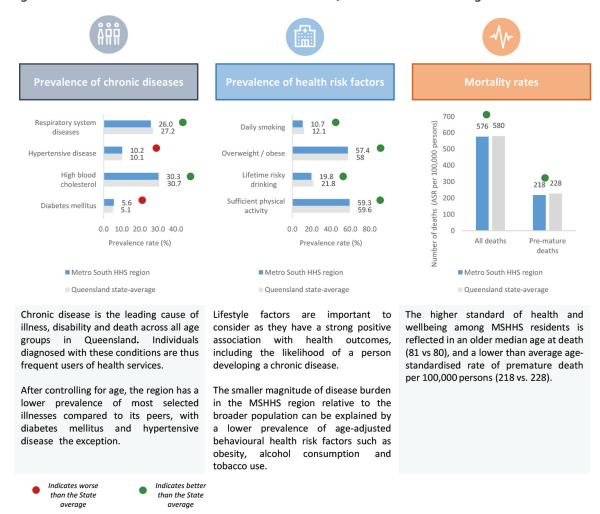
Australian institute of Health and Welfare, 2016, Australia's Health 2016, 'Determinants of Health'. Australia's health no. 15. Cat. no. AUS 199. Canberra: AIHW.

Population health profile

The following section provides a summary of the burden of disease and healthcare characteristics that drive the need for health services in the MSHHS region.

On the whole, the MSHHS catchment region performs slightly better than the Queensland state-average on a range of indicators that measure a community's health and wellbeing status.

Figure 7: Selected Health status statistics. MSHHS vs. Queensland State average.



Source: Prevalence of chronic disease – Social Atlas of Australia, based on the 2011–12 Australian Health Survey, conducted by the ABS. Mortality rates – Social Atlas of Australia, based on the 2010 to 2014 Cause of Death Unit Record Files and ABS Estimated Resident Population (ERP), 30 June 2010 to 30 June 2014. Deaths are defined as avoidable in the context of the present health system, based on the PI-16 Potentially avoidable deaths, 2015. Risk factors – The health of Queenslanders 2016. Report of the Chief Health Officer Queensland.

However, there is variation in health status across the MSHHS catchment. A number of regions such as Beaudesert and Beenleigh, as well as the Ipswich hinterland area (noting it is not within the MSHHS catchment), showed signs of higher than average chronic disease, alcohol consumption, tobacco use and premature death, suggesting a greater degree of unmet health need exists in these areas.

Detailed health status statistics

A more detailed regional analysis of the prevalence of chronic disease, using indicators for each of Mater Health's three catchment regions, is provided below.

Table 4: Health Status statistics, 2011/12.

Age standardised prevalence 100 persons	Metro South HHS	Queensland State	Brisbane	Redland	Springfield
Region					
Diabetes	5.6	5.1	5.0	4.8	7.4
High blood cholesterol	30.3	30.7	30.8	30.4	29.6
Circ. system disease	17.1	17.8	16.6	16.7	18.1
Respiratory disease	26.0	27.2	26.2	29.0	24.8

Source: Social Atlas of Australia, based on the 2011-12 Australian Health Survey, conducted by the ABS.

Diabetes

Diabetes is linked to a number of chronic and acute health conditions, with hospitalisation often required to treat complications arising from suboptimal diabetic management. In 2011/12, 5.6% of residents within the MSHHS catchment region were estimated to be living with diabetes, compared to the Queensland average of 5.1%. The Springfield – Redbank SA3 region was notably higher than the Queensland average, at 7.4%.

Diabetes is the leading cause of potentially preventable admissions in Queensland public hospitals. This suggests that shifts to treatment and management in alternative settings, however small, could translate into significant efficiency gains.6

High blood cholesterol

Consistently high blood cholesterol is linked to a number of acute cardiovascular and other heart conditions. Between 2011/12, 30.3% of adult residents in the MSHHS region were estimated to have highblood cholesterol, a rate slightly below the Queensland state average of 30.7%.

Circulatory system diseases

Circulatory system diseases, such as high blood pressure, can lead to heart attack, kidney damage, and stroke. The prevalence of circulatory system diseases in the MSHHS region (17.1%), the Brisbane Central LGA (16.6%) and the Redland LGA (16.7%), was slightly below the Queensland average, at 17.8%. However, the rate within the MPHS immediate geographic region – Springfield – Redbank SA3 – was moderately higher than the State aggregate, at 18.1%.

Respiratory disease

Respiratory diseases range from acute infections, such as pneumonia and bronchitis, to chronic conditions such as asthma and chronic obstructive pulmonary disease (COPD). Similar to diabetes, rates of lung disease are important from an acute system perspective, as they typically comprise a large share of potentially preventable hospitalisations. Indicators for Mater Health's three catchment regions show that relative to the State average (27.2%), in 2011/12 the burden rate was slightly lower in the Springfield – Redbank SA3 (24.8%), while it was moderately higher in the Redland LGA (29.0%), and broadly consistent with the Brisbane Central LGA, at 26.2%.

⁶ National Health Performance Authority 2015, Healthy Communities: Potentially preventable hospitalisations in 2013–14.

Implications of the burden of chronic disease

On all selected measures of health status, the MSHHS catchment engages in less risky behaviours, on average, compared to the Queensland state-average, resulting in relatively lower rates of disease.

Despite this, investment in programs that seek to prevent or manage key modifiable risk factors such as obesity (e.g. screening, ongoing risk assessment), and thereby further reduce the prevalence of chronic disease within the local community offers a number of benefits. It will reduce the personal, social and economic burden of ill health both now and in the future. Important for the current fiscally constrained policy environment – it will improve health system productivity, by optimising the allocation of scarce and expensive health workers and other public resources.

Vulnerable population groups

While the majority of the MSHHS catchment region is considered slightly advantaged relative to the broader population, there are certain population groups within the catchment that are at increased risk of poorer health outcomes on the basis of social and cultural characteristics, financial hardship or disability. To reduce inequity in health access and outcomes for these population groups, they often require healthcare provision that is tailored to their unique needs. Promoting equitable healthcare is core to Mater Health's mission – to provide compassionate care to the most socially marginalised members of the community.

Table 5: Vulnerable Population group statistics. 2011/12.

	Metro South HHS	Queensland State	Brisbane LGA	Redland LGA	Springfield SA2
Region					
ATSI population	2.40%	4.30%	1.90%	2.20%	5.30%
Born in a non-English speaking country	14.10%	9.50%	17.40%	6.50%	15.40%
Age standardised prevalence of mental health problems	13.80%	14.10%	12.80%	11.90%	15.40%

Source: Social Atlas of Australia based on the estimated resident population developed by Prometheus Information on behalf of the Australian Government Department of Health.

Aboriginal and Torres Strait Islander population

Aboriginal and Torres Strait Islander people are disadvantaged on many health measures, including life expectancy and utilisation of health services. Of all population groups in Australia, Aboriginal and Torres Strait Islander people have higher rates of chronic disease and are more likely to experience early onset of diseases. ⁷

The MSHHS region has a lower Aboriginal and Torres Strait Islander population (2.4%) relative to the state-wide average (4.3%). However, there are defined pockets across the region with a high concentration of Aboriginal and Torres Strait Islander people. For example, the proportion of Aboriginal and Torres Strait Islander residents residing in Beaudesert, Forest Lake–Oxley, Springwood–Kingston, Ipswich Hinterland, Beenleigh and Browns Plains, all fall within the range of 3.5-6.0%. Of the three Mater Health catchment regions, the Springfield area comprises the highest proportion of Aboriginal and Torres Strait Islander peoples, at 5.3% of the Springfield – Redbank SA3.

⁷ Queensland Health, 2014, The Health of Queenslanders 2014: Fifth report of the Chief Health Officer Queensland. Brisbane: Queensland Government; 2014.

Culturally and Linguistically Diverse population

The MSHHS region is characterised by a culturally diverse population. When compared to Queensland as a whole, there is a marked difference in the share of residents born in a non-English speaking country (14.1% vs. 9.5%).

The relatively high number of individuals born overseas is primarily driven by a high proportion of migrant communities residing in the Sunnybank and Rocklea regions, where 40.6% and 28.9% of residents are from a culturally and linguistically diverse background, respectively. In terms of place of origin, this group is broadly represented by people of Chinese or Maori descent, and also includes a relatively high number of African refugees.8

Similar to Aboriginal and Torres Strait Islander communities, individuals from non-English speaking backgrounds may face a number of unique health access barriers such as poor levels of health literacy and difficulty communicating, impacting their ability to access adequate care, and consequently, their health and well-being. Specifically, people residing in Queensland from non-English speaking countries have, on average, higher rates of diabetes and higher vaccine preventable hospitalisations.9

Population living with a mental illness and / or behavioural problems¹⁰

Mental and behavioural disorders, such as depression, anxiety, and drug use are increasingly prevalent in the community and are a significant driver of burden of disease. In addition, there is an association between diagnosis of mental health disorders and a physical disorder. In 2011/12, the age-standardised prevalence of people living with a mental illness and / or behavioural disorder was lower in the MSHHS catchment (13.8%), relative to the broader population (14.1%). Similar to the trend for chronic disease, the prevalence rate was notably higher in the Springfield – Redbank SA3 area (15.4%), when compared to the Redland LGA (11.9%) and the Brisbane Central LGA (12.8%).

Access to health service providers

There are a number of major public and private hospitals located within (or in close proximity to) the MSHHS region, these are outlined in Table 6.

Table 6: Hospitals within the Metro South region.

Public hospitals	Private hospitals
Logan Hospital	Greenslopes Private Hospital
Mater Public Hospital	Mater Private Hospitals (Brisbane & Redland)
Princess Alexandra Hospital	St Vincent's Private Hospital
Lady Cilento Children's Hospital	Sunnybank Private Hospital
QEII Jubilee Hospital	Belmont Private Hospital (Specialist Mental Health)
Beaudesert Hospital	
Redland Hospital	
Marie Rose Centre (Dunwich)	

Brisbane South Primary Healthcare Network, 2016, Whole of Region Needs Assessment.

¹⁰ It is important to note here that the delivery of public mental health services falls within the remit of Queensland Health.

Potentially preventable hospitalisations

Many hospital admissions could be prevented if more effective non-hospital care were available, either at an earlier stage in disease progression or as an alternative to hospital care. The Productivity Commission thus considers the rate of potentially preventable hospitalisations to be an indirect measure of whether people are receiving adequate primary health care.¹¹

As illustrated in Figure 8, after controlling for differences in age structure, the rate of potentially preventable hospitalisations per 100,000 people in 2013/14 was higher in the MSHHS region (2,634) relative to the national average (2,436). Statistics for each of the three Mater Health catchment regions indicate that over the same period, the Springfield area had the highest rate of avoidable admissions, at 2,882 per 100,000 persons – likely owing to the relatively higher rates of chronic disease.

With rapid growth of the ageing population, the rate of potentially preventable hospitalisation is likely to increase. This highlights the need for Mater Heath to improve access to appropriate healthcare for the elderly and other hard-to-reach populations by strengthening partnerships between the acute, sub-acute and primary care sectors.

3,500 2,882 3,000 2,634 2,582 2,436 2,317 2,500 2,000 1,500 1,000 500 0 Brisbane Springfield -Cleveland -Metro South National Inner - SA3 Redbank -Stradbroke **HHS** region average North – SA3 - SA3

Figure 8: Potentially preventable hospitalisation (ASR per 100,000 persons). 2013/14.

Source: National Health Performance Authority 2015, Healthy Communities: Potentially preventable hospitalisations in 2013–14.

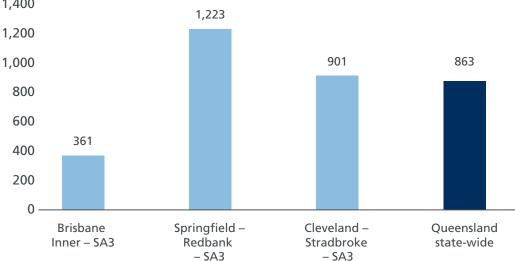
Access to General Practitioners

Access to primary health care services is essential to good health care and reducing demand for emergency department and hospital-based care. A common indicator of access to primary health care is the number of General Practitioners per head of population. In 2014, the SA3 regions where the South Brisbane and Redland campuses are located, both showed higher ratios of General Practitioners per head of population compared to the Queensland average, while the rate was significantly lower in the Springfield – Redbank area.

¹¹ Productivity Commission, 2014, Report on Government Services, 'Healthy Lives', Canberra, 2014.

1,400 1,223 1,200

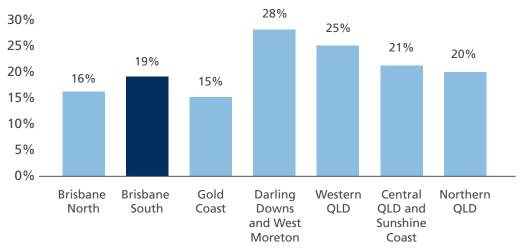
Figure 9: Ratio of residents to General Practitioners. 2014.



Source: Australian Institute of Health and Welfare. Health Workforce Dataset, 2014. ABS Estimated Resident Population, 2014.

In 2013/14, 19.0% of residents within the South Brisbane PHN catchment reported that they felt they waited longer than acceptable to get an appointment with a GP, a rate moderately higher than South Brisbane's urban Queensland PHN peers - Gold Coast, at 15.0%, and Brisbane North, at 16.0%.

Figure 10: Percentage of adults who felt they waited longer than acceptable to get an appointment with a General Practitioner, by Primary Health Network. 2013/14.



Source: National Health Performance Authority 2015, Healthy Communities: Potentially preventable hospitalisations in 2013–14.

Access to Residential Aged Care Facilities

Currently, 15.7% of all aged care places in Queensland are located in the Brisbane South Aged Care Planning region (the scope of this region is broadly aligned with Brisbane South PHN). With the growing ageing population in the region, the provision of residential aged care facilities and the capability of the residential aged care workforce will continue to form a critical part of the service landscape.

Table 7: Aged Care Service List by Aged Care Planning region, Queensland, 30 July 2016.

Aged Care Planning Region	Residential Facilities	Transition Care Facilities	Total Facilities	Residential Places	Transition Care Places	Home Care Low Places	Home Care High Places	Total Places
Region								
Brisbane North	42	1	43	3,879	140	1,218	412	5,649
Brisbane South	69	1	70	5,827	146	1,585	481	8,039
Cabool	34		34	3,234	-	740	342	4,316
Central West	2		2	116	-	61	11	188
Darling Downs	40	1	41	2,366	52	659	257	3,334
Far North	24	1	25	1,816	38	554	270	2,678
Fitzroy	22	1	23	1,527	30	438	161	2,156
Logan River Valley	20		20	1,822	-	653	242	2,717
Mackay	10	1	11	911	25	263	123	1,322
North West	5		5	146	-	105	9	260
Northern	22	1	23	1,634	46	523	215	2,418
South Coast	53	1	54	4,966	96	1,227	767	7,056

Source: Department of Health, Ageing and Aged Care.

4. Current service profile (Mater Health)

Mater Health organisational structure

Mater Health recently configured its services into five Clinical Streams. These are outlined in Figure 11.

Figure 11: Mater Health organisational structure.

	Mater Health								
	Cancer Care Services	Surgical/Acute Care Services	Medical / Chronic Disease Services (MCDS)	Neurosciences	Mothers, Babies and Women's Health Services (MBWHS)				
South Brisbane	V	V	~	V	V				
Redland	V	V	V	V	V				
Springfield	V	V	V	V	V				

The clinical leadership has been reoriented to align with these Clinical Streams, with a dedicated Medical Director, Director of Nursing and Midwifery and Director of Business appointed to oversee the direction of the specialities comprising each stream. Activity within each of the five Clinical Streams is delivered across Mater Health's facilities.

Current activity

Activity by Clinical Stream

Table 8 provides a summary of the current (2015/16) and historical (2011/12) level of activity at Mater Health by Clinical Stream.

Over the four years to 2015/16, the total volume of separations has grown at a rate of 6.8% per annum, while the total volume of bed days has increased by a more moderate 2.6% per annum. Part of the growth in activity over this period can be attributed to:

a) The opening of Mater Private Hospital Springfield, which commenced operations in October 2015; and

b) The additional 12,000 QWAUs that Queensland Health agreed to be delivered at Mater Hospital Brisbane over four years starting from 2014/2015 to partially offset the loss of public activity from the closure of Mater Children's Hospital in 2014/15.

As reflected in Table 8, separations have outpaced bed days, largely due to a shift towards same day activity and better managed length of stay practices across the Surgical / Acute Care Services (SACS) and Medical / Chronic Disease Services (MCDS) Clinical Streams.

The majority of separations delivered at Mater Health in 2015/16 were delivered within the Surgical / Acute Care Services Stream, representing 45.2% of the total volume of separations.

However, over the past four years, activity delivered within the Surgical / Acute Care Services stream has declined as a proportion of total activity, falling by 2.5 percentage points from a base of 47.8% in 2011/12. Over this same period, Cancer Care Services share of total activity has grown by 7.0 percentage points to 11.6% in 2015/16. The activity contribution from all other Clinical Streams has remained relatively constant.

The rapid growth in Cancer Care Services activity (annualised growth of 34.4% between 2011/12 and 2015/16) is partially explained by a change in counting methods. Sameday Chemotherapy separations were historically coded as outpatients, while the current system counts Sameday Chemotherapy separations as inpatient activity.

Table 8: Mater Health Activity Overview by Clinical Stream.

		Separations			Bed days		
	2011/12	2015/16^	CAGR	2011/12	2015/16	CAGR	
Inpatients							
Cancer Care Services	3,575	11,657	34%	24,792	31,034	6%	
Medical Chronic Disease Services	15,049	18,222	5%	54,596	58,618	2%	
Mothers, Babies & Women's Services	17,618	19,508	3%	75,881	79,847	1%	
Neurosciences	3,934	5,509	9%	19,831	23,359	4%	
Surgical Acute Care Services	36,728	45,252	5%	73,392	82,386	3%	
Total	76,904	100,148	6.80%	248,492	275,244	2.60%	
Of which ICU				4,708	4,490	-1.20%	
Of which NICU				11,331	12,104	1.70%	
Emergency Department	48,217	57,259	4.40%				

Outpatients* 364,043	
----------------------	--

Note

Mater Children's Hospital has been excluded from the analysis.

Some tables may not add due to rounding.

Source: Mater Health admitted and non-admitted data, 2011/12, 2015/16.

^{*}Incomplete outpatient data available for 2011/12. The Pathology tier 2 clinic has been excluded from analysis.

[^]As MPHS commenced operations in October 2015/16, the total figure includes actual activity from MPHS for 2015/16. In other parts of the Plan where Springfield is shown separately, a full-year effect of activity has been incorporated, based on 16/17Q1 extrapolated out to a full year. The equivalent total separations for Mater Health is 105,503 (which will reconcile to other parts of this Plan).

Activity by Mater Health facility

Inpatients

The share of total activity delivered as public activity increased from 39.6% of the total volume of separations in 2011/12 to 48.4% in 2015/16. Over the same period, separations have outpaced bed days at all facilities, with Mater Private Hospital Redland the exception.

Of note is the relatively high volume of public separations delivered at Mater Private Hospital Springfield in 2015/16 (2,889 of 3,613 separations). This result is reflective of Mater Health's contract with West Moreton Hospital and Health Service (WMHHS) and Metro South Hospital and Health Service (MSHHS) to deliver additional public activity (primarily elective surgery and procedural activity) at Mater Private Hospital Springfield, over the period 2015/16 – 2025/26.

Emergency Department

In the four years to 2015/16, the volume of private Emergency Department presentations has grown at a faster rate than public Emergency Department presentations (10.3% to 17,457 presentations vs. 2.3% to 39,802 presentations, respectively).

Over this same period, there has been a marked increase in the volume of high acuity public Emergency Department presentations, with category 2 and category 3 presentations growing at 3.6% and 6.8% per annum, respectively. Conversely, the volume of category 4 presentations has remained relatively constant, while the volume of category 5 presentations has fallen at a relatively sharp rate of 9.2% per annum. In addition, the proportion of presentations resulting in an admission increased by 4.2 percentage points to 30.8% in 2015/16.

Outpatients

Historical data for outpatients was only available from 2014/15. Over the 12 months to 2015/16, outpatient activity grew by 19.8%, a result partially attributable to the additional activity delivered at Mater Private Hospital Springfield and additional outpatient activity funding at South Brisbane from Queensland Health.

Table 9: Mater Health Activity Overview by Hospital.

		Separations		Bed days			
	2011/12	2015/16	CAGR	2011/12	2015/16	CAGR	
Inpatients							
MHB	20,641	31,910	11.50%	54,859	68,393	5.70%	
МСРВ	4,799	4,583	-1.10%	8,841	6,082	-8.90%	
MMH	9,789	11,688	4.50%	38,324	44,001	3.50%	
MMPB	5,810	5,559	-1.10%	34,850	32,410	-1.80%	
MPHR	7,852	9,814	5.70%	15,686	20,441	6.80%	
MPHS^		3,613			6,128		
МРНВ	28,013	32,981	4.20%	95,932	97,789	0.50%	
Total	76,904	100,148 6.80%		248,492	275,244	2.60%	

Emergency Department			
Category 1	37	31	-4.30%
Category 2	2,557	2,947	3.60%
Category 3	12,908	16,770	6.80%
Category 4	18,554	18,455	-0.10%
Category 5	2,354	1,599	-9.20%
Total MHB	36,410	39,802	2.30%
Of which admitted	26.60%	30.80%	
Total MPHB	11,807	17,457	10.30%

MHB 239,306 MMH 110,679 MPHS 14,058 Total 364,043	Outpatients (excluding Pathology)*	
MPHS 14,058	МНВ	239,306
	MMH	110,679
Total 364,043	MPHS	14,058
	Total	364,043

Note: Some totals may not add due to rounding.
*Incomplete outpatient data available for 2011/12. The Pathology tier 2 clinic has been excluded from analysis.
^As MPHS commenced operations in October 2015/16, the total figure includes actual activity from MPHS for 2015/16. In other parts of the Plan where Springfield is shown separately, a full-year effect of activity has been incorporated, based on 16/17H1 extrapolated out to a full year. The equivalent total separations for Mater Health is 105,503 (which will reconcile to other parts of this Plan).

Table 10: Mater Health Licensed Beds by facility

Facility	Overnight beds	Day and recovery beds	NCCU	CCU	ICU	Chemo Chairs	Theatres	Proc.	ED	Dialysis chairs
МРНВ		60	-	8	10	-	10	7	14	-
MMH and MMPB	756*		82	-	-	-	-	-	-	-
MHB (incl. Duncombe and Salmon buildings)		55	-	6	16	42	16	6	18	12
MPHR	60	16	-	-	-	-	2	1	-	-
MPHS	64	16	-	-	-	15	4	-	-	8
Total	880	147	82	14	26	57	32	14	32	20

Source: Mater Health Bed Licensing Bound *Note inpatient beds includes overnight recovery beds
*Note: a bed audit at South Brisbane was undertaken in May 2017 which identified changes to licensed bed capacity. The total licensed inpatient bed capacity identified was 756 inpatient beds (excluding NCCU, ICU and recovery beds).

5. Practical implications of our plan and focus areas

Clinical service planning approach and phasing

In developing our Clinical Services Plan, and identifying the impact of execution on activity and future growth in our services, we have identified a phasing of growth based on our assessment of the market, internal and external analysis, and an estimate of growth potential for the future. Rather than propose distinct scenarios, we have identified a phasing of growth over the time horizon to 2026/27.

In developing this phasing, we have:

- Considered market trends, internal and external analysis
- Considered consultation findings with our own stakeholders, and our partners (including the Department of Health)
- Discussed and confirmed the broad assumptions with our Clinical Services Plan Project Steering Committee.

The phasing is illustrated in Figure 12, with the components and timing described below.

Figure 12: Clinical Services Plan baseline and phases







Baseline

The baseline has been developed based on a 'no change' basis, with no growth in either public or private activity. As such, it is shown as current activity for 2017/18.

The basis for this as a base case for comparison is:

• flat or limited planned growth in private hospital activity within Mater Health during 2016/17, in comparison to the previous year;

- assessment of the private hospital market generally in Brisbane, with many providers experiencing no or limited growth;
- While we have had some increases in our public hospital activity including one-off 'purchases' of particular types of activity – we cannot expect or rely on continued growth in our public hospital contract. This is also consistent with messages across the broader public health system, that funding is limited and will be capped from 2017/18 (particularly given the end to the Commonwealth Government's 'uncapped' 45% contribution to the efficient cost of activity growth from 2017/18).

There are some confirmed changes to our services in 2017/18, therefore we have set the baseline as at our 2017/18 budgeted activity (which accounts for additional recurrent funding for ambulance arrivals and general medical activity in our public hospital contract at South Brisbane, and budgeted activity growth in our private services at Springfield).

Phase One: targeted growth and optimising existing infrastructure (2017/18 to 2020/21)

Given the lead time in planning and developing new infrastructure, and the fact that we have existing underutilised infrastructure, Phase One (2017/18 to 2020/21) is based on targeting growth in our private services but within the constraints of existing built capacity.

This allows us to target growth in line with our strategic priorities, and optimise the use of the existing assets that we have.

The adjustments made to the baseline in Phase One align closely with our strategic priorities in the Clinical Services Plan:

- **Growth engines** targeting 5% per annum growth in private activity for specific specialties aligned with our growth engines of women's health, age friendly care, neurosciences and healthy living. This is on the basis that we will develop specific, holistic and differentiated service offerings around these growth engines. This also captures specific services identified to grow to maximise private activity at Springfield and Redland. This growth target has been modelled to commence from FY18/19; allowing 12 months from FY17/18 to plan for and develop the identified growth engines. For the Obstetrics SRG, the 5% annualised growth target is significantly higher than the expected market growth rate (according to the Hardes status quo private hospital projections) for private hospitals in the Brisbane / Gold Coast region. As such, the expected market growth rate of 1.5% (as outlined in Table 11) has been used as a more realistic target for private obstetrics.
- Operational excellence achievement of budgeted length of stay targets incorporated into occupied bed day requirements.
- **Different care experience** targeting an additional 1% per annum growth in private activity across non-growth engine specialties, to highlight that everyone has a role to play in designing and implementing a different care experience for Mater Health patients; and ultimately this should flow through to all of our services.
- Virtual care and digital health care delivery growth in activity is captured through the growth rates targeted above; however, this will eventuate through a potential reduction in physical infrastructure required on a hospital campus, on the basis patients and their families can access care remotely. We are targeting a 5% reduction in ambulatory care space required from 2021/22.

Public hospital activity remains constant at our 2017/18 contracted levels, on the basis that we cannot rely on continued growth in public hospital activity and funding. However, it should be noted that we do have the capacity to rapidly flex up our services to respond to emerging needs that arise from the public sector - particularly through our strong partnership with the Department of Health Queensland, MSHHS and WMHHS. In addition, we have planned on the basis of a new public contract being in place for Springfield (alongside considerable capacity growth) in 2021/22.

Planning Implication

We have identified a number of specialties (SRGs) where we are targeting significant growth in private activity across campuses. The specialties and their alignment with the growth engines are:

Table 11: Growth engines by SRG / ESRG

Specialty	Women's Health	Age-friendly care	Neurosciences	Healthy living	Market growth rate to 2021/22	Market growth rate to 2026/27
Chemotherapy	~	✓			2.70%	3.30%
Diagnostic GI Endoscopy		✓		✓	4.20%	3.50%
Ear, Nose & Throat		✓		~	2.40%	2.60%
Gastroenterology		V		V	5.80%	5.20%
Gynaecology	~				0.40%	1.00%
Medical Oncology		V			2.10%	1.90%
Neurology			V		6.00%	5.40%
Neurosurgery			V		3.90%	3.70%
Non Subspecialty Medicine		V		✓	4.80%	4.50%
Non Subspecialty Surgery		V		V	2.90%	2.90%
Obstetrics*	~			✓	1.50%	1.50%
Ophthalmology		V		V	7.00%	5.70%
Orthopaedics		V	V	V	3.60%	3.30%
Qualified Neonate	~				1.30%	1.10%
Urology	~	V			5.20%	4.40%
Vascular Surgery		V		~	3.20%	3.20%
Palliative Care		V		V	8.20%	5.30%

Source: Hardes Private 2015/16 – growth rates for Brisbane / Gold Coast private hospitals *Growth in obstetrics has been capped at 1.5% per annum in line with Hardes' forecasts of market growth.

In the period to 2020/21 we are targeting 5% annualised growth in each of these Specialties. In most cases this is slightly higher than the expected growth for Mater (according to the Hardes status quo private hospital projections) in the same period. Where this is the case, we will need to increase our market share.

In the period to 2026/27 we are targeting a more ambitious growth rate of 7.5% per annum in the growth engine specialties.

Phase Two: strategic growth (2021/22 to 2026/27)

Phase Two is the longer-term view of our planning and includes further growth in our private services, allowing us a longer lead time to grow and develop services – and plan for any additional infrastructure and support services we require to deliver on this.

A major component of the change in Phase Two compared to the baseline is Stage Two of our Springfield development. Mater Health has long-term plans to continue to develop and expand our presence at Springfield for both public and private patients.

The business case developed for our private services at Springfield forms the basis of these changes in Phase Two; along with an assessment of potential public activity that would flow to an expanded hospital at Springfield. This assumes that negotiations would continue and an agreement reached on a significant public contract at Springfield, between Mater Health and the Department of Health. In addition, the Department of Health and MSHHS and WMHHS will have independent views on the catchment and appropriate public mix of services to be provided at Springfield.

While the phasing does not specifically reference the Hardes public and/or private projections, they have been used to inform trends in activity, average length of stay and market share. While the projections themselves do not form the basis of the future activity profiles for Mater Health identified in the Plan, the profiles are within the 'need' identified by the Hardes projections. This is illustrated in Table 11.

For growth in private ambulatory infrastructure (VMO rooms), given the limited information available in terms of capacity and throughput, it is assumed in Phase one there would be sufficient capacity for any additional private ambulatory activity (however, at Springfield additional ambulatory capacity may be needed prior to stage 2 commissioning). In Phase two, master planning will be required (including market sounding with VMOs regarding their preferred location for private rooms) to determine future capacity requirements.

Future service profile for Mater Health

SUMMARY

Translating our Clinical Services Plan into a view of the next ten years for Mater Health:

Growth engines – by executing our plan successfully, it is estimated private activity in our nominated growth engines (excluding Obstetrics and Springfield) will grow by 5.0% per annum by 2020/21, and 7.5% per annum to 2026/27.

Total activity growth – overall, activity (separations) is projected to grow by 2.0% per annum to 2020/21; and 5.8% per annum to 2026/27. This comprises annualised growth of:

- **South Brisbane** 1.4% per annum to 2020/21; and 2.4% per annum to 2026/27.
 - Public growth 0%
 - Private growth 3.2% per annum to 2020/21; and 4.9% per annum to 2026/27.
- Redland 4.0% per annum to 2020/21; and 6.1% per annum to 2026/27.
- Springfield 4.9% per annum to 2020/21; and 13.3% per annum to 2026/27.
 - Public growth 0% to 2020/21, 23,434 additional separations in 2021/22 (Stage 2 commissioning), 4.8% to 2026/27
 - Private growth 20.0% to 2020/21, 3,010 additional separations in 2021/22 (Stage 2 commissioning), 36.6% to 2026/27.

Private Infrastructure Utilisation (Phase one) – our aim in Phase one is to improve the utilisation of our existing built private capacity through targeted growth in private activity. Between now and 2020/21, if we achieve this we will change our occupied bed base by:

- **South Brisbane** 31 additional private occupied beds (plus critical care), leaving 60 beds of spare capacity
- **Redland** 7 additional private occupied beds.

Private Infrastructure growth (Phase two) – our aim in Phase two is to achieve more aggressive growth in our growth engine specialties. Between 2021/22 and 2026/27, if we achieve this we will change our occupied bed base by:

- **South Brisbane** 88 further additional private occupied beds (plus critical care), some of which could potentially be occupied within the spare capacity remaining after Phase 1, but requiring some additional licenced private capacity
- Redland 18 further additional private occupied beds, requiring additional licenced private capacity.

Springfield – Springfield is targeting 20% private growth across all specialties between now and Stage 2 commissioning. From 2021/22 our planned private growth is based on our business case. Our aim is also to continue to advance our market-led proposal to expand our partnership with the Department of Health to provide increased public hospital services at Springfield. Based on our assessment of potential public activity for the Springfield area, we estimate:

- Phase 1 (up to 2020/21) 12 additional private occupied beds, leaving 14 beds spare capacity
- Phase 2 (2021/22 to 2026/27)
 - Initial commissioning of Stage 2 facility (2021/22) 15 further occupied private beds,
 166 additional occupied public beds
 - Longer term (to 2026/27) 113 further additional occupied private beds, 57 further additional occupied public beds.

Based on our strategic growth priorities and the phasing of our targeted growth, the following sections provide a summary of the future activity profile for Mater Health – at both the Clinical Stream level and by campus. This is outlined in the tables below.

A summary of the targeted growth rates for private activity at each Mater Health campus compared to the projected growth rates for private activity within the locally defined catchment region (as projected through Hardes Private status quo projections) is provided in Table 12.

Table 12: Comparison of summarised Clinical Services Plan growth rates (private activity) vs. projected growth rates for private activity within the local catchment region.¹²

	Pha	se 1	Phase 2		
Annualised growth	Market growth	CSP growth	Market growth	CSP growth	
South Brisbane (Pvt.)	3.90%	3.20%	3.70%	4.90%	
MPHR	3.50%	4.00%	3.20%	6.10%	
MPHS	4.80%	20.00%	4.80%	36.90%	

Note that the high private activity growth rates at Springfield are calculated from the relatively low current volume of private activity at the campus.

Future service profile

Table 13: Projected Inpatient Activity within All Mater Health Sites. 2017/18 to 2026/27.

	Seps	Phase	e 1		Phase 2		Bed days	Phase	e 1		Phase 2	
	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR
Inpatients												
Cancer Care Services	17,801	18,851	1.9%	20,916	31,882	8.8%	31,115	32,789	1.8%	35,774	48,741	6.4%
MCDS	23,705	24,469	1.1%	37,162	44,928	3.9%	68,719	73,749	2.4%	110,624	142,448	5.2%
MBWHS	18,345	19,002	1.2%	21,918	25,823	3.3%	65,244	67,651	1.2%	79,212	89,361	2.4%
Neuro- sciences	5,869	6,474	3.3%	7,910	11,694	8.1%	23,349	25,772	3.3%	33,659	47,407	7.1%
SACS	49,407	53,231	2.5%	62,547	85,323	6.4%	87,556	94,119	2.4%	109,401	147,526	6.2%
Total	115,127	122,027	2.0%	150,453	199,650	5.8%	275,983	294,080	2.1%	368,669	475,482	5.2%

Some totals may not add due to rounding.

¹² Using the Hardes private modelling tool (2015/16), the catchment regions have been defined as: South Brisbane private hospitals – MSHHS region, Mater Private Hospital Redland – Cleveland-Stradbroke, Capalaba, Wynnum-Manly, Carindale and Logan-Carbrook SA3s, Mater Private Hospital Springfield – Springfield – Redbank, Forest Lake – Oxley, Centenary SA3s.

Table 14: Projected Inpatient Activity within Mater Health, Public & Private Split. 2017/18 to 2026/27.

	Public	Phase	e 1		Phase 2		Private	Phase	e 1		Phase 2	
	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR
Inpatients												
Cancer Care Services	11,882	11,882	0.0%	13,724	14,559	1.2%	5,919	6,969	5.6%	7,192	17,323	19.2%
MCDS	16,284	16,284	0.0%	28,604	32,605	2.7%	7,421	8,185	3.3%	8,558	12,323	7.6%
MBWHS	10,846	10,846	0.0%	13,099	13,549	0.7%	7,499	8,156	2.8%	8,819	12,275	6.8%
SACS	20,957	20,957	0.0%	27,284	29,862	1.8%	28,451	32,274	4.3%	35,263	55,461	9.5%
Neuro- sciences	1,439	1,439	0.0%	2,131	2,365	2.1%	4,430	5,035	4.4%	5,779	9,329	10.1%
Total	61,408	61,408	0.0%	84,842	92,939	1.8%	53,719	60,619	4.1%	65,612	106,710	10.2%

Some totals may not add due to rounding.

Table 15: Projected Emergency Activity within Mater Health, Public & Private Split. 2017/18 to 2026/27.

	Public	Phase	e 1		Phase 2		Private	Phase 1		Phase 2		
	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR
ED												
Triage 1	36	36	0.0%	56	61	1.8%						
Triage 2	4,070	4,070	0.0%	6,404	7,015	1.8%						
Triage 3	20,609	20,609	0.0%	32,428	35,517	1.8%						
Triage 4	19,394	19,394	0.0%	30,517	33,424	1.8%						
Triage 5	2,035	2,035	0.0%	3,202	3,507	1.8%						
Total	46,144	46,144	0.0%	72,608	79,525	1.8%	16,604	18,276	3.3%	21,765	37,713	11.6%

Note – includes projected activity for both South Brisbane and Springfield. Some totals may not add due to rounding.

Table 16: Projected Outpatient Activity within Mater Health, Public & Private Split. 2017/18 to 2026/27.

	Public	Phase	e 1	Phase 2			Private	Phase 1		Phase 2		
	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR	2017/18	2020/21	CAGR	2021/22	2026/27	CAGR
Out patients	385,663	385,693	0.0%	521,907	567,409	1.7%						

Future Infrastructure requirement

Table 17: Projected Infrastructure requirement.

	Phase 1			Pha	se 2	
	2020/21	Growth	2021/22	Growth	2026/27	Growth
Inpatients						
Overnight	640	39	806	166	1,014	208
Sameday*	120	8	145	25	196	51
Stage 1 Recovery*	35	3	39	4	57	17
Total	795	50	990	195	1,267	276
Critical Care						
ICU	18	1	26	8	35	9
CCU	14	0	19	5	24	5
NCCU / SCN	87	4	88	1	101	13
Procedural						
Operating Theatres	28	2	32	4	43	11
Procedure Rooms	5	0	6	1	7	1
Cardiac Cath Labs	1	0	2	1	2	0
Renal Dialysis Chairs	16	0	16	0	16	0
Chemotherapy Chairs	21	1	23	2	40	17
Birthing Suites	18	0	20	2	22	2
Outpatients						
Outpatient rooms	94	2	127	33	138	11
Emorgona						
Emergency	.=				2.5	22
Treatment Spaces (incl. resus bays)	47	2	66	19	86	20

^{*}Same day and Stage 1 recovery beds are listed in the Mater Bed License as "Total Recovery Bays". It is likely same day patients utilise licensed overnight beds.

To account for the impact of virtual models of care on the need for outpatient consulting rooms, a 5% reduction in outpatient occasions of service (occurring in hospital) has been modelled under Phase 2. The required infrastructure capacity for private ambulatory care has not been estimated as these services are largely delivered by external providers. It is recognised that additional private outpatient consulting rooms may be required at Springfield prior to stage 2 commissioning.

Sensitivity analysis

The phases that have informed the growth assumptions for the Clinical Services Plan – particularly the baseline – consider the broader private hospital market and growth trends. To April 2017, Mater Health experienced little year-on-year growth in private hospital activity, and as such the baseline presented in the Plan assumes no growth in either public or private activity for Mater Health beyond what has been planned for 2017/18.

This however, is not the 'worst-case scenario'. Given the regulatory uncertainty associated with private health insurance (premium increases, membership, quality of health insurance policies, MBS and prostheses reviews), and increases in public hospital targets for private patients, it is prudent to consider a 'worst-case scenario' where private hospital activity indeed declines over the short- to medium-term.

As such, we have undertaken a high-level sensitivity analysis to estimate the potential impact of a reduction in private hospital activity for Mater Health:

- If private hospital activity (excluding Springfield) were to decrease by 1% per annum below planned 2017/18 levels, by 2026/27 this would equate to 4,472 fewer separations, 12,270 less occupied bed days, and 38 additional beds of unutilised capacity across the Mater Health network
- If private hospital activity (excluding Springfield) were to decrease by 3% per annum below planned 2017/18 levels, by 2026/27 this would equate to 12,399 fewer separations, 34,019 less occupied bed days, and 103 additional beds of unutilised capacity across the Mater Health network.

It is recognised this paints a pessimistic view of the future for the private hospital market, however it is important to demonstrate that other potential scenarios have been considered in developing this Plan – particularly the uncertainty and challenges present in the private hospital market.

Despite this, we have developed and are committed to a positive, future-focused plan that is ambitious but targeted towards areas we believe play to our strengths and will provide sustainable growth for us in the future. This is presented in the following sections of the Plan.

Implementation roadmap – priorities for Mater Health

Given our rapidly changing environment, and our commitment to executing on our Clinical Services Plan, we identified a number of high priorities to focus our attention in the immediate term. Through this process however, we identified a number of initiatives that require attention across Mater Health. These are outlined below, under each of the four focus areas in our plan.

Drive growth engines

- Master planning to inform future infrastructure requirements and investment decisions
- **Service contract negotiations** with Queensland Department of Health this should emphasise the future role for Springfield, potential support for public activity at Redland, as well as Mater Health's ability to respond to emerging public sector needs (particularly from MSHHS). The Plan should be used as the starting point for negotiations
- Expand our relationships and negotiations with private health insurers to include funding arrangements for value-based care and expected patient outcomes
- Explore opportunities to leverage personalised medicine and clinical trials to build eminence within growth engines.

Improve operational excellence

In addition to our existing operational excellence programs under the Exceptional Every Time strategy:

- Place education and research at the core of our services, ensuring we build eminence through evidence-based care
- Referral pathway optimisation to optimise referral between public and private services. This will be supported in the long-term by e-referral systems and other digital health improvements (aligned with the Mater Group Digital Strategy). The key actions needed include:
 - Project set-up
 - Map current patient referral pathways (public and private)
 - Map proposed standardised public referral pathways including direct access protocols (public and private)
 - Identify and address barriers to new pathways (public and private)
 - Implementation of enhanced referral pathways.
- Develop standardised value-based care pathways that deliver consistent outcomes, are **innovative and evidence-based** – develop standard approach to care pathways (specific specialties to focus on have been identified within the Clinical Stream sections). These should align with existing work underway with the Exceptional Every Time Strategy and be expanded and be consistent across all Streams. The key actions needed include:
 - Develop standard approach, objectives, tools and templates (including those to be used prior to, and after implementation of an electronic medical record)
 - Develop and roll-out education materials to relevant staff developing new care pathways
 - Develop appropriate governance arrangements for pathways to be endorsed.
- Seek opportunities for partnerships, where other organisations (aligned with our mission and values) may be better placed to provide services in partnership with Mater Health.

Design and deliver an industry leading healthcare experience

- Mater private health care differentiation identify consistent framework across all Streams to improve the differentiation between our public and private services, to drive growth in our private services to increase value in the private offering.
- Mater Membership Program investigate the feasibility of a 'Mater Membership' program that creates a link for patients to Mater and has member benefits relating to service access and a premium service experience. This would allow access to the full range of care and services (including support services) across Mater Health's three campuses. This may also include offering financial incentives for achieving care plan goals (e.g. weight management targets, wellness model key achievements). This will require options on subscription levels, detailed costing analysis for different care packages / levels of service, financial advice on accounting treatment.
- Patient experience framework, including journey mapping and workshops facilitate patient experience workshops to develop common understanding and principles to inform development of different care experiences across Mater Health. Reorienting our services to become more patient and family-centred will require a significant cultural and organisational change process (see below). The key actions include:
 - Facilitate workshops with patients, their families and referrers to understand the desired patient experience
 - Journey map patient experience, identifying all key touchpoints and areas for change

- Identify care 'navigation' processes or protocols to align to standard patient pathways and bundled care arrangements
- Develop principles, common elements of the patient experience to inform all projects relating to this across each Stream.
- Internal Change becoming a Customer Focused Organisation Aligned to EET to develop an internal whole-of-organisation response to strengthen our customer-focus and truly deliver on the Mater Health promise:
 - Develop a culture change program and a performance and accountability framework aligned to improving customer focus, whereby employees, partners, providers and suppliers in every role and at every level of the organisation are energised and proud to serve customers
 - Build capacity and capability of our workforce and provider partners to excel in customer service
 - Develop all future plans, models of care and services orientated around customer needs and convenience
 - Prioritise and modify systems, processes, structures, roles and infrastructure to align to customer needs and convenience
 - Strengthen organisational decision making and resource allocation, with more timely customer service feedback and complaints
 - Develop customer 'value based' key performance indicators across all areas of our business to support a 24-7 customer service expectation.

Utilise virtual care and digital healthcare delivery

- Implement digital enabling initiatives (e.g. telehealth services, navigation services, streamlined preadmission and referral practices, digital communication and information tools, virtual consults).
- Linked with the development of the "Age Friendly Care" service model, map information and technology requirements, including consideration of a 'virtual health advisor' component to the service. This can then be expanded across Mater Health.
- Develop a digital pre-admission process to streamline the pre-admission process.
- Explore internal telehealth service models, to streamline care for patients who require support from other specialists, to reduce the need for internal referrals and patients to return for multiple appointments.
- Develop a continuous live link, that could be targeted (for example) at women and their families to enhance their experience with Mater and giving birth. This may include a live link to the nursery that parents and their wider network of family and friends can access. This initiative could also be applicable to our Age-Friendly Care service model.

6. Appendices

Appendix 1 – Assumptions used in forecasting activity and infrastructure requirements

An overview of the methodology used to produce the activity projections is outlined in Section 5: Clinical service planning approach and phasing. A high-level outline of the methodology used to convert the activity projections to infrastructure requirements is presented in Table 18.

A 5% reduction in average length of stay for all overnight activity in the 2017/18 base year has been modelled. Subsequent years ALOS improvement will need to be determined through clinical consultation and peer benchmarking – as such, the ALOS modelled in Hardes for both public and private has been applied in the years from 2018/19 to 2026/27.

The infrastructure requirements have been determined using a range of service planning methodologies (including those endorsed by the Queensland Department of Health (QH) for Public services). In some cases alternative benchmarks and methodologies have been used where the standard methods were not considered appropriate by Mater Health. To test for uncertainty in these assumptions, a sensitivity analysis has been conducted on each activity item, using an alternative methodology as agreed with Mater Health.

Table 18: Assumptions used to convert projected activity to infrastructure requirements.

•		•
Activity Type	Methodolo	gy Overview
Admitted Patient	Public	Private
Inpatients Acute	Determine bed requirements by applying projected bed days to QH endorsed service planning benchmarks for inpatient activity.	Determine bed requirements by applying projected bed days, to adjusted QH endorsed service planning benchmarks (slightly more efficient benchmarks) for inpatient activity.
Non-admitted Patients		
Emergency Department	Determine infrastructure requirements (resuscitation bays, treatment spaces, isolation rooms and short stay beds) by applying the projected volume of presentations to the QH endorsed service planning benchmarks for Emergency Department activity.	Determine infrastructure requirements (resuscitation bays, treatment spaces, isolation rooms and short stay beds) by applying the projected volume of presentations to throughput in 2015/16.
Outpatient Clinics – Ambulatory Care	Determine projected outpatient activity by applying 2016/17 ratios of selected ESRGs to outpatient clinics and apply to projected inpatient activity.	Determine projected outpatient activity by applying 2016/17 ratios of selected ESRGs to outpatient clinics and apply to projected inpatient activity.
	Determine room requirements by applying the QH endorsed service planning benchmarks for outpatient activity.	Determine room requirements by applying the QH endorsed service planning benchmarks for outpatient activity.
Procedural Activity		
Same day Chemotherapy	Determine chair requirements by applying projected sameday chemotherapy activity to current sessions per day and current operating hours and days.	Determine chair requirements by applying projected sameday chemotherapy activity to current sessions per day and current operating hours and days.
Renal Dialysis	Determine the required number of dialyses using the assumptions and calculations outlined in the Mater Health Renal Service Business Case (submitted December 2016).	Determine the required number of dialyses using the assumptions and calculation outlined in the Mater Health Renal Service Business Case (submitted December 2016).

Activity Type	Methodology Overview						
Endoscopy	Determine the required number of endoscopy suites by applying projected endoscopy activity (within the following categories: Gastroscopy, Colonoscopy, ERCP, EUS) to the current scheduling time weights for each endoscopy type.	Determine the required number of endoscopy suites by applying projected endoscopy activity to current throughput.					
Interventional Cardiology	Determine infrastructure requirements (number of Cath Labs and recovery beds) by applying projected interventional cardiology activity to the QH endorsed service planning benchmarks for interventional cardiology activity.	Determine infrastructure requirements (number of Cath Labs and recovery beds) by applying projected interventional cardiology activity to the QH endorsed service planning benchmarks for interventional cardiology activity.					
Operating Theatres	Determine infrastructure requirements (number of OTs and recovery beds) based on actual theatres minutes and utilisation, applied to future activity projections (base year of 2015/16).	Determine infrastructure requirements (number of OTs and recovery beds) based on actual theatres minutes and utilisation, applied to future activity projections (base year of 2015/16).					
Maternity	Determine the number of birthing suites by applying projected maternity activity (using QH endorsed service planning methodology weightings) to throughput as advised by Mater clinicians.	Determine the number of birthing suites by applying projected maternity activity (using QH endorsed service planning methodology weightings) to throughput as advised by Mater clinicians.					
Critical Care	Determine ICU bed days by applying current ratio of ICU mins per ERSG to projected activity. Covert to ICU beds using the QH endorsed service planning benchmarks.	Determine ICU bed days by applying current ICU ALOS to projected ICU activity. To determine infrastructure requirements, external private throughput benchmarks will be used, where available. Alternatively, infrastructure requirements will be determined by applying: ICU bed days, at 365 days per year, at prior year ICU bed occupancy.					
NICU / SCN	Determine NICU bed days by applying current ratio of ICU mins per ERSG to projected activity. Covert to ICU beds using the QH endorsed service planning benchmarks.						
Medical Imaging	Apply projected imaging activity to QH endorsed service planning benchmarks (time per procedure, hours and days of operation)	Not projected, as medical imaging at Mater Health's private hospitals are largely delivered under outsourcing arrangements.					

Closure of Children's Hospital

It is acknowledged that in recent years Mater Health has undergone significant change, particularly with the closure of Mater Children's Hospital. To enable accurate comparison with current activity, all activity at Mater Children's Hospital has been excluded from any historical activity analysis.

Springfield growth rates

To determine the growth in activity for the Springfield campus over the projected period, the following assumptions have been applied to 16/17 inpatient activity:

Public activity –

Phase 1: No growth.

Phase 2: 70% of all public activity in the defined catchment region, as per Table 1.

Private activity -

Phase 1: 20% growth on 16/17 case-mix.

Phase 2: Growth assumptions as per the Mater Private Hospital Springfield Bed Demand Analysis Business Case.

Appendix 2 – Schedule of figures and tables

List of figures

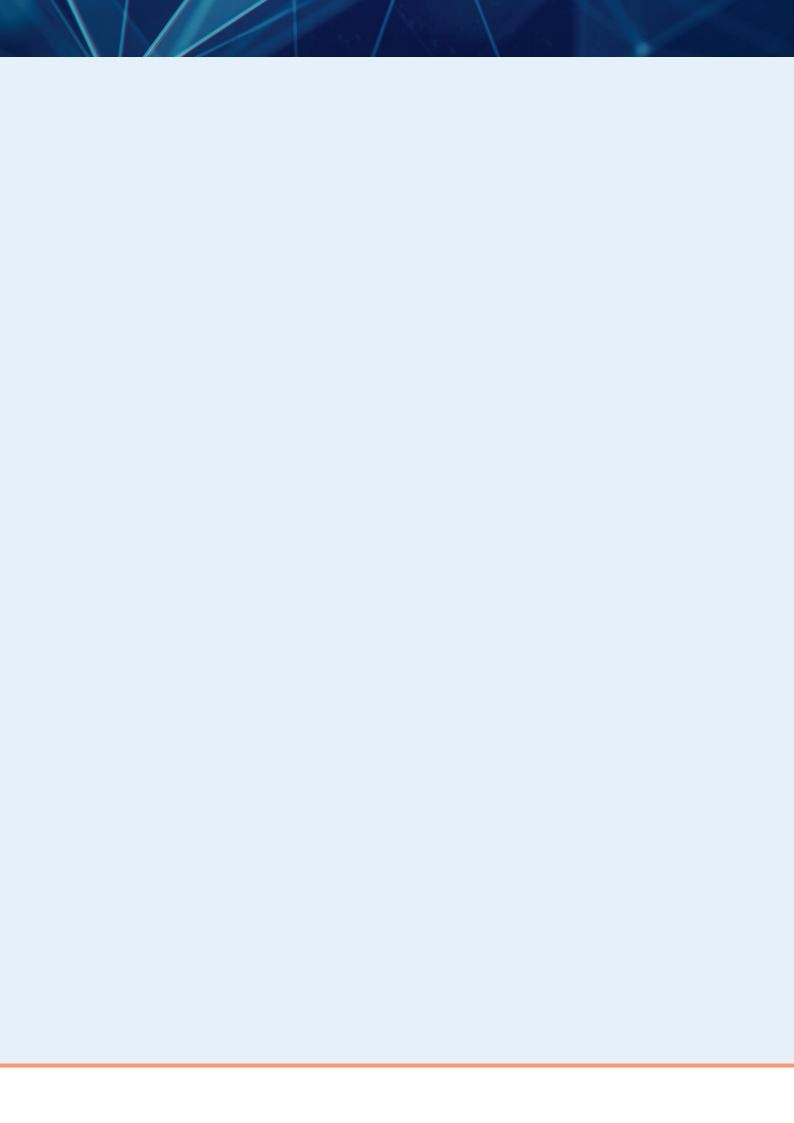
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Appendix 3 – Glossary of terms

Term	Definition
Local Government Area (LGA)	A spatial unit which represents the whole geographical area of responsibility of an incorporated Local Government Council, an Aboriginal or Island Council in Queensland, or a Community Government Council (CGC) in the Northern Territory.
	(Reference – http://meteor.aihw.gov.au/content/index.phtml/itemId/354357)
Statistical Area (SA2, SA3)	The Australian Statistical Geography Standard (ASGS) provides a framework of statistical areas used by the Australian Bureau of Statistics (ABS) and other organisations to enable the publication of statistics that are comparable and spatially integrated.
	• Statistical Areas Level 2 (SA2s) are designed to reflect functional areas that represent a community that interacts together socially and economically. They consider Suburb and Locality boundaries to improve the geographic coding of data to these areas and in major urban areas SA2s often reflect one or more related suburbs. The SA2 is the smallest area for the release of many ABS statistics, including the Estimated Resident Population (ERP), Health & Vitals and Building Approvals data. SA2s generally have a population range of 3,000 to 25,000 persons, and have an average population of about 10,000 persons. SA2s are aggregations of whole SA1s.
	• Statistical Areas Level 3 (SA3s) are designed for the output of regional data. SA3s create a standard framework for the analysis of ABS data at the regional level through clustering groups of SA2s that have similar regional characteristics, administrative boundaries or labour markets. SA3s generally have populations between 30,000 and 130,000 persons. They are often the functional areas of regional towns and cities with a population in excess of 20,000, or clusters of related suburbs around urban commercial and transport hubs within the major urban areas. SA3s are aggregations of whole SA2s.
	(Reference – http://www.abs.gov.au/websitedbs/d3310114.nsf/home/australian+statistical+geography+standard+%28asgs%29)
	Depending on the data source, some information is only available at an SA2 or SA3 level (not both) – as such, data presented in this CSP may be presented at both levels, depending on the source.
Socio Economic Index for Areas (SEIFA)	SEIFA is a suite of four indexes that have been created from social and economic Census information. Each index ranks geographic areas across Australia in terms of their relative socio-economic advantage and disadvantage. The four indexes each summarise a slightly different aspect of the socio-economic conditions in an area.
	The indexes can be used for a number of different purposes, including targeting areas for business and services, strategic planning and social and economic research. For each index, every geographic area in Australia is given a SEIFA score which measures how relatively 'advantaged' or 'disadvantaged' that area is compared with other areas in Australia.
	(Reference – www.abs.gov.au)
WAU (Weighted Activity Unit) / QWAU (Queensland Weighted Activity Unit)	A WAU is a measure of health service activity expressed as a common unit, against which the national efficient price (NEP) is paid. It provides a way of comparing and valuing each public hospital service (whether it is an admission, emergency department presentations or outpatient episode), by weighting it for its clinical complexity.
	The average hospital service is worth one WAU – the most intensive and expensive activities are worth multiple NWAUs, the simplest and least expensive are worth fractions of an WAU.
	(Reference – http://www.publichospitalfunding.gov.au/glossary)
CAGR	Compound Annual Growth Rate – is a measure of growth over multiple time periods.
Specialty	These refer to Mater Health defined specialties, on which activity (and other data) is reported. It is based on mapping of doctors to specialties, with activity being grouped according to their doctor of discharge and their respective specialty. They do not align one-to-one with standard diagnosis related groups (DRGs).





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