



FEBRUARY 2021

Health 2030 – Growing the economy through health.

Discussion Paper.

Toowoomba and Surat Basin Enterprise



Australian Government

BUILDING OUR FUTURE



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Introduction.

Introduction.

The health care sector has undergone – and will continue to experience rapid transformation as we deal with the twin challenges of increasing demand, with limited or scarce resources (including funding) to continue to meet that demand.

Additionally, the typical incremental approach to reform that has characterised the siloed health system in Australia has also been disrupted – with 2020 being a year like no other. In Queensland, nationally, and internationally health services are all facing enormous challenges (and opportunities) to respond to a pandemic, and optimise their services to meet current and future need.

Traditional approaches to service delivery have been transformed at a pace and scale previously unimagined. The rapid adoption of virtual care models and remote monitoring have permanently altered the way consumers and clinicians think about how health care can and should be delivered.

Furthermore, the almost holistic shift to remote working models has challenged the traditional, office-based, major city-centric workforce model – with significant parts of the population reconsidering their lives in major cities and relocating to regional areas while working remotely.

These shifts – both in the health care sector, and the population more broadly – present significant opportunities for major regions (such as Toowoomba and the Surat Basin) to grow their local

economies through attracting talent, developing liveable communities, and taking advantage of the shifts in health care delivery through innovative service and delivery models.

TSBE Health

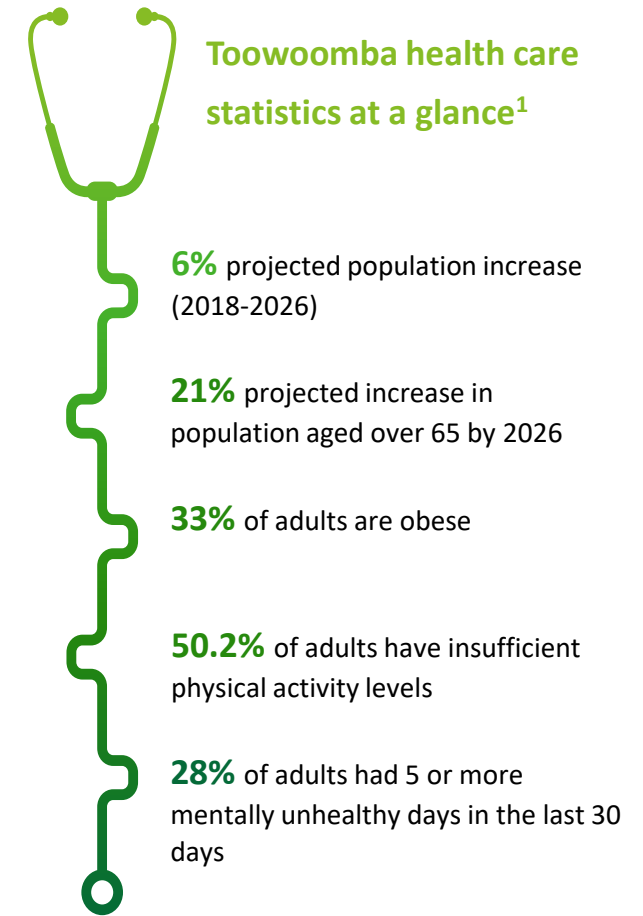
The Toowoomba and Surat Basin Enterprise (TSBE) Health links businesses with opportunities in the growing health industry by boosting the region's health profile and promoting the liveability and services in the region. The key advantage of TSBE Health is the 2017 Memorandum of Understanding between the three hospitals in Toowoomba (Toowoomba Hospital, St Vincent's Private Hospital Toowoomba and St Andrew's Toowoomba Hospital) which creates a collaborative and dynamic approach between partners to furthering the health objectives of the region.

Purpose of this document

The purpose of this Discussion Paper is to identify key shifts and trends in the health care sector, and to promote discussion between TSBE Health partners on future opportunities for us to collectively capitalise on these opportunities to grow the region through health care.

This is a starting point on the path to developing a plan for growth in health-related services in the Toowoomba and Surat Basin region.

Toowoomba health care statistics at a glance¹



¹ Source: Report of the Chief Health Officer 2020, Hospital and Health Service Profiles



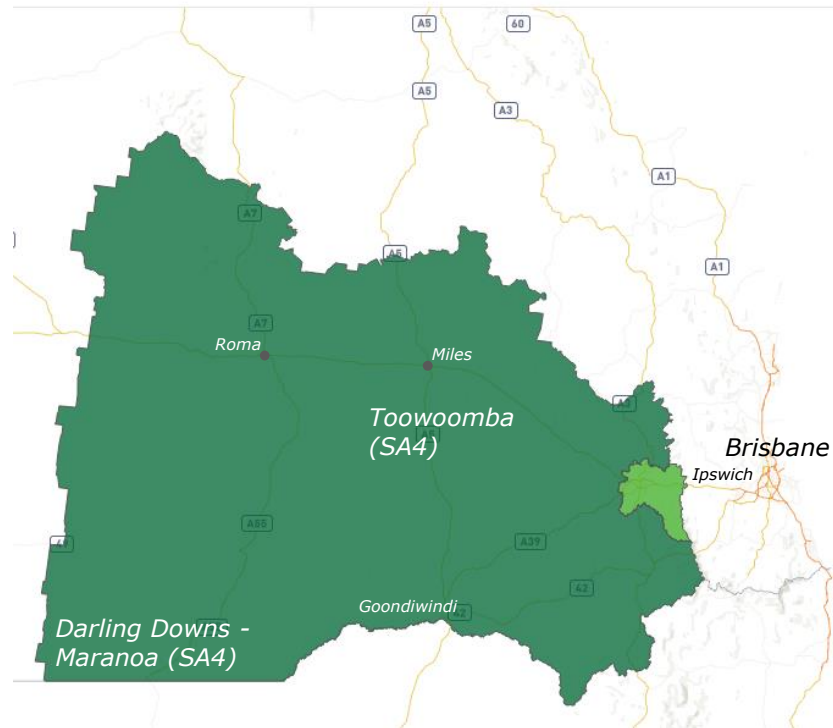
Regional profile.

An economic and demographic overview of the
Toowoomba and Surat Basin region

Population snapshot.

The Toowoomba-Darling Downs region (defined by the Toowoomba and Darling Downs-Maranoa SA4s) is a major community and economic region of Queensland.

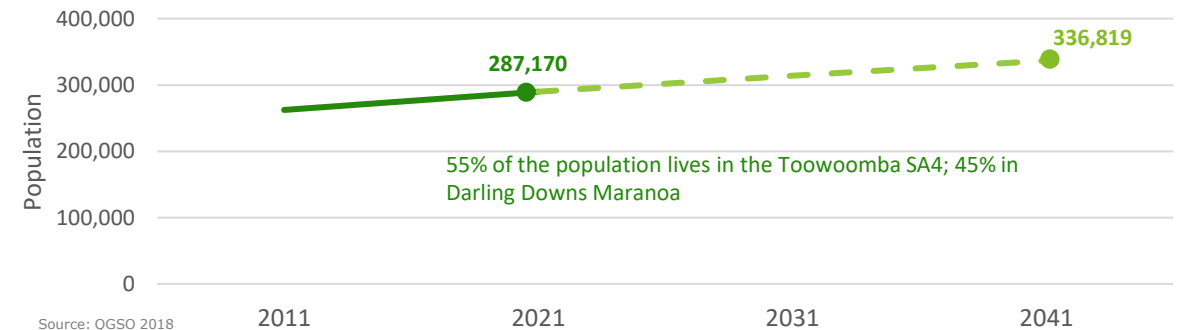
The region is home to almost 290,000 people as at 2019. Within the region, the historical population growth rate was the strongest in Toowoomba at 1.2% per annum on average over the last 10 years to 2019 compared with 0.5% in Darling Downs-Maranoa and 1.6% in the state as a whole.



The region has a significantly lower unemployment rate than the state and national average. Specifically, this rate dropped to around 4% for the combined region as a whole in the March quarter 2020 which is well below the state average of around 6% in the same time period.

Population growth projections

The Toowoomba-Darling Downs region is expected to grow at 0.7% per year on average to 2041. Around 55% of the region lives in the Toowoomba SA4 portion of the region.



Source: QGSO 2018

Health statistics

The Toowoomba region has an ageing population with 21% of the region expected to be over 65 by 2036 (compared to 19% in 2018). This will result in increased demand on health services due to a larger burden of disease.

In terms of health indicators, the Toowoomba region has an obesity rate that is 31% higher than the Queensland rate; while 50.2% of adults also had insufficient physical activity levels in the region. The prevalence of these risk factors will result in further demand on the health system in years to come.

The Toowoomba region also has a 6% higher suicide rate than the rest of Queensland demonstrating that the mental health of those within the region should be one of the focuses for future investment.

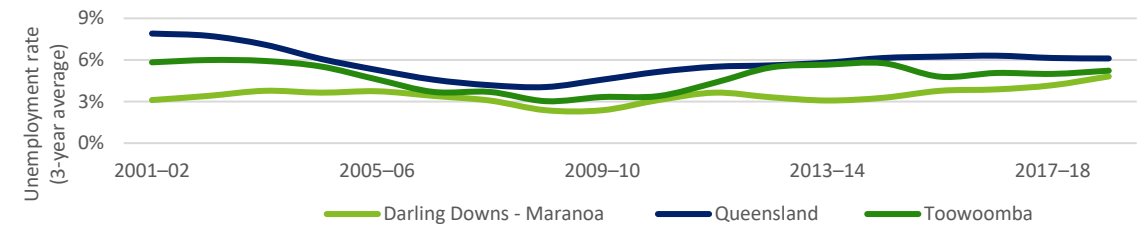
Overview of the economy.

The Toowoomba and Darling Downs regional economy and community is diverse with a broad economic base ranging from agriculture and resources to manufacturing, construction and service industries including health care and social assistance. A snapshot of the key strengths of the regional economy and community is provided below which provides the regional macroeconomic context.

The median house price in the Toowoomba urban region is significantly lower than Brisbane with the median house price in Brisbane being \$550,000 compared with \$375,000 in Toowoomba. The regional CPI growth rate is also lower than the state average.

Unemployment rate

The Toowoomba and Darling Downs-Maranoa SA4's have historically had lower unemployment rates than the Queensland average.

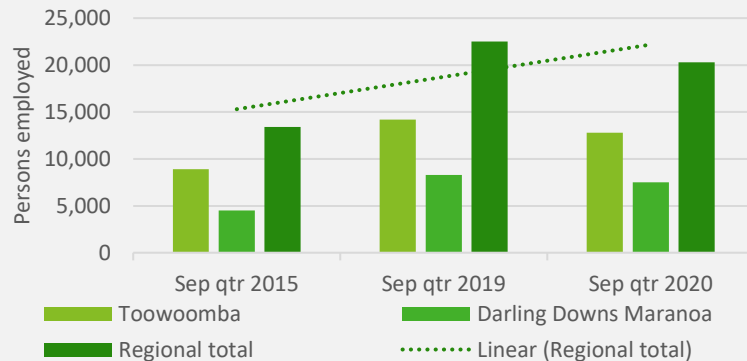


Industry breakdown.



Health

Over 20,000 persons are employed in the health care and social assistance industry in the region as a whole according to the latest ABS labour force data. This has increased on average over the past 5 years.

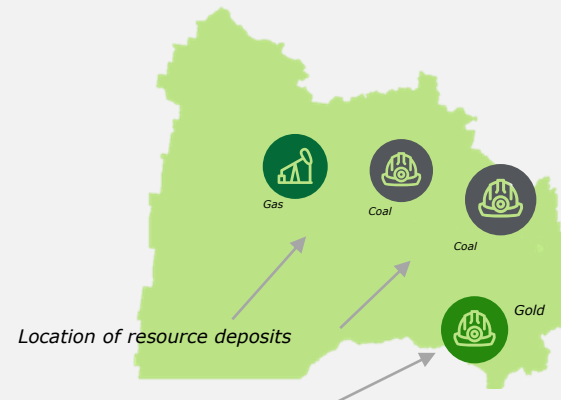


Source: ABS 2020



Mining

The region has gas and mining resources, with 8.6 million tonnes of coal transferred from the Darling Downs region to the Port of Brisbane (2013).

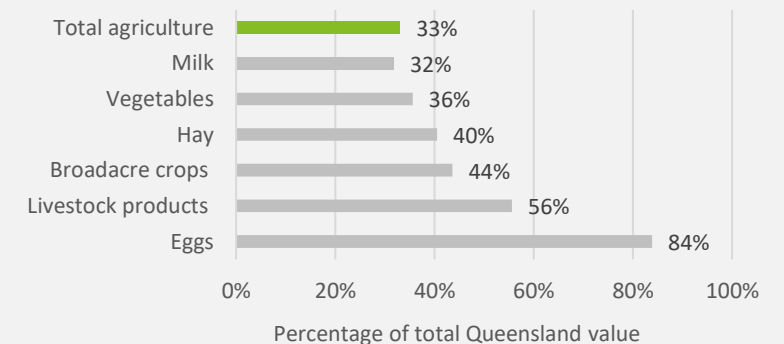


Source: DRME 2013



Agriculture

The region is a significant producer of agricultural products with 33% of Queensland agriculture coming from the region.



Source: ABS 2016

Economic contribution of the health care industry.

The health care and social assistance industry is a significant economic mainstay in the region. This in part is due to the three major hospitals within the region (Toowoomba Hospital, St Vincent's Private Hospital Toowoomba and St Andrew's Toowoomba Hospital). In Toowoomba, the industry directly accounts for almost 1 in 5 jobs and over 1 in 10 jobs in the Darling Downs - Maranoa. The industry makes a direct contribution to the state economy of over \$27 billion and the combined region is estimated to be worth around \$1.6 billion of this in FY 2019 (current prices).

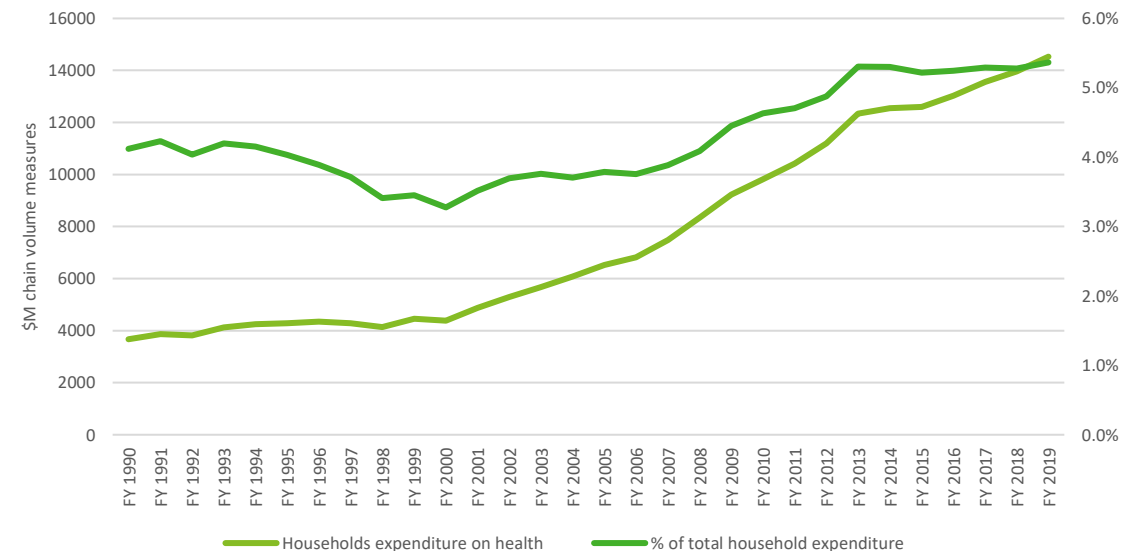
The health care and social assistance sector is worth over \$27 billion in gross value added in nominal terms (or over 7% of total industry value added in Queensland) as at June 2019 based on the latest ABS state accounts. This makes it the third largest sector (of all employing industries in the state) behind only mining and construction in terms of industry gross value added.

The health industry is labour intensive. As a result, the contribution of the sector is most significant when analysed in terms of jobs. Furthermore, health is the largest employing industry in the state; providing jobs for around 365,000 persons (or 15% of total jobs) as at the August reference month of the September quarter 2020.

Based on the region's share of total health employment in the state, the health care and social assistance industry is estimated to directly contribute around \$1.6 billion to the combined Toowoomba-Darling Downs regional economy and over 20,000 jobs. This contribution is estimated to continue to increase over the medium and long term – driven by increasing population growth as well as an ageing population and other factors.

A significant proportion of the size of the industry is accounted for by expenditure by households on health in the economy. Analysis of the latest state accounts for Queensland highlights that this expenditure has grown steadily since 2000 and also at a slightly faster pace than overall consumption with health increasing its share of total household expenditure in Queensland. This expenditure also tends to be 'driven' by population growth in the main. With population of the Toowoomba Darling Downs - Maranoa region as a whole estimated to grow by 0.6% per annum which reflects moderate long term growth, this increase in expenditure will continue.

Growth in household final consumption on expenditure



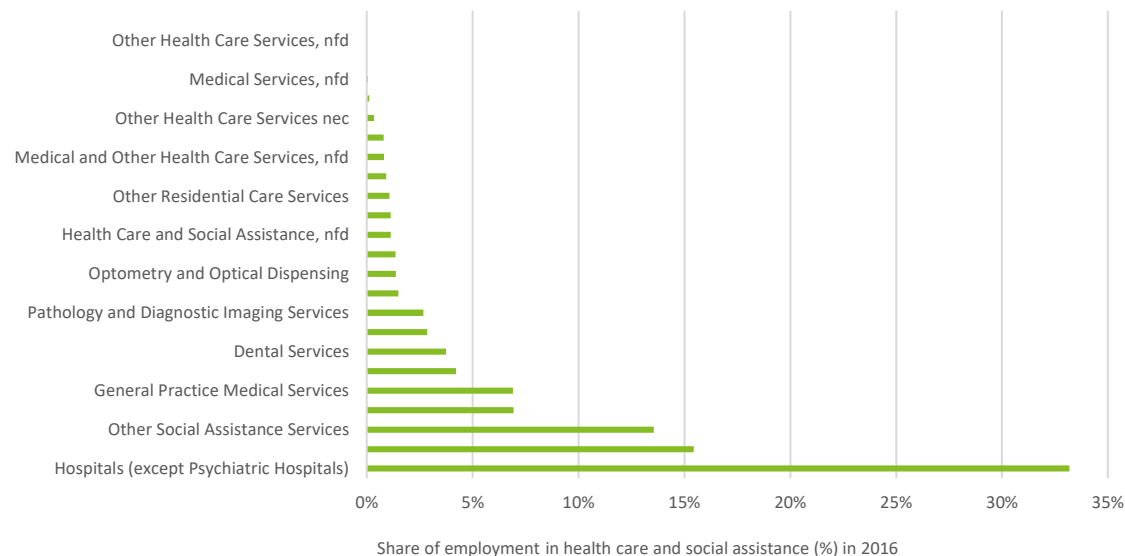
Health care employment breakdown within the region.

The health care and social assistance workforce is diverse with the main employing sub-sectors in the region including hospitals, aged care residential services, child care and other social assistance services as well as GPs, dental, specialised medical services and other allied health services.

Within the industry in the region, the largest sub-sector is hospitals. This is followed by aged care, other social assistance services and child care services. A detailed breakdown of employment within the health industry in the Toowoomba and Darling Downs-Maranoa SA4 regions is provided below.

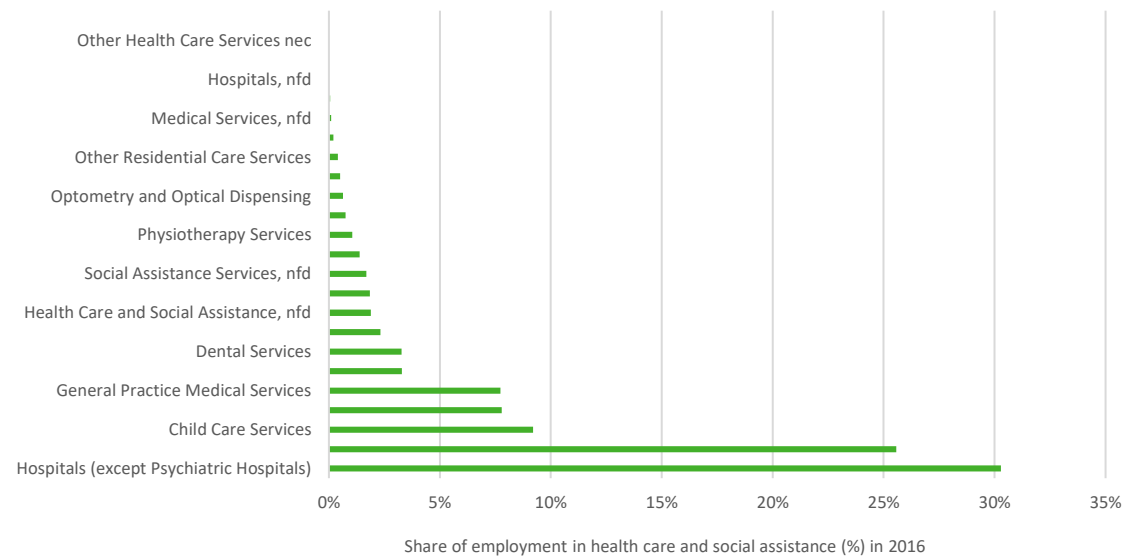
This highlights a relatively similar distribution in both the Toowoomba SA4 and Darling Downs-Maranoa SA4 regions. This also highlights that the industry is highly diverse and caters for the full spectrum of health care and social assistance services in the region.

Employment breakdown in the health care and social assistance industry in Toowoomba SA4 in 2016



Source: Deloitte analysis using ABS

Employment breakdown in the health care and social assistance industry in Darling Downs and Maranoa SA4 in 2016



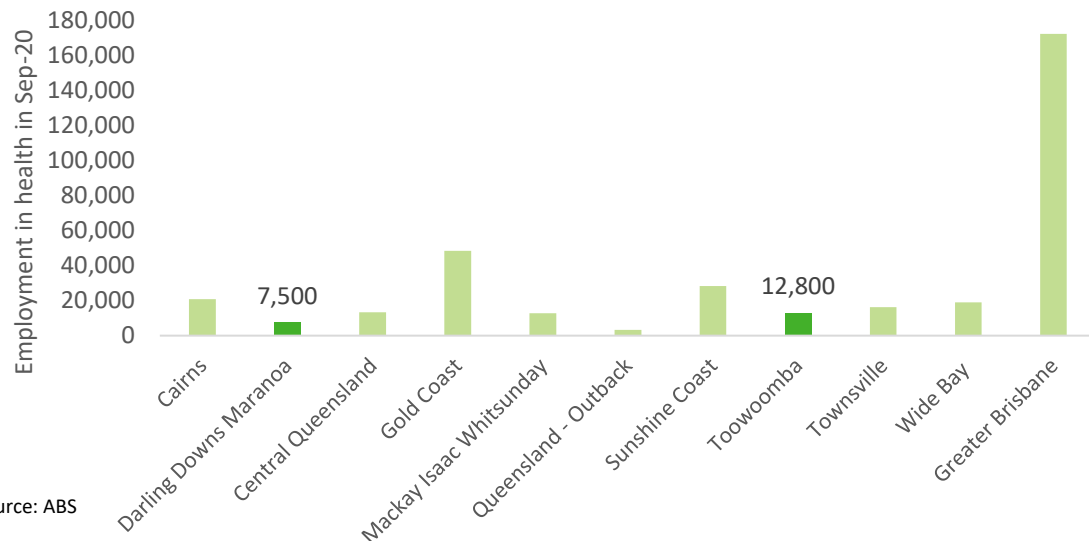
Source: Deloitte analysis using ABS

Comparative analysis of health employment.

Comparative analysis with other regions highlights that the Toowoomba region is relatively specialised in the health care and social assistance sector with health accounting for the highest share of regional employment compared with other regions. This can be attributed to the Toowoomba region servicing a number of rural areas as well as the Toowoomba region necessitating more staff.

Outside of Greater Brisbane, the largest levels of employment in the health care and social assistance sector are in the Gold Coast, Sunshine Coast and Cairns SA4 regions. This analysis is based on the latest ABS labour force survey data for the August reference month of the September quarter 2020.

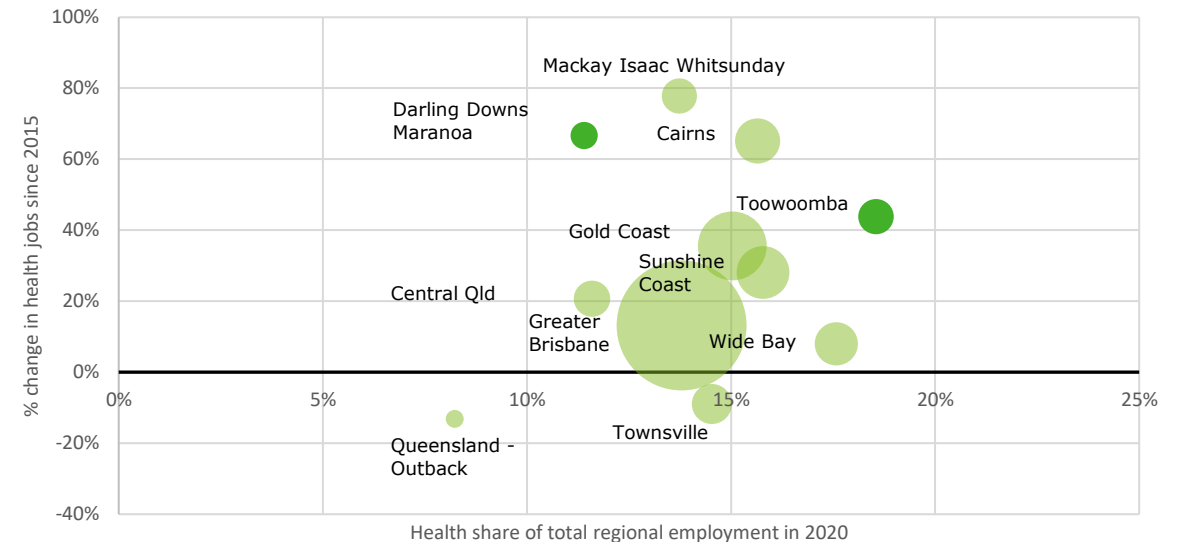
Comparative analysis of employment in the health care and social assistance industry by region



Source: ABS

Comparative analysis with other regions in Queensland highlights that the Toowoomba SA4 has the highest health care and social assistance sector share of regional employment as at the September quarter 2020. The region also experienced a large increase in jobs in the sector since five years ago, with this level increasing by 44% over this period. An even faster increase was experienced in the Darling Downs Maranoa SA4 with over 60% increase over this period – although as a share of total employment it still remains lower than a number of regions in the state.

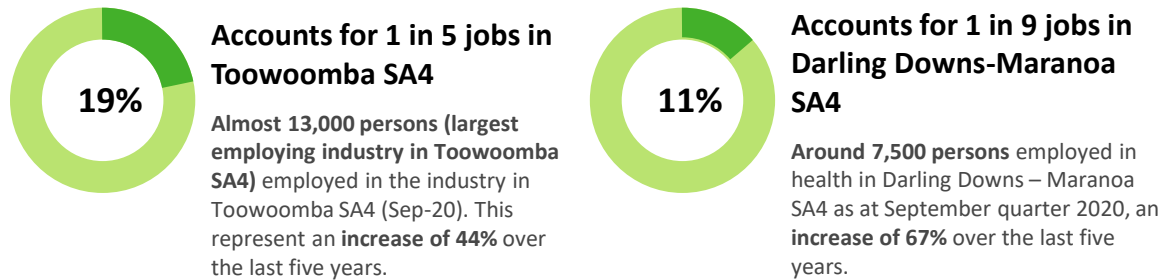
Comparative analysis of employment in the health care and social assistance industry by region



Source: ABS

Impact of the ageing and growing population.

The health care and social assistance industry is an economic mainstay of the Toowoomba and Darling Downs regional economy and community. The industry is estimated to directly contribute around \$1.6 billion in the regional economy and 1,245 businesses as at June 2019. This is also evidenced by the fact that the industry:



Within the health care and social assistance industry, hospitals are the largest employer accounting for over 30% of jobs in the health care and social assistance industry in the region. Toowoomba is home to three major hospitals including St Vincent's Private Hospital, St Andrew's Toowoomba Hospital, and Toowoomba Hospital.

As teaching facilities, they also support the region's training and skills development needs. Other major health facilities and infrastructure include Griffith University, University of Queensland Rural Clinical School, LifeFlight helicopter base in Toowoomba (one of seven in Queensland) and smaller hospitals in various towns across the region. Toowoomba also hosts the Darling Downs and West Moreton Primary Health Network, further boosting its role as the health hub for the region². There are also a number of retirement village operators and 3,111 aged care service operational places as at June 2020 in the total region³. There are also 32 hospitals in total in the region (6 in Toowoomba and 26 in Darling Downs Maranoa) as at the same period³.

Looking ahead, the region's ageing and growing population is expected to generate demand for health care and social services. This is also anticipated to provide opportunities for the region to build on its foundations as a major regional health hub.

A scan of the latest skill shortages report for Queensland in the health sector highlighted a number of health professions where they were some shortages (noting the most recent report was as at June 2018 and the situation may have significantly changed since COVID-19)⁴ including a range of allied health professions (e.g. sonographers, optometrists, and physiotherapists) as well as the medical and nursing professions.

There are a range of factors that influence supply and demand in the health professionals cluster include an ageing population and associated increased need for medical or health related services. Furthermore:

- The impact of scientific and technological development on diagnosis and treatment programs.
- Public health policy and budgets influence availability and access for health professional services⁴.

The latest Queensland State Budget 2019-20 highlights \$1 billion for Darling Downs and South West Hospital and Health Services⁵. The State Budget also highlights the budget providing for an additional 381 nurses and 101 extra doctors in the region. The budget includes funding for a number of health projects including: the Roma Hospital redevelopment, Student Nurse Accommodation in Roma, implementing electronic medical records (ieMR) at Toowoomba Hospital and a new ambulance station at Drayton.

2 Refer: <https://www.tr.qld.gov.au/community-business/business-support/economic-development/7260-economic-profile>

3 Queensland Treasury regional profile for Toowoomba and Darling Downs - Maranoa SA4s – Date accessed October 2020

4 Labour market research – health professional, Queensland, June 2018

5. Queensland Treasury State Budget 2019-20, Regional Action Plans



The future of health.

A look at the future of health in 2030

Social determinants of health.

There are a large number of factors that influence the health of patients and are part of the larger health care sector.

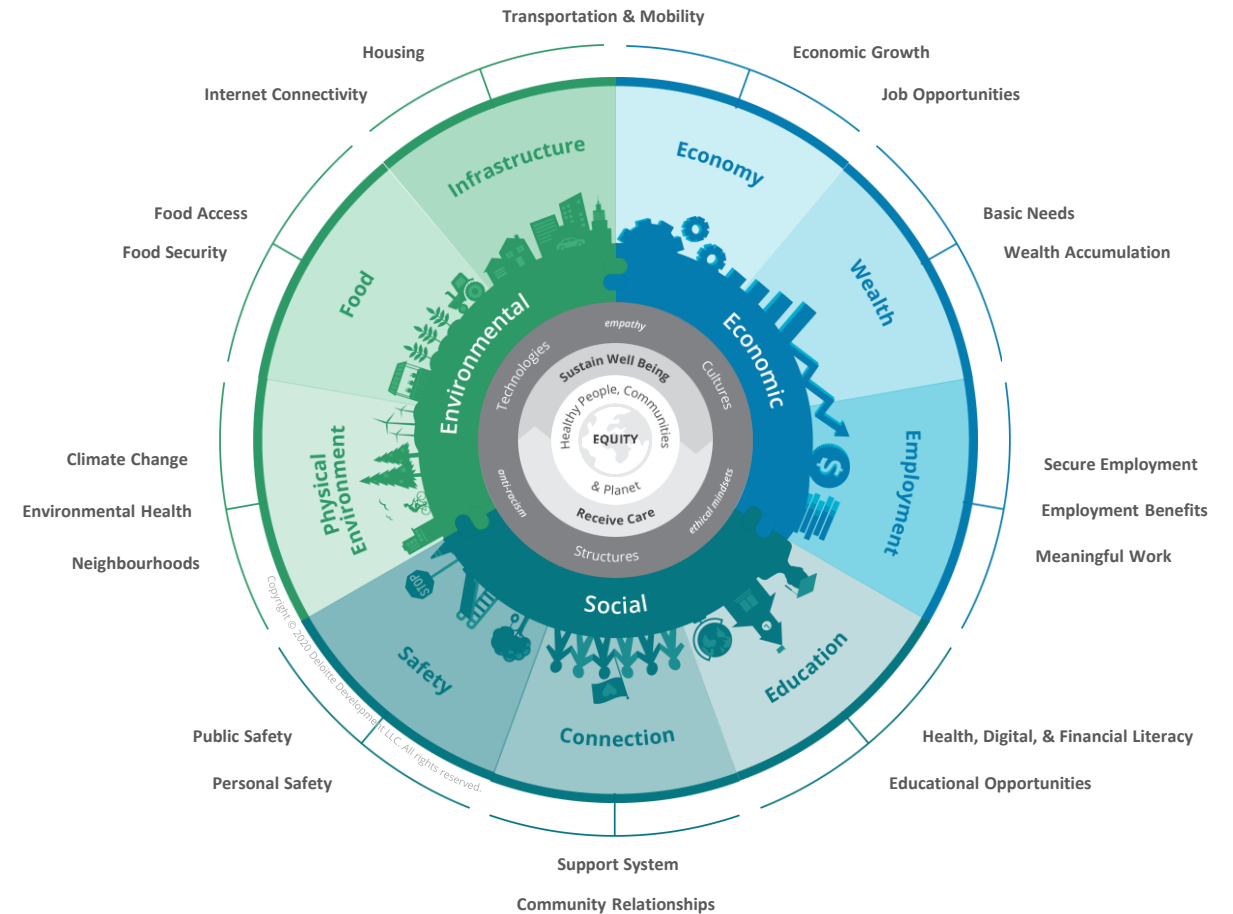
The World Health Organisation (WHO) defines health as “a state of complete physical, social and mental wellbeing, and not merely the absence of disease or infirmity”, health also includes people’s ability to lead socially and economically productive lives.

Up to 80% of health outcomes are affected by social, economic and environmental factors. These drivers of health (also known as social determinants of health) are shown on the right. There is extensive evidence that these factors all have an impact on health. In fact, health care itself only determines 15-25% of health outcomes².

There are also a number of underlying factors that influence these determinants. These include:

- **Technology:** Technology is expanding at an exponential rate which is leading to regular breakthroughs. However socioeconomic barriers can make it difficult for everyone to access technology that sustains or improves health and wellbeing.
- **Culture:** Studies have shown that cultural issues can negatively impact the health of current generations but also might affect the genetic make up of future generations.
- **History:** The poor health outcomes of some populations (in particular First Nations) has to be seen in the historic context of broader attitudes and policies about First Nations people and communities over the last 100 years.

When considering these determinants and the underlying factors, it can be seen that improving health outcomes involves taking a wider view of health – as seen in a key trend of shifting to population-based approaches to health care in Queensland and worldwide.



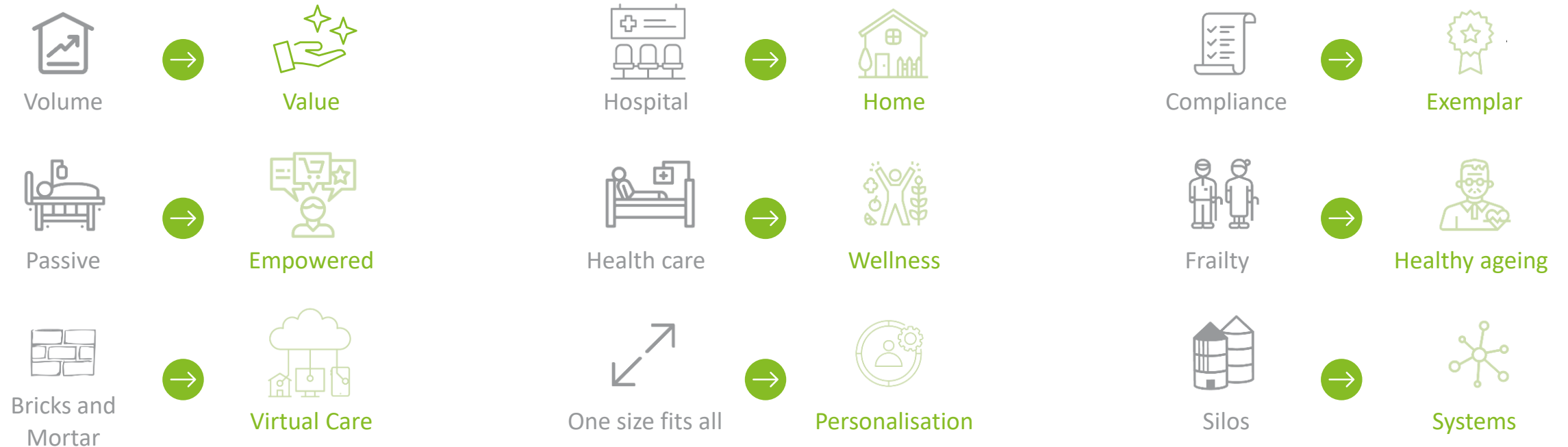
Future trends in health care.

There are a large number of factors that influence the health of communities, with significant shifts expected in how care is delivered.

The health sector is in the midst of a transformation, both here in Australia and internationally. Increasingly informed and empowered consumers, a shift from an illness or sickness-focus to wellbeing, and harnessing technology to deliver improved outcomes will give rise to new opportunities for business, partnerships, existing providers and consumers.

Those organisations that grasp these trends and shift their focus accordingly – including through partnerships with each other – will increasingly attract workforce, funding and customers.

A number of these are explored in the following section of this Discussion Paper, including with reference to the opportunities to grow the economy through health care in the Toowoomba and Surat Basin region.



Shifting health care spending.

In the future it is expected that health care spending will fundamentally shift from activities that diagnose and treat existing disease to activities that drive wellness and prevent onset of disease through early sensing of asymptomatic signals.

Treatment health care spend includes spending around activities that we consider to be “health care”-related today. In 2020 we view health as activities related to disease management. For example:

- *Spend in hospital systems*
- *Pharmacy expenses for treatment*
- *Virtual interactions with clinicians for care*

Wellbeing health care spend includes things today that are focused on wellbeing and prevention. As health care shifts from reactive to proactive and focuses more on wellbeing and prevention and finds ways to connect individuals closer to their wellbeing, aligned with appropriate incentives / financing. This will include things that are currently in different industries:

- *Real-time biometric sensing, waste, hormone and enzyme release trends*
- *Apps, wearables, and digital nudging*
- *Running shoes & other fitness equipment*
- *Healthy foods*

Wellbeing makes an impact to not only physical health and the prevention and management of health risks, but also financial stability, mental resilience, social connectivity, and purpose and meaning. This shift also creates exciting opportunities – for both existing health services to transform, as well as for new business entrants to contribute to the reform of the sector.



Opportunities locally.

The opportunities for the Toowoomba region to
grow through the health care industry

The “regions” agenda.

Toowoomba is a major regional area in Queensland and the second most populous inland city in Australia. It is also recognised as Australia’s second largest agricultural production area, whilst also being the gateway town to the Surat Basin which has a number of energy projects including coal seam gas.

In 2019, the Toowoomba region recorded a **3.0%** boost to the regional economy with the Gross Regional Product (GRP) reaching **\$11.56 billion** (for FY19)⁷.

In recent years there has been major investment in the Toowoomba and Surat Basin region. The region offers various strategic advantages for investment including greenfield industrial sites and its location as a trade gateway for the region. This investment has been across sector and will connect Toowoomba both with Brisbane and the world. Some of the investment in the region has included:



Toowoomba Wellcamp Airport

Australia’s first privately funded major airport with passenger and cargo services



Toowoomba Bypass

41 km bypass and partial ring road around Toowoomba that opened in 2019



Inland Rail

The planned Inland Rail track will run through the Toowoomba region



New Toowoomba Hospital

Detailed business case for a new Toowoomba Hospital on the Baillie Henderson Hospital campus

This increased investment, combined with the growth of regions as a government policy priority means that the Toowoomba and Surat Basin region is in the prime position to build sustainable industries and communities. This will result in a boost to essential services such as health due to the increased population who are attracted by the level of investment and opportunities.

⁷ Source: <https://www.tr.qld.gov.au/about-council/news-publications/media-releases/14029-new-grp-figures-highlight-toowoomba-region-s-strong-growth-pass-11-billion-for-first-time-3>

Impact of COVID-19

COVID-19 has accelerated the shift to technology enabled remote working with perceptions about working from home undergoing a rapid change. Workers across Australia no longer need to live close to a CBD, with regional centres like Toowoomba that are within close range of major capitals (90 minutes to Brisbane) becoming increasingly desirable for knowledge or professional workers. Toowoomba offers cheaper housing, less traffic, and more green spaces.

This shift to the regions is not new, with the last census showing that regional Australia attracted more people than it lost to capital cities. It has been shown that those aged 20-35 are now more likely to look at regional areas to purchase residential property. In fact between 2011 and 2016, 146,962 millennials moved from capital cities to regional areas with even more (207,510) moving between communities within regional Australia. This trend is expected to accelerate in the wake of COVID-19 due to the ease of working remotely.

In light of COVID-19 the Queensland Government has identified growing the regions as a priority during the economic recovery. This includes co-investing with industry, bridging the digital divide, delivering new energy projects and investing in water resources. At an Australian Government level, the Regional Australia Ministerial Taskforce, chaired by the Prime Minister is ensuring that the challenges and opportunities facing regional Australia are at the heart of government decision making.

In summary, the expected growth of the regions – including areas such as Toowoomba and surrounding areas – means increasing investment (public and private sector) and attraction of talent and skilled workers, which in turn supports building sustainable industries and communities. This includes a boost to essential services such as health care and all of the knock-on effects from improved services, including attracting workers and their families to the region boosting investment in housing, education, and overall consumption.

A shift to wellbeing.

Care models are increasingly shifting to a focus on prevention and wellbeing rather than on treatment and illness. This shift has been aided by technology that enables easier patient access, improved early diagnosis, and the application of behavioural economics (e.g. nudging to better decisions) to care models.

The health system will shift



... from treating patient illness to managing consumer health and wellbeing



... from accepting one-size-fits-all to precision health solutions



... from a reactive system to a holistic and predictive approach



... from extending life to improving quality of live over a lifetime

This shift away from illness treatment towards the management of health and wellbeing has enabled an opportunity for the Australian health care sector to improve health outcomes and ensure sustainability of the health care system. This shift also enables a number of opportunities for integration, partnerships and early interventions across all health providers. This includes private health insurers who are increasingly pushing towards more promotion and prevention type strategies and offerings in a bid to keep their policy holders healthy.

In line with this shift to a focus on prevention and wellbeing is the rising aggregation of people from public, non-profit, and commercial enterprises working together around the topics of disease prevention and wellbeing. These smart health communities (SHC's) often work outside the traditional health care system to provide support for consumers. This shift to wellbeing also creates economic and business opportunities, with the “wealthy, worried and well” who have significant disposable income driving the need for expanded wellbeing offerings – including traditionally private services – offered in different settings and through alternative models.



Social infrastructure such as parks and public exercise equipment contribute to this shift of wellbeing as they remove some of the barriers that inhibit consumers making healthy choices. Social infrastructure also plays an important role in the economic development of a region and the development of the society's quality of life.

The abundance of parks and gardens within the Toowoomba region contribute to this increased quality of life, with investment such as the new cross

country track across the Toowoomba Showgrounds also increasing the number of active transport options in the region. Active transport includes non-motorised forms of transport that increases the daily physical activity levels of those who utilise these options. For a population that has an obesity rate that is 31% higher than the rest of Queensland, investment in opportunities such as active transport can improve health outcomes.

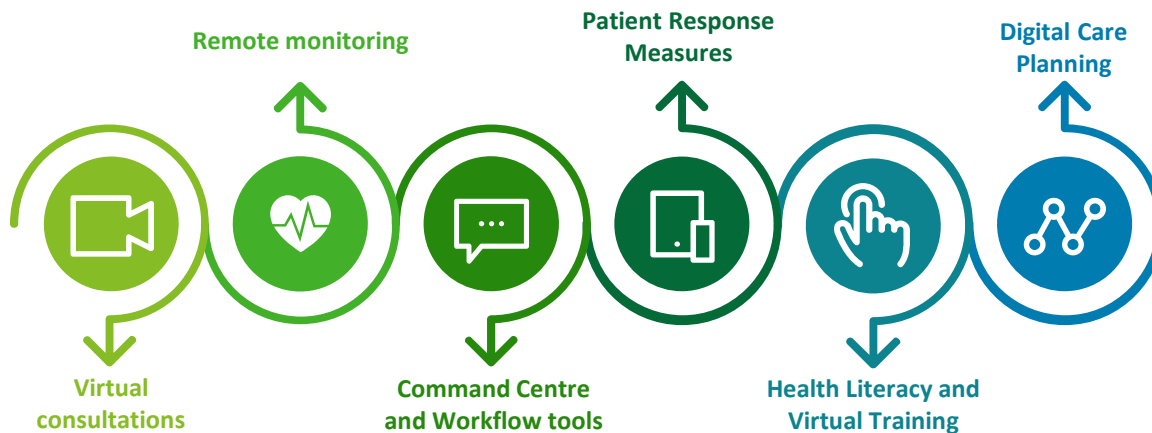
Governments at a local, state, and national level have demonstrated a commitment to investing in active transport alternatives and social and health infrastructure, with the business case and master plan for the new Toowoomba Hospital underway – a prime local example of this (noting project funding is not yet confirmed). These commitments from Government to social infrastructure increase the attractiveness of the area and encourage further investment and economic opportunities. This may be in the form of health precincts (similar to, for example, the Westmead Health Precinct) or through the new business opportunities. Either way, the economic opportunities of this shift are endless.



Technology and innovation.

Virtual healthcare is a key component of the future health industry. It has the capacity to inform, personalise, accelerate and augment prevention and care. This shift to virtual care has been accelerated by COVID-19 with consumer expectations changing around the provision of virtual care.

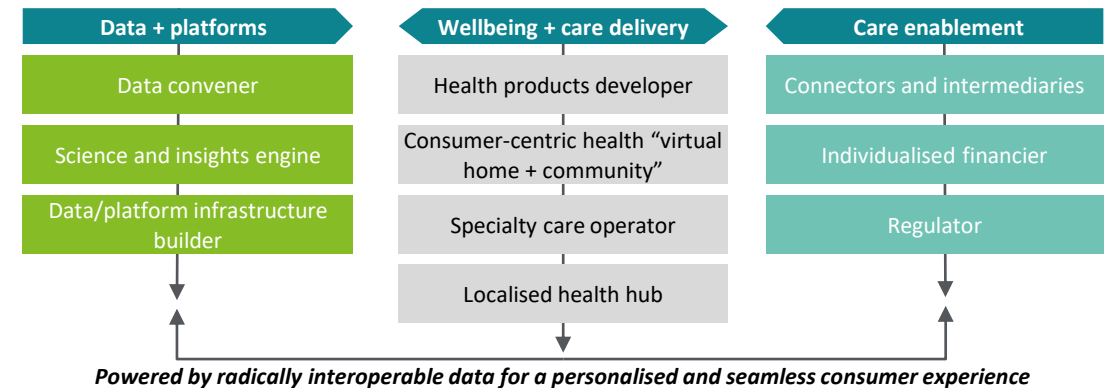
The term virtual health care covers a large array of different technologies and solutions that help stakeholders deliver health services independent of time or location. This enables the development of new or augmented models of care where machines and consumers join clinicians in the care delivery team. This may include the use of wearables for remote monitoring, a hospital without beds, or the use of big data in order to develop predictive analytics (which is linked to the shift to wellbeing and proactive care).



Technology provides unprecedented opportunities to drive economic growth in health care, through being able to provide more services locally (increase self-sufficiency), provide remote care from larger centres (such as Toowoomba), and attract a more permanent workforce to the region.

The *Future of Health* will see traditional providers and firms increasingly challenged by new entrants and challengers – particularly focussed around data and technology. This has already started, with large technology companies (Google, Apple, IBM) investing heavily in health. This creates further opportunity to grow the economy through health care with increasing new business opportunities – such as those new business ‘archetypes’ outlined below.

Ten winning business archetypes in the future of health



Source: Deloitte Future of Health

From an economic policy and commercial perspective, start-ups and start-up ecosystems are the bridge between the current economic growth path, and the creation of new growth opportunities which will drive income and jobs in the future. While decisions about innovation are primarily made at the individual and firm level, when such innovation decisions are combined across industries and markets, this translates into economy wide “innovation and knowledge spill overs”. Location or regions are increasingly playing a significant role in the relationship between innovation ecosystems and economic growth. This is in line with the Queensland Government objectives of creating knowledge based jobs and innovation-led economic growth, achieved through increased collaboration between government, industry, and research organisations.

The power of local innovation.

Since 2015, the Federal Government has spent almost \$1.1 billion on promoting business-based research, development and innovation across all industries. This in combination with the \$130 million spent as part of the Advance Queensland grants demonstrate the commitment to innovation across all levels of government.

Yet whilst innovation in health care will blur traditional boundaries, there is also innovation that will grow the health economy outside of these boundaries. By thinking about not just health care delivery and data, but also the auxiliary services, there are a number of areas where innovation can enable the Toowoomba and Surat Basin to grow the economy through the health sector.



This could include looking at areas such as repurposing hospital waste, virtual care or innovative transport solutions. These areas whilst outside core health services, provide an opportunity to significantly impact business as usual operations for health care providers.

By working with local partners to create innovative solutions for health delivery and/or operations, there is an opportunity to improve the sustainability of health care services in Toowoomba, whilst also promoting economic growth in the region. These opportunities can then also be shared / implemented across other industries where appropriate – and to other regions.

The Toowoomba and Surat Basin region has a number of unique features that enable the success of local innovation. These include the Memorandum of Understanding in place and thriving local innovators. These features enable the benefits of investment into local innovation to be spread across the region leading to significant regional impact.

Importance of the Memorandum of Understanding

In 2017, the three major hospitals as well as the Darling Downs and West Moreton Primary Health Network partnered with the Toowoomba Regional Council (TRC) and TSBE to work on a range of outcomes designed to promote the region as a health and wellness economic leader.

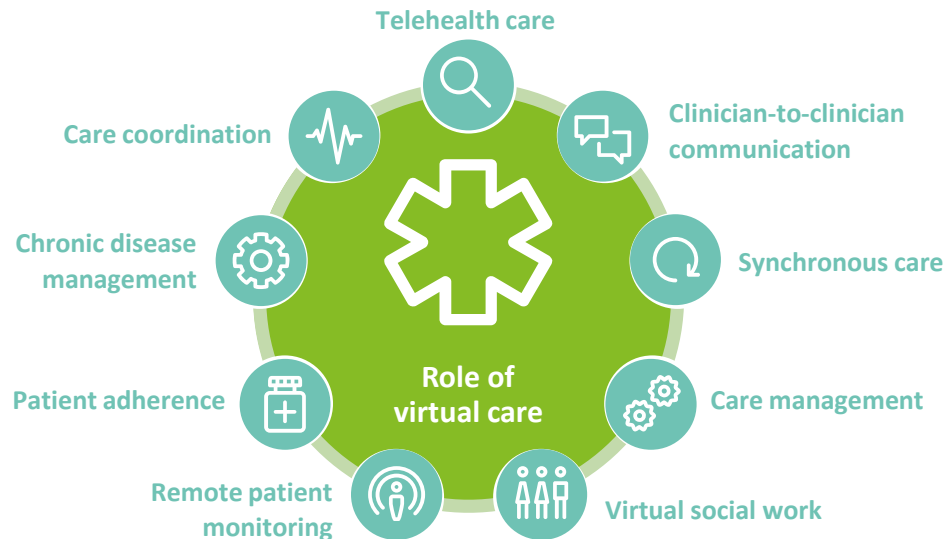
The MOU also enables the parties to work co-operatively in a way that is not seen across other regional areas in Queensland. This includes through education opportunities, employment and patient care. This creates a clear differentiation for the Toowoomba region, with very few (if any) other regional centres benefiting from a formal arrangement such as the MOU to foster collaboration and cooperation on mutually beneficial areas..

The MOU also enables agile communication and networking across a range of opportunities, which results in both patient and economic benefits for the region. The MOU also facilitates the adoption of innovative ways of working across a regional area quickly which creates a competitive advantage for the Toowoomba region.

Opportunities in virtual care.

Virtual care provides unprecedented opportunities to drive economic growth in health care by allowing services to be provided anywhere, including historically underserved rural and remote areas surrounding regional hubs like Toowoomba. Virtual care includes a wide range of technologies and solutions enabling the delivery of health services independent of time or location.

Whilst telehealth saw a large uptake as a result of COVID-19, virtual care expands beyond this and includes a number of technologies and roles as shown in the diagram below.



These different technologies are not about replacing humans in health care, but about augmenting and supplementing providers to improve the delivery of care. It helps to relieve clinicians of administrative or routine tasks affording them more opportunities to practice at the top of their scope of practice.

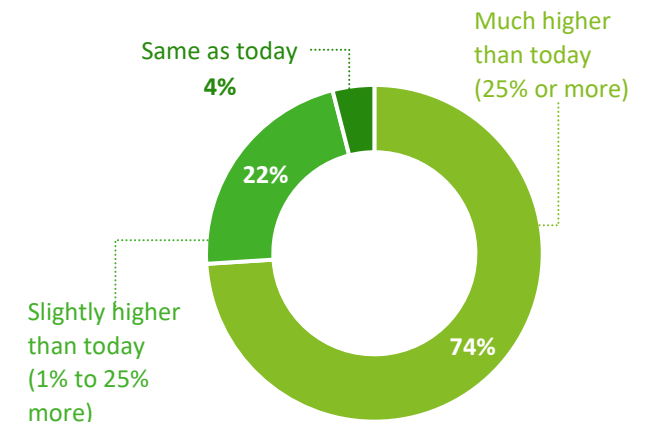
Currently no one in Queensland has a unique, competitive advantage yet in virtual care due to it being a relatively new technology and way of working. This therefore represents an opportunity for the Toowoomba region to take advantage of its various synergies (e.g. such as the MOU between Toowoomba Hospital, St Andrews Toowoomba Hospital, and St Vincent's Private Hospital Toowoomba) in order to develop and create a competitive advantage that will result in economic benefit for the region.

The Toowoomba and Surat Basin region has a unique opportunity to develop this competitive advantage due to the mix of regional and rural populations within the area. Whilst Toowoomba is a large regional town, there are a number of rural and remote communities both within the Darling Downs region and also in the South West corner that utilise the tertiary providers within Toowoomba. Therefore developing a virtual hub and spoke model would build upon current practices whilst also developing skills within the region and providing a competitive advantage that could boost economic growth.

The virtual health market is projected to grow significantly over the next decade, with 74% of executives anticipating that investment in virtual health will increase by 25% or more. This provides a significant opportunity for the Toowoomba and Surat Basin region to grow this industry in order to capitalise on this increased investment.

Whilst becoming market leaders would boost economic investment, it would also lead to increased recruitment with workers wanting to be part of the organisation which would also improve economic outcomes.

By 2030, industry wide investments in virtual health will increase significantly



The future workforce.

There are a number of health workforce opportunities that the Toowoomba and Surat Basin region can capitalise on in the coming years. The digitalisation of health and the shift to proactive rather than reactive medicine opens up a number of opportunities for new types of health workers.

There are also opportunities for the Toowoomba and Surat Basin region to utilise workforce across both the private and public sector. As shown earlier, the region is experiencing growth in population which is resulting in a higher demand on the public and private health system. With the development of the new Toowoomba Hospital, and recent expansions across the private sector there are increasing opportunities to investigate alternative workforce models, joint recruitment and retention campaigns to provide increasingly attractive opportunities to prospective workers, and not ‘compete’ with each other as individual providers across the spectrum.

The National Rural Health Commissioner recently wrote that *“we need to move away from current models that rely on a workforce that is primarily developed for and by market-driven, metropolitan training systems and a dwindling cohort of solo practitioners working in isolation in small towns. We must move to a system of integrated, place-based, regional health networks that train and support a rural and remote workforce – working in collaborative teams across defined geographical areas.”*

There are also significant mutually beneficial opportunities for the Toowoomba region to “grow your own” workforce with existing tertiary educational facilities and programs (e.g. Study Toowoomba, UQ Rural Clinical School, USQ, TAFE, the Queensland Health Office of Rural and Remote Health). There has been a consolidated effort to increase the number of clinicians in regional areas, including through the introduction of the Rural Generalist Pathway model which provides end-to-end training in regional, rural and remote locations. By capitalising on the existing educational facilities and programs, plus attracting those who want a treechange, the Toowoomba region is primed to build a significant knowledge economy and workforce of the future.

With a changing health environment, Deloitte predicts that there will be a number of key drivers of workforce changes in healthcare including:



GENERATIONAL SHIFTS IN THE WORKFORCE

As older generations retire, millennials and younger generations enter the workforce with different expectations, eschewing traditional career paths and requiring more contemporary workplaces (including virtual ones).



OPEN TALENT MODELS

The proliferation of gig, virtual, contract and other new talent models requiring new skill sets, change where work is performed, and requires different employment models.



TECHNOLOGY

Emerging technologies such as artificial intelligence (AI), robotic process automation (RPA), cognitive computing, and virtual reality/augmented reality (AR/VR) can automate and augment tasks performed by people.



CONSUMERISM

Consumers are demanding better service, more convenience, and easier ways to navigate the health care system – these demands can create opportunities for organisations to identify new strategies for what work needs to be done.

These key drivers can already start to be seen in the current landscape, and with the rise of disruptive technology, current workforce structures and systems will dramatically change. There are a number of new archetypes and career options starting to exist within the health workforce that are different to the current status quo.

It has been shown that an investment in the health of populations leads to improved economic outcomes which in turn produces benefits at the local, regional, and national level through what is often called an ‘economic dividend’. Therefore a regional approach to developing and training your own workforce, attraction and retention, and shared workforce and employment models will help the region capitalise on the opportunity to grow and maintain a skilled workforce – it will also result in flow-on benefits for the region and the economy.

Growing a regional workforce.

Grow-your-own workforce strategies are characterised by two important features. They look to local labour markets as a key source of workforce supply, and they encourage organisations to use the skills and talents of their existing workforce more effectively. In addition, these strategies can lead to local organisations becoming the employer of choice due to improved development opportunities which improves staff retention. Grow-your-own workforce strategies also include initiatives that build the skills and talents of local workforce to enable career progression. This enables local succession so that there is a sustainable pipeline of local workers to meet business needs. These types of strategies may take time to implement however can result in improved service delivery and long term flow on health, economic, social and educational benefits for the community.

As previously highlighted, there are a number of significant mutually beneficial opportunities for the Toowoomba region to “grow-your-own” workforce with existing tertiary educational facilities and programs (e.g. Study Toowoomba, UQ Rural Clinical School, USQ, TAFE and the Queensland Health Office of Rural and Remote Health). These existing tertiary facilities will also benefit from the additional support announced by the Federal Government in April 2020. This support includes 3.5% growth in Commonwealth Grant Scheme funding to regional campuses, \$48.4 million in research grants for regional universities to partner with industry to boost research capacity and a \$900 million industry linkage fund that helps universities provide work integrated learning opportunities. This additional support improves the opportunities available within the Toowoomba region for both local students who want to stay, and those who may want to move to Toowoomba for these opportunities.

COVID-19 has also led to an increase of regional high school graduates staying in regional areas rather than migrating to cities such as Brisbane for higher education opportunities due to classes being offered virtually. This has implications for the local health providers since they now have a wider range of local students to undertake placements within the region which can increase recruitment and ameliorate the impacts of ‘brain drain’ from the regions to capital cities.

There are a number of existing programs within the Toowoomba region that are enabling grow-your-own workforce strategies. This includes The Southern Queensland Rural Health (SQRH) program. The program supports nursing, midwifery, allied health students and health professionals to develop a high quality and highly skilled workforce across Southern Queensland. The program was established in 2017 and is a Commonwealth funded collaboration between the following organisations.



SQRH operates from two main training sites, Toowoomba and Charleville. It also services various other sites to provide education and support. By offering clinical placements in regional, rural and remote areas, SQRH is highlighting the various opportunities within these regions which improves recruitment, and is a way of providing regional leadership in developing innovative training solutions to address workforce recruitment retention.

This program provides an example of one of the mutually beneficial opportunities to the Toowoomba region that utilises existing tertiary educational facilities in ways that both upskill the local workforce whilst also attracting additional health workers to the Toowoomba region. Considering the number of these facilities and the additional support, the Toowoomba region should consider what other opportunities are available in order to implement a grow-your-own workforce strategy.

Connectivity within the region.

In many systems, the “whole is often greater than the sum of its parts” – this can be particularly true for an integrated health ecosystem. Health ecosystems can include public hospitals, private hospitals, primary health care, and allied health clinics.

There are a number of forces at play that are causing sustainability issues for all health providers (public and private). These include an ageing and increasingly sick population, a declining rate of patients with private health insurance and the rising cost of care. Given that the health care and social assistance industry is the largest employing industry within the Toowoomba region (and the second largest contributor to GRP) ensuring ongoing sustainability is a priority for the region both for health reasons and financially.

The interdependence of the public and private health system was shown during the peak of COVID-19 with private hospitals treating more public patients in order to ensure that public hospitals had the capacity to treat COVID-19 patients. This showed the importance of this relationship and how this partnership approach can relieve pressure on the public health system.

Increasingly, the concept of an ‘ecosystem’ is coming to the fore in healthcare – in other words, the siloed approach, be it by provider / sector / part of the care continuum, is no longer delivering the outcomes consumers and the workforce demand.



In rural and remote regions in particular, the importance of a well-functioning eco-system, where providers across the spectrum can partner effectively to achieve mutually beneficial outcomes is critical to the sustainability of the sector. This helps achieve economies of scale, attract and retain a workforce, build local capability, and attract investment.

Importantly, the ecosystem shouldn’t just be limited to health and social care providers. In the Toowoomba and Surat Basin region, there are significant private employers with workforces who require health and wellbeing services (in particular, the resources sector), local governments play a significant role in wellbeing infrastructure and local service delivery in many rural communities, and increasingly health is intersecting with other sectors (such as retail). Expanding the thinking around partnerships and ecosystems outside of the traditional health and social care system will also identify more and exciting opportunities to grow the local economy through health care.

The Service and Learning Consortia Program: A co-investment model to improve access to allied health services in rural Australia

As an example of the potential for partnerships and ecosystems, the National Rural Health Commissioner in June 2020 issued a report on the “Improvement of Access, Quality and Distribution of Allied Health Services in Regional, Rural and Remote Australia”. A recommendation of the report is to develop Service and Learning Consortia to improve access to allied health services. These would be through a series of demonstration trial sites.

Service and Learning Consortia will integrate rural and remote ‘grow your own’ health training systems with networked rural and remote health service systems. *Service and Learning Consortia* will consist of local private, public and not-for-profit service providers, training providers, and community representatives collaborating across multi-town and multi-sector networks, according to community need. Once established, *Service and Learning Consortia* will improve recruitment and retention of allied health professionals by making rural and remote allied health practice and training more attractive and better supported.

Infrastructure and precincts.

The development of the new Toowoomba Hospital at the Baillie Henderson Hospital campus will bring with it significant economic benefits – through the development of new services, expansion in capacity (which bring with it a requirement for additional workforce), and new opportunities for other health and wellbeing services. This is in addition to the economic benefits and job creation through the planning and construction phase.

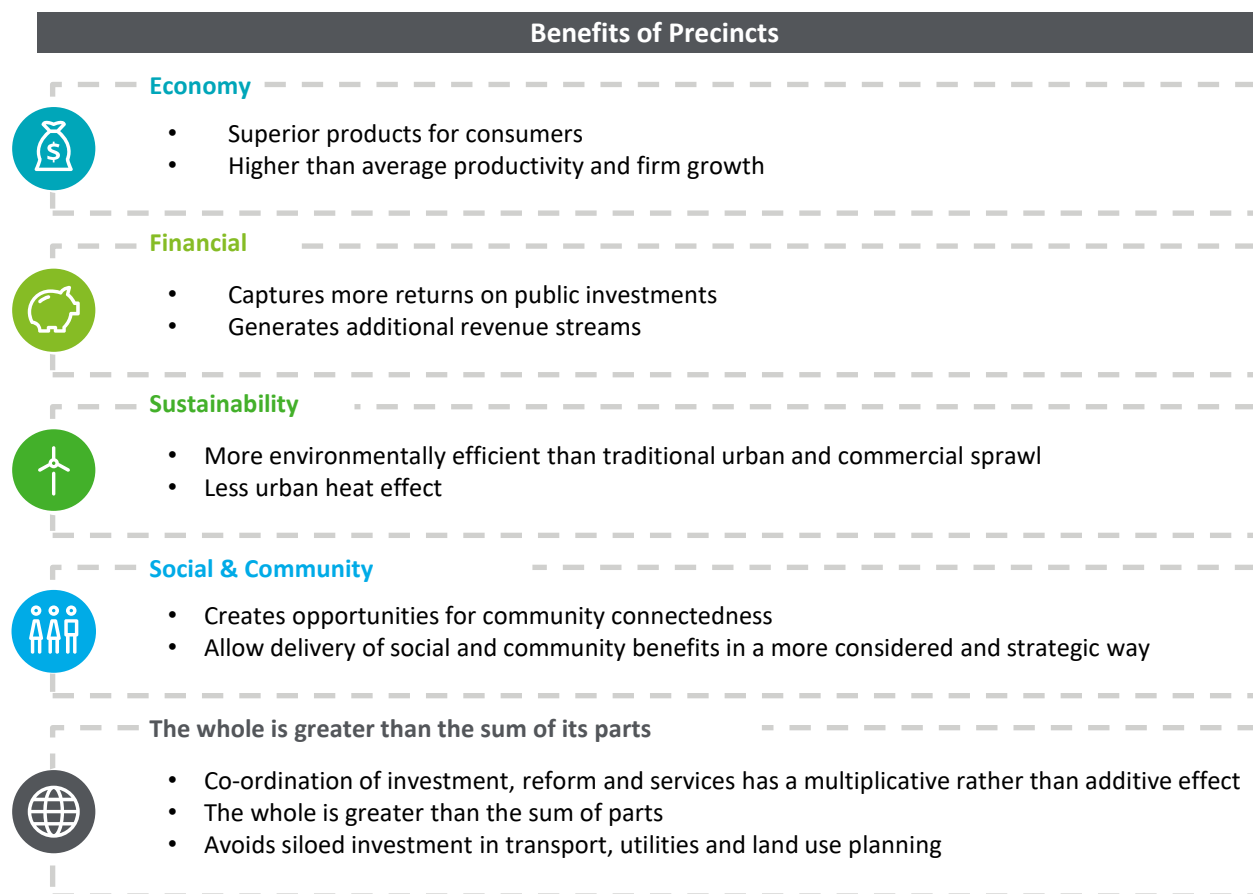
It also provides a significant opportunity to activate a large area and take a precinct approach – to maximise the benefits of the investment to the community, government, and to also enable some of the other opportunities explored in this paper (such as partnerships).

By taking a precinct approach to the redevelopment rather than it being isolated, a number of benefits can be achieved.

Precinct approaches enable a myriad of benefits, most importantly, overcoming siloes to deliver more co-ordinated investment with higher returns. As the outcomes are clearly defined upfront, there are more opportunities for innovation in how outcomes are delivered, and de-risking of delivery and funding.

The co-location (or close proximity) of partners strengthens relationships due to the proximity of people allowing informal knowledge sharing to occur. There are a number of precincts both in Queensland, Australia and internationally that demonstrate the benefits of co-locating health resources in order to provide training opportunity, improve health outcomes and foster innovation. Some of the other benefits that result from precincts are shown on the right.

The Toowoomba Hospital redevelopment provides an opportunity to consider the merits of a broader health and wellbeing precinct, to create a more connected health and social care system, improve workforce opportunities and enable new health, education, research, and commercial opportunities.



Source: Deloitte Taking a Precinct Approach to Infrastructure and Development



Next steps.

Next steps.

While this Discussion Paper is not exhaustive in the full challenges and opportunities facing the health and social care system, it highlights a number of key opportunities relevant to the Toowoomba and Surat Basin region for consideration as to how health can contribute to increased economic growth.

There are a number of challenges in health care delivery in rural and regional areas, but equally there are significant opportunities. The National Rural Health Commissioner noted in his final report in June 2020, that his time in the role has *“demonstrated that the solutions to many of the challenges that rural communities face lie within rural communities themselves.”*

The purpose of this paper has been purely to raise the issues – to spark conversation, discussion and thinking outside the traditional bounds as to what is possible to achieve sustainable growth, and ultimately improve the health outcomes for the Toowoomba and Surat Basin community.

TSBE intends to work with health partners to develop and implement a health care roadmap for the region with the ultimate aim to increase economic growth through health care, achieve a sustainable health system, and improve health outcomes.



Future of health

How should the Toowoomba and Surat Basin Enterprise health partners best position the region to capitalise on the changing health landscape?



The regions agenda

How should the Toowoomba and Surat Basin Enterprise health partners attract and retain people in the region particularly in the health industry?



The shift to wellness

What commercial opportunities are available due to this shift to wellness that will grow the Toowoomba regions economy?



Technology and innovation

How should the Toowoomba and Surat Basin Enterprise health partners capitalise on technology and innovation within the region?



Connectivity within the region

What mechanism should be put in place in the Toowoomba region to ensure better connectivity?



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