



Government of **Western Australia**
East Metropolitan Health Service



Shire of
Serpentine
Jarrahdale



Byford Health Hub

Collaborative Design Introduction Pack

Healthy people, amazing care. Koorda moort, moorditj kwabadak

We acknowledge the traditional owners of the land we are talking about in this document, the Wadjuk people of the Noongar nation, and their elders – past, present and emerging.

Note: this document is intended for a wide audience, including people with lived experience of health and mental health challenges, people with disabilities, and people who might never have worked with government or health services before.

This 'Introduction Pack' provides information on the Byford Health Hub Program

The East Metropolitan Health Service (EMHS – a part of the WA Department of Health) have partnered with the Shire of Serpentine Jarrahdale to design and deliver a new 'health hub' in Byford (more on what that means in the next few pages).

EMHS have engaged Nous Group to co-ordinate the collaborative process through which the hub will be designed. The design process will run over two months from late January 2022 and will involve participants from a wide range of organisations, professional and personal backgrounds.

The design process will encompass:


- The **concept of the Byford Health Hub**; and
- How **the services in the Byford Health Hub will work together** (the operating model).

Alongside this, Nous will do research and analysis to support the Hub development, taking ideas and information from the people who participate in the design process. This will include:

- Calculating the **costs of building and running the Hub**
- Assessing the **benefits to the community**
- Testing options for **how the Hub will be funded** once it is built (the options for procurement)

This Starter Pack provides a range of background information on key ideas, input to date, and research findings which will inform the Hub development process

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A 'glossary of terms' is included at the end of this document, with simple definitions for terms that are used.

'Health hubs' and 'integrated care' are about making better connections – between people and services, and between services themselves



HEALTH HUBS ARE ABOUT HAVING SERVICES IN ONE PLACE

A health hub is a place where **multiple different health, social, and community services** are located, usually in the **same building**. For example, a health hub might include a doctor's surgery, psychologist, radiology clinic, and physiotherapist under one roof.

Hubs are **different from hospitals**, which are usually much larger, and focus almost exclusively on health problems (especially when they are very serious). However, Hubs may often partner with hospitals, and even deliver some of the hospital's services in a more local context. Hubs are also **different from a 'health precinct'** which may host different services that are nearby but in separate buildings, rather than all together in one facility. Hubs are a way of implementing a modern approach to health care called '**place-based systems of care**' which creates convenient places in the community where people can go to receive all kinds of care, in a convenient and connected way.

In designing the Byford Health Hub, we will need to determine **the right mix of social and health services** based on the needs of the community – and consider how they will work based on a range of factors, including the money available to run them, the organisations that might deliver them, and our model of integrated care.

Health hubs and integrated care are a natural fit, because they both focus on bringing services and users closer together and can increase each other's potential benefits.

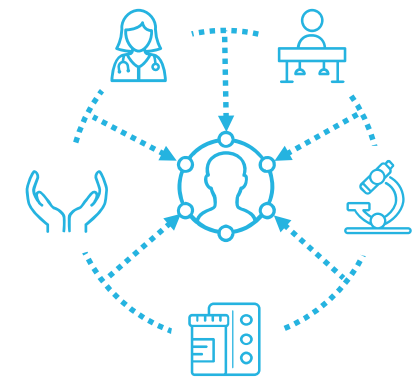
The Byford Health Hub design process will use these concepts, as we figure out how they might work best in Byford.

INTEGRATED CARE IS ABOUT SERVICES WORKING BETTER TOGETHER

In the context of health hubs, 'integrated care' refers to the idea that services are not just located in the same building, but also **connected in the way they run** – so they **feel more like one 'experience'** to someone who comes to use them.

Integrated care usually focuses on trying to make people who use them feel **better cared for and empowered**, and making the services themselves more efficient, to **reduce the burden on health systems**. Evidence indicates that by bringing services closer together, and focusing on people's overall needs, integrated care can simultaneously improve the experience of both users and service providers. Connections between care services can also potentially expand **beyond traditional health care** to include "**social prescribing**", where patients are referred to non-medical services that support health and wellbeing (e.g. joining a horse-riding club; attending a men's shed; learning to cook etc).

Other terms are commonly used to refer to broadly similar concepts, including 'coordinated care, patient-centred collaborative care, or disease management'.



SOURCES

Dorling, et al. 'The evidence for integrated care', McKinsey & Company, 2015.
Ovretveit, 'Does Clinical Coordination Improve Quality and Save Money?', Health Foundation, 2011.
Royal Commission into Aged Care Quality and Safety, 'Models of Integrated Care, Health and Housing', 2020.
The King's Fund, 'Place-based systems of care – A way forward for the NHS in England', 2015.

The King's Fund, 'What is social prescribing?', 2017.
Trankle, et al. 'The Western Sydney Integrated Care Program Qualitative Evaluation', Western Sydney University, 2017.
World Health Organisation, 'Global strategy on people-centred and integrated health services', 2015.

Combining 'health hubs' with integrated care has many potential benefits, across a range of areas

By bringing together different services in one location, and integrating those services together to make a more streamlined experience, it is possible to create mutually beneficial scenarios across multiple levels of the community, and the health and social service delivery environment.



INDIVIDUALS & FAMILIES

- Better quality care, with better results – and happier people as a result
- Care services that are easier to access, and more likely to be available when needed
- Improved health and wellness literacy and understanding, independence in decision making, and ability to self-manage.
- Seamless experience of continuity of care and cross-referral across service providers



COMMUNITIES

- More people in the community willing and able to seek health care
- More healthy people in the community as a result
- Better influence and relationships between health care providers
- Enhanced links between health and social services
- More community members who feel included, and participating in shared activities



HEALTH AND SOCIAL SERVICE PROFESSIONALS

- Improved job satisfaction and workloads
- Broadened education and training opportunities
- Expanded professional network
- Increased career progression options through skill enhancement and expansion of roles



HEALTH AND SOCIAL SERVICE SYSTEMS

- More efficient allocation of resources, reducing total system strain and costs
- Improved equity and care access
- Reduced medical errors, improved diagnostic accuracy, and increased patient safety
- Increased service uptake and participation
- Reduced duplication and inappropriate use of services

SOURCES

Dorling, et al. 'The evidence for integrated care', McKinsey & Company, 2015.

Trankle, et al. 'The Western Sydney Integrated Care Program Qualitative Evaluation', Western Sydney University, 2017.

Nous analysis

Byford Health Hub is an opportunity to deliver services differently, to meet the needs of a growing community

The idea for the Byford Health Hub was first developed as part of **local thinking about how to make Byford a more attractive and vibrant place** while helping people make healthier choices, meeting health and social needs of the community.

The Shire of Serpentine Jarrahdale developed early concepts and made the case for a health hub, and the State Government agreed to fund it – with East Metropolitan Health Service coordinating its planning and delivery.

The planned Hub is set up well to be a success, with a number of things in its favour:

- **Funding for the building is already committed**
\$30.6 million was announced in 2021 as a key election commitment of the McGowan Government to build the Byford Health Hub.
- **The Hub is one part of bigger plans for Byford**
The area earmarked for the Hub is a small part of a broader development plan for the Byford town centre, including a new Metronet train station, shops, a splash park and other community services. Having so many things together in one place is likely to enhance the value of all of them to the community and promote social connection.
- **Design of the Hub will be a process of genuine collaboration**
Not all government building projects are able to be flexible in their design, but the Hub design process is. A wide range of people from the community, government and other services will have a say in what the Hub will be.
- **The Hub aims to do things differently**
Building on the range of advantages at hand, the design process is deliberately trying to think differently about how services are delivered – not just where (the Hub), but also how (an ‘integrated care’ approach to how the Hub works – outlined on the next page).
- **The goals of the Hub align with the goals of the whole health system**
In 2019, the WA Government published a defining report outlining the future direction of the WA health system – the **Sustainable Health Review (SHR)**. It specifically called for **more focus on services before people end up in hospital** and on connecting the range of existing services to create a **better-connected experience for patients**.



There are many organisations and people involved in the Byford Health Hub program – for an overview, see the diagram included at the end of this document

The Hub has potential to generate lasting impact for a growing community

Driven by community needs

the Hub should be informed by and respond to community needs (health, social and beyond) – both initially, and continuously once it is running

- The community will play an important role in ensuring that the services and design of the Hub are suitable to local needs.
- The community should have ongoing input into the hub over the course of its operation, to ensure it remains aligned with community needs.
- The community needs to feel a sense of ownership of the Hub, and different parts of the Serpentine Jarrahdale community may need to be consulted and included in different ways.

A community space

the Hub should provide a welcoming public space in a safe and supportive way to foster connection throughout all areas of the diverse community

- The Hub will be situated in Byford, but many of its users are likely to come from across the whole Serpentine Jarrahdale Shire.
- Byford has seen rapid growth in recent years, but does not yet have a true community centre – the Hub is an early part of the Shire's plans to create one.
- Many people feel intimidated by big, standalone health service facilities, and might be more likely to get care at a place which feels welcoming and part of an area they would go to anyway.
- The Byford community has a significant and growing multicultural population, and the Hub has an opportunity to facilitate cohesion between different areas of the community.

Here for the long term

the Hub should provide health and social services that are realistic to deliver, and can be maintained for the long-term benefit of the community

- The funding allocated so far is for the physical building the Hub will occupy – ongoing funding for its services, and co-ordination between them, is yet to be decided. This will be an important consideration in the design process.
- There is an opportunity to make a variety of services more efficient and sustainable, by standardising how patients are referred, and sharing administrative tasks.
- It will be important to define the scope of the hub carefully, because it will not be feasible for it to try to deliver all things to all people.
- The community around Byford is experiencing rapid growth, and what meets the needs of the community now may not in a few years' time.

The Hub is an opportunity to tackle long-standing service delivery challenges

Doing things differently

...the Hub should aim to try new approaches and do things differently, to develop new and improved ways of delivering services

- Already-committed funding for the building and strong buy-in from a range of organisations and people create an opportunity to try new ideas from a position of strength.
- The Hub is an opportunity to deliver on Sustainable Health Review recommendations to focus more on pre-hospital care, connections between services, and better patient experience.
- Innovation and improved practice is a potential attraction for staff who will work at the hub, if it can be implemented and clearly communicated.
- Measurement and evaluation will be critical, to be able to tell the story of the Hub's successes – as well as capture and improve where it is not working as intended.

'Not just health'

the Hub should encompass a broader range of services and benefits to promote healthy and connected holistic communities

- People who use services find it frustrating when they are not well connected together, or in convenient locations at convenient times.
- Few social services are based in Byford, and what service are delivered locally usually attend people's homes.
- The Hub could help diversify the local economy by creating local jobs, and attracting more skilled workers.

Getting ahead of problems

the Hub should promote healthy communities and wellness through proactive and preventative approaches

- Health promotion and maintenance of health and wellness are important considerations for a health community, and can avoid costly care further down the line.
- The Shire of Serpentine Jarrahdale has a deliberate focus on proactive planning and prevention, to avoid some of the social and health problems that fast-growing communities have struggled with in other outer metropolitan areas.
- Connection to the immediate precinct creates opportunities to encourage healthy behaviours through partnerships with adjacent businesses and Shire initiatives (e.g. community gardens, supermarkets).

The Hub design process will be informed by the health and social needs of the community

Whatever the final design of the Byford Health Hub ends up being, it needs to reflect the current and future health and social needs of the community that will use it.

Alongside conversations and interviews, Nous has conducted a 'health and social needs analysis' of the areas surrounding Byford, extending throughout the Shire of Serpentine Jarrahdale (and other areas).

The analysis was guided by a concept called 'the social determinants of health' – the idea that people's health is influenced by a wide range of things, well beyond more traditional health factors like diet, disease or injury. This includes location, explicitly social factors like housing and income, population-level trends and more.

The table on the right gives a brief explanation of the main categories of health and social factors we considered, and why they are useful.

The following pages contain a selection of insights from the information analysed, and specific considerations that may be relevant to the Hub design process as a result.

FACTORS INFLUENCING HEALTH AND SOCIAL NEEDS

EPIDEMIOLOGY	
What?	The study of health characteristics across whole populations – as opposed to individuals or small groups. e.g. statistics on how people die (general morbidity).
Why?	Provides insight into large-scale trends, to inform the kinds of health and social services that may be needed, and in what volume.
SOCIAL AND ECONOMIC FACTORS	
What?	Social and economic influences cover a wide variety of non-health factors which have an effect on people's lives, e.g. housing, education, diet, income.
Why?	This information can indicate the habit and lifestyle factors that influence community needs, and potential service mix required.
POPULATION DEMOGRAPHICS	
What?	Broad community profile statistics such as population size and growth, age, cultural and ethnic diversity, and activity and exercise levels.
Why?	This information can help us understand who lives where, and how likely people might be to get certain illnesses, and what issues might occur in the future.
PHYSICAL ENVIRONMENT	
What?	Physical environmental factors include the level, type and cost of housing, public and community spaces, transport and commute stresses.
Why?	Provides insight into large-scale trends, to inform the kinds of health and social services that may be needed, and in what volume.
SERVICE PROVISION	
What?	Service provision refers to the level and type of services available including healthcare, social services, schools and other education.
Why?	This information can indicate whether there are gaps in the services available, and indicate potential challenges to providing particular services.

Mental health is an emerging challenge and a community priority in the Shire of Serpentine Jarrahdale

Insights

Life expectancy

- The Shire of Serpentine Jarrahdale has an average life expectancy at birth equal to the state and national averages of 82.8 years.

Mental health

- The incidence of adverse mental health conditions* within the Shire is above state averages, with **25.8% of residents being formally diagnosed with a mental health problem** in the past 12 months, compared with the state average of 14.5%.
- Stress and mental health has also been identified by residents as the most major issue that the community faces.
- Certain cohorts have markedly bad mental health indicators, such as male youth and adolescents, with more than **double the suicide rate of the metropolitan population**.

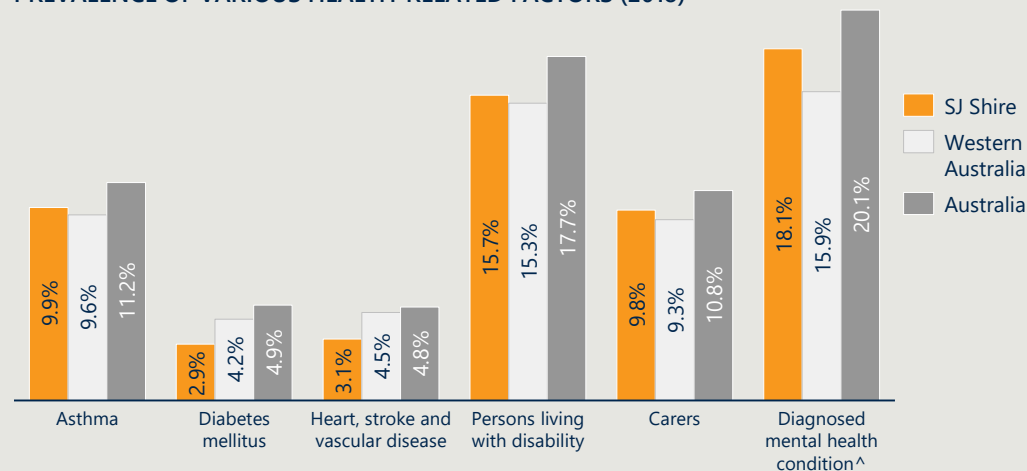
Chronic conditions and disability

- The Shire has a slightly lower prevalence of disease and chronic illness, with the incidences of conditions such as asthma, diabetes, heart, stroke and vascular disease and multiple chronic conditions all falling below national averages.
- The proportion of individuals identifying as living with disability or as carers is roughly in line with state and national levels at 15.7% and 9.8% respectively

Considerations for the Byford Health Hub

- Life expectancy and chronic disease prevalence are in line with the general population and do not point to specific areas of need, but there may be discrete population groups whose needs are higher.
- Slightly lower rates of diabetes, stroke and heart disease likely due to the area's growth in young families, but there are significant populations of older long-term residents who may benefit from more local care options for chronic conditions.
- The increased rates of mental health conditions and the concern of residents indicates a higher level of underlying social, emotional, and financial stress within the community.
- The Hub may have a role to play in improving the mental health of the population at all age levels.

PREVALENCE OF VARIOUS HEALTH-RELATED FACTORS (2018)



*2016 data for rates of mental health conditions was used due to statistical gaps in 2019 data.

[^]2016 data used for Serpentine Jarrahdale and Western Australia

Sources:

Australian Bureau of Statistics, 'National Health Survey: First results, 2017-18' 2020.

Australian Bureau of Statistics, 'National Health Survey: Small Area Estimates 2017-18', 2020.

Australian Bureau of Statistics, 'Survey of Disability, Ageing and Carers, 2018', 2020.

Department of Health, 'Health and Wellbeing Surveillance System – Serpentine Jarrahdale 2010-16', 2016.

Department of Health, South Metropolitan Population Health Unit, 'Shire of Serpentine Jarrahdale Health and Wellbeing Profile', 2016.

Roden, 'Life expectancy in Australia's Commonwealth Electoral Divisions, 2016-2018', Parliament of Australia, 2020.

Shire of Serpentine Jarrahdale, 'Health and Wellbeing Strategy, 2020-2024', 2021.

The Serpentine Jarrahdale community is composed largely of young families in blue collar roles, and home ownership is higher than average

Insights

Education

- University education rates within the Shire are approximately 45-50% lower than state and national averages, while Certificate-level qualifications are 45-55% higher.
- Approximately 44% of residents listed their highest level of formal education as year 12 or lower, slightly higher than state and national levels (at 40% and 41% respectively).

Employment level and type

- Employment rates are in line with state and national averages, but there is deviation in employment type, with **physically demanding blue collar roles** such as trades, machinery operation and physical labour **comprising 43.3% of the workforce**, compared with 33.9% in WA and 29.8% nationally.

Income and living expenses

- Over **62% of homes within the Shire are owned with a mortgage**, exceeding state and national of 39.7% and 34.5% respectively.
- Mortgage repayment and rental expenses in the Shire represent between 20% and 27% of total household income, marginally below the comparable average rates across WA and Australia of between 22% and 28%.

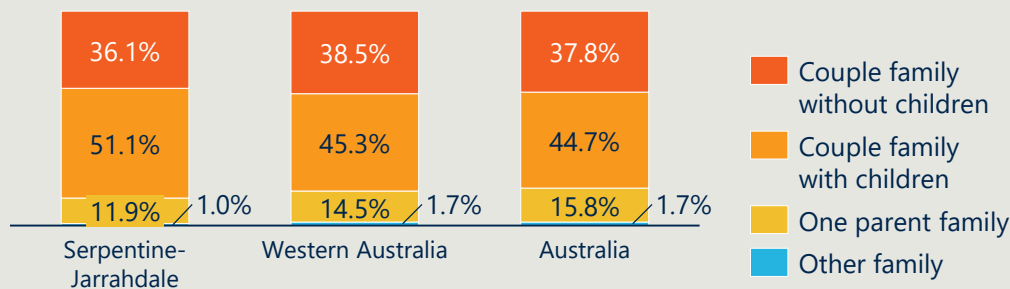
Family structure

- 51% of families in the Shire are a couples with children. 36.1% are couples without children.

Relative disadvantage

- The SEIFA 'Index for Advantage and Disadvantage'^{*} rates Serpentine Jarrahdale in the **82nd percentile** – more disadvantaged than 18% of local government areas (LGAs) in WA. This compares with Armadale, which rates in the 58th percentile – more disadvantaged than 42% of LGAs.

HOUSEHOLD STRUCTURES (2016)



Considerations for the Byford Health Hub

- There is a growing amount of evidence that higher educational attainment is linked to high health literacy and healthier behaviours. There may be a role for the Hub in promoting health literacy and healthier lifestyles.
- A higher proportion of physically demanding roles may indicate greater need for occupational therapy and physiotherapy services to address physical injury.
- The substantially higher rate of mortgaged homes may result in a higher proportion of residents exposed to financial stress if interest rates rise in the future, from current historic lows.
- There is already greater demand for youth, adolescent, and young family services in the Shire relative to the state and national averages. This is likely to rise in the future as the children of young families grow up in the area.
- The Shire's SEIFA score indicates a relatively high level of advantage – the marked disparity with nearby Armadale suggests socio-economic challenges may not be evenly distributed across the Shire. Byford, which is closer to Armadale than most of the Shire, could potentially have higher levels of disadvantage than the overall figure suggests.

^{*}The Socio-Economic Indexes for Australia (SEIFA) Index for Advantage and Disadvantage is maintained by the Australian Bureau of Statistics and measures a range of indicators to examine the relative socio-economic advantage or disadvantage of an area. These include unemployment, occupation type, income, education, internet access, and dwelling size.

Sources:

- Australian Bureau of Statistics, 'Census of Population and Housing: Serpentine Jarrahdale General Community Profile', 2016.
- Australian Bureau of Statistics, 'The Socio-Economic Indexes for Australia, 2016', 2016.
- Australian Government Department of Education, 'Benefits of Educational Attainment', 2019.

The population surrounding Byford is growing extremely fast, posing a future strain on existing health and social services.

Insights

Population

- The Shire has a current population of just under 36,500 and is the **fastest growing local government area** in Australia, with an expected population growth of 88% to over 68,000 by 2036. This rate is over triple the expected state average of 25% growth.

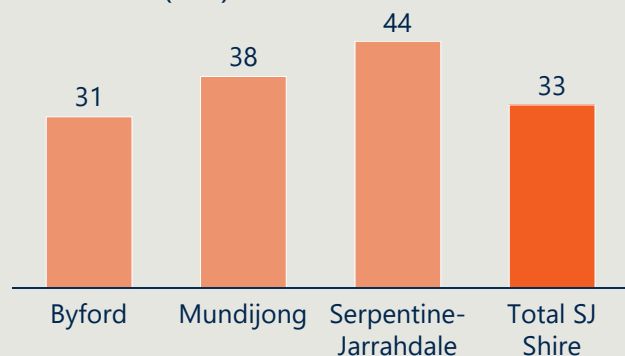
Age

- The Shire has a relatively young, with a median age of 32, relative to the state and national ages of 36 and 38 respectively. However, the age profile varies across the Shire, with the Mundijong Serpentine, and Jarrahdale regions having older median ages of 38 and 44 respectively.
- Although the proportion of residents aged between 30 and 59 is in line with state and national levels, there are proportionately **fewer older residents**, with only 13.3% of the population aged over 60, compared with 19.3% and 21.2% at state and national levels.
- This is paired with a higher youth population, with 45% of residents aged under 30, below the state and national levels of 39 and 38% respectively.

Country of origin and ethnicity

- The Shire has a slightly higher rate of Australian-born residents at 68%, compared with 60% in the rest of WA and 66% across Australia.
- Within families, 50% of residents identified as having at least one parent born overseas, compared with 55% in the rest of WA and 45% across Australia.
- The Aboriginal and/or Torres Strait Islander population represents about 2% of residents and is approximately 50% lower than state and national levels.

MEDIAN AGE (2016)



Considerations for the Byford Health Hub

- The demand for social and health services can be expected to grow approximately in line with population, indicating that the demand for services within the Shire may approach twice the current levels by 2036.
- This demand growth is likely to add additional strains to existing health infrastructure and highlights the role that the Byford Health Hub may play in meeting this service demand.
- A relatively younger population indicates a lower total demand for older adult services and presents an opportunity for the Byford Health Hub to be proactively involved in preventative and pre-emptive health strategies targeted at promoting wellness, rather than treating illness.
- However, the pipeline of future older residents, currently aged between 30 and 59, is in line with average benchmarks, so older resident care needs are expected to return to state and national levels over the next 20 years.
- Variation in the age profiles of different communities across the Shire is expected to lead to different service demands that need to be taken into consideration in the Hub's design.
- Although there is likely to be lower demand for services tailored to Aboriginal people, the Shire's proportion of overseas-born residents is similar to broader benchmarks. This may present an opportunity for the Hub to promote community engagement and inclusion by different cultural demographics.

Sources:

Australian Bureau of Statistics, 'Census of Population and Housing: Serpentine Jarrahdale General Community Profile', 2016.

Australian Bureau of Statistics, 'Regional population by age and sex', 2020. Profile ID, 'Shire of Serpentine Jarrahdale Community Profile'.

Houses in Serpentine Jarrahdale are relatively affordable, but the large commutes faced by most residents limit participation in local activities and opportunities for social connection.

Insights

Housing

- Most of the Shire's population live in traditional dwellings, with over 98% reporting their residence as separate houses and **fewer than 1% living in apartments or terrace housing**.
- Homelessness is comparatively low in the Shire, with only 40 estimated homeless people in 2016. This is markedly lower than other outer metro ~35% lower than the Shire of Mundaring, and 90% lower than the City of Wanneroo.

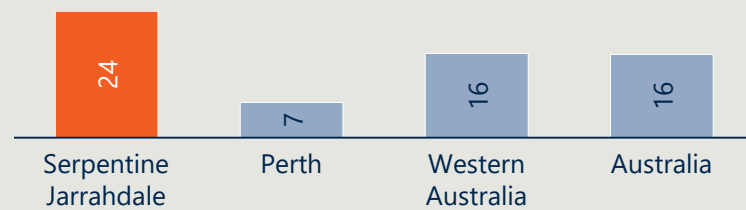
Transport

- Shire residents are heavy commuters, with only 19.3% of the population both living and working within the Shire, and **74% reporting that they travel outside of the area for work**. This is higher than other local government areas such as the City of Perth and the Shire of Mundaring, which report outside commute rates of 45.9% and 68.2% respectively.
- The most common form of travel is as the sole occupant of a car, with driver residents accounting for 64% of total travel methods, and only 4.6% travelling as passengers. The use of public transport is low, with only 10% of residents commuting via train or bus systems.
- Commutes are also longer than state and national averages, with an average distance traveled of over 24km, compared with 16km across the rest of the state and Australia.

Food environment and activity

- Rates of excess body mass are high, but in line with state averages, with **69% of residents overweight or obese**, compared with the state average of 68.6%. This is paired with levels of physical activity, with 37.4% of residents completing fewer than 150 minutes of physical activity per week, compared with 38.4% across WA.
- Heavy alcohol consumption is more common, with 33.4% of residents reporting that they drink at high risk levels for long-term harm* compared with the state average of 26.5%. Smoking is also high^, with 13.7% of resident's smokers, compared with 13.1% across WA.
- Research by the East Metropolitan Health Service has revealed that access to and **availability of healthy food varies between communities within the Shire** as measured by Food Stress Index⁺ scores. While food stress is low within the Darling Downs, Oakford, Oldbury, Cardup, Mardella, and Serpentine areas, it is relatively high in Byford, Mundijong, and Keysbrook. The dietary risk of food outlets is also high, with 80% rated as very high or high risk for dietary health.

AVERAGE COMMUTING DISTANCE (2016) (km)



Considerations for the Byford Health Hub

- With a low incidence of homelessness, the community need for housing support and homelessness services is likely to be low.
- High commuting rates indicate a population accustomed to travel and the use of services outside of the Shire. This may reduce the level of community engagement as residents seek services and amenities from outside their local area.
- A geographically dispersed population accustomed to commuting may mean a high reliance on cars when accessing services.
- High commuter flow suggests the future Byford train station is likely to draw significant volumes of people to the immediate vicinity of the Hub and presents an opportunity for the Hub to stimulate more local employment.
- Poor dietary and lifestyle choices, and high rates of excess weight may indicate a food security risk within the Shire, and present an opportunity for the Hub to improve community health education and literacy to empower healthier community choices.
- Different Food Stress Index scores indicate varying food environments across the Shire and highlight that residents from some regions may face more significant financial stresses in obtaining food that may act as barriers to making healthy choices.

*Defined by the WA Department of Health as more than 2 standard drinks on any one day.

^ 2016 data for rates of smoking was used due to statistical gaps in 2019 data.

+ The Food Stress Index incorporates 13 variables including household demographics, household income and food affordability to show geographic areas where households are vulnerable to food insecurity as a result of inadequate income, such as spending >25% of disposable income on food.

Sources:

Australian Bureau of Statistics, 'Census of Population and Housing: Estimating homelessness', 2016.

Australian Bureau of Statistics, 'Census of Population and Housing: Serpentine Jarrahdale General Community Profile', 2016.

Department of Health, 'Health and Wellbeing Surveillance System – Serpentine Jarrahdale 2010-16', 2016.

Department of Health, 'Health and Wellbeing Surveillance System – Serpentine Jarrahdale 2015-2019', 2021.

East Metropolitan Health Service analysis, 2021.

Landrigan, et al. 'Protocol for the Development of a Food Stress Index to Identify Households Most at Risk of Food Insecurity in Western Australia', 2019.

Profile ID, 'Shire of Serpentine Jarrahdale Community Profile'.

Serpentine Jarrahdale residents have limited local access to a range of health and social services

Insights

Primary health care

- The Serpentine Jarrahdale region has a relatively low rate of per capita health and social service provision, with 20 health and social service providers servicing the population at a rate of **0.59 providers per 1,000 residents**. This figure is 63% below the state average of 1.62 providers per 1,000 residents. Despite this, **service usage is high**, with 92.2% of residents attending a primary health care service within the past 12 months, above the state average of 88.7%.
- Existing services are heavily health-orientated** and the Shire has a particular lack of specialist mental health, alcohol and other drug and social support services.
- These **services are concentrated towards the north of the region**, with the majority being located in and around Byford. This results in residents from the areas surrounding Serpentine, Mundijong and Jarrahdale in need of treatment being forced to travel north to Byford or Armadale, or south to the Peel region.

Secondary/tertiary health care

- The nearest hospital is Armadale, approximately 15 mins drive from Byford.
- Total urgent care admissions at Armadale Hospital increased by ~1,500 from 23,017/year in 2017-18 to ~24,567 in 2018-19, compared with a drop of ~800 at St John of God Midland over the same time period*.

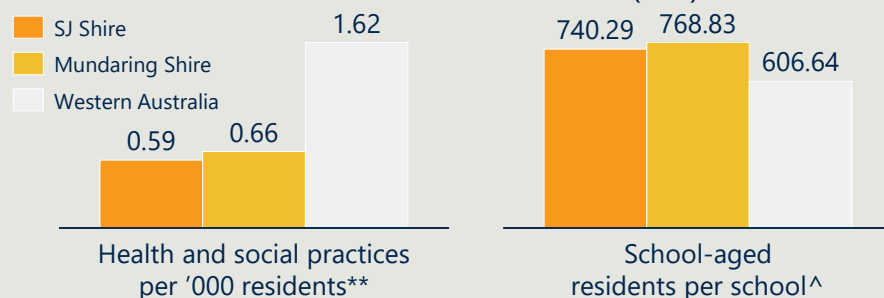
Education and schooling

- The Shire has lower number of schools per capita than the state average, with 14 schools in the region leading to an average of 740 school-aged residents[^] per school – approximately 22% above the state average of 606.
- Existing educational services are unequal across age groups, with most providing only primary-level education and only two schools catering for early childhood or secondary schooling.

Considerations for the Byford Health Hub

- Service provision per capita in the Serpentine Jarrahdale area is below the state average, with a small number of local services providers relative to the size of the population.
- Above average usage of primary health services indicates high demand for services and potentially a need for residents to travel further to access services.
- Provision of social and specialist care is particularly low, and residents seeking this treatment will usually need to travel outside of the area.
- Increasing urgent care presentations at Armadale Hospital pre-pandemic may indicate need for urgent care options in other, non-Hospital contexts within the wider Armadale catchment area.
- Secondary and tertiary healthcare services are limited or inaccessible within the Shire and residents must travel outside of the area for treatment. This increases and reducing the accessibility of existing local services.
- The region's low number of early childhood and adolescent services, including a lack of local secondary schooling options contributes, to a high proportion of residents leaving the region for work and schooling purposes.

PROVISION OF HEALTH AND EDUCATION SERVICES (2021)



*2019-20 is excluded as all hospitals saw COVID-related drops in this time that are not necessarily indicative.

** Health and social practices include general practitioner, dental, allied health, pharmacy, mental health, sexual health, alcohol and other drug, emergency departments, hospitals, social work and financial health.

[^]School-aged population taken as 0-19 years.

Sources:

Australian Bureau of Statistics, 'Number of All Schools by State and Territories 2010-2020', 2021.

Australian Bureau of Statistics, 'Regional population by age and sex', 2020.

Australian Institute of Health and Welfare, 'Armadale-Kelmscott Memorial Hospital', 2021.

Department of Education, 'Alphabetical list of Western Australian Schools', 2021.

Department of Health, 'Health and Wellbeing Surveillance System – Serpentine Jarrahdale 2015-2019', 2021.

Health Direct Australia, 'Healthmap', accessed November 2021.

Examples of existing hubs highlight considerations for the Byford Health Hub design

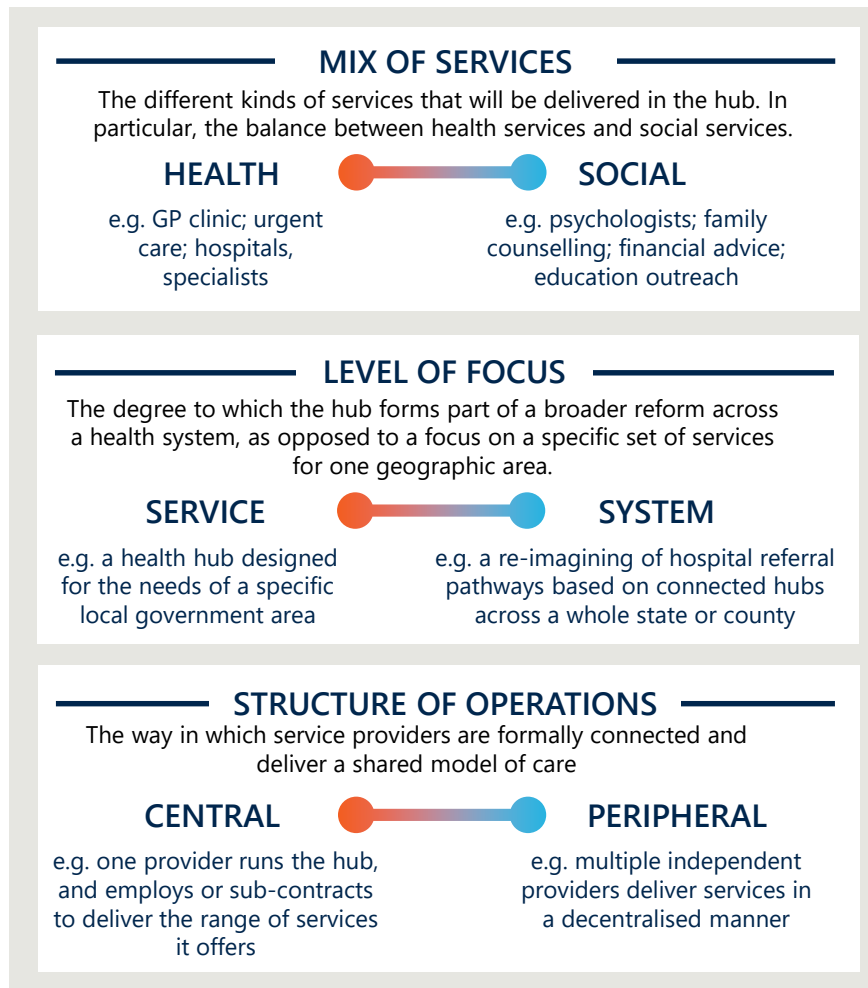
Health Hubs are not a new concept, and have been implemented in various ways around Australia, and the world.

We looked at a wide range of health hub designs from countries with comparable health care systems, identifying points of interest and potential inspiration for the Byford Health Hub design process.

The following pages provide a selection of case studies from the range of reviewed approaches.

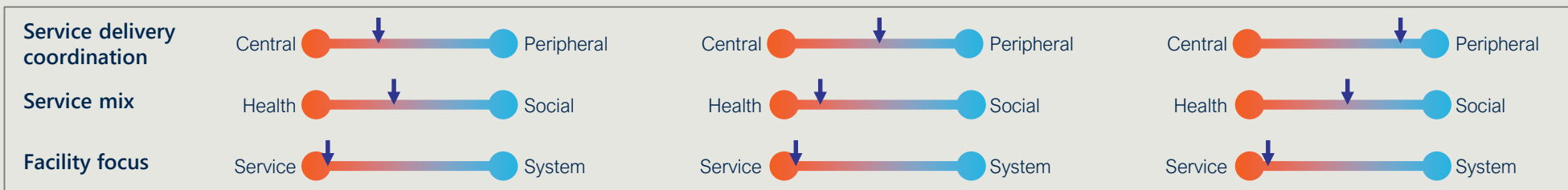


In our review, we identified three key 'settings' (each a sliding scale), that all health hubs will touch on in their design. These settings influence the kind of hub that is created, and what is involved in its day-to-day operation.



Health hubs in WA are typically focussed at the service level, with service delivery coordinated through decentralised and independently operating providers.

	<u>Peel Health Hub</u>	<u>Edith Cowan University (ECU) Health Centre</u>	<u>Cockburn Health and Community Facility</u>
Description	A youth-focussed health facility managed by not-for-profit 'GP down south'.	A university-partnered facility with strong links to academic research.	A local government-run facility providing multiple co-located services.
Location	Peel, Western Australia	Wanneroo, Western Australia	Cockburn, Western Australia
Management	Administered by 'GP down south' with input from co-locating providers through a central development group.	Administered by the ECU Health Centre Committee with input from academia and industry bodies and networks.	Administered by the City of Cockburn, which connects services and manages the facility, but does not curate patient journey.
Notable features	A collaborative model of care between providers is supported with state and federal government partnerships.	Partnerships with university and state Health Service Providers provide clinical training, research and medical advice.	City of Cockburn focus on links to social, financial and professional services – including Commonwealth (e.g. Centrelink)
Service mix	Youth focused: GP, mental health, and alcohol and other drug services	Health, mental health, child, and pathology, public health promotion	GP, dental, dietetics, mental health, disability (NDIS) family and financial, Centrelink, cafe



What does this mean for the Byford Health Hub?

The Peel Health Hub has shown demand for a shared care model in the approximate geographic area. It also shows how a narrowly-focused hub design might work, targeting a specific cohort, rather than trying to 'be everything to everyone'.

The ECU Health Centre highlights potential opportunities for research partnership, and/or integration with a tertiary education provider. This could increase the value proposition for prospective staff, and offer mutually beneficial opportunities for education providers considering the Byford area.

The Cockburn Health and Community Facility is an example of strong local government involvement in coordination of a mixed health and social service community hub, and illustrates the ongoing role and value that local government could have in the Byford Health hub.

Other jurisdictions have focused more on system-level change, but with less emphasis on social services

The Integrated Medical Centre (TIMC)

A community-focused private-billing facility with multidisciplinary services.

Fitzroy, Victoria

Not-for-profit provider Cohealth funds free women's and child services (at a network of clinics) with private profits from TIMC.

Uses a centralised **service delivery model** with unified booking and care plans to provides users with continuity of care.

GP, physiotherapy, psychology, dietetics, podiatry, occupational medicine to industry

Western Sydney Integrated Care Program (WSICP)

A system-level collaborative program to deliver greater integration of care.

Western Sydney, New South Wales

Independently-run services coordinated by a State and Commonwealth partnership, across Western Sydney Local Health District.

Uses a **digital care platform** and **dedicated 'care facilitator'** role staffed by Registered Nurses (RNs). GPs enrol the patients/users.

GP, diabetes, lungs & heart, home care

National Health Service (NHS) Integrated Care Systems

A national program to deliver decentralised, community-centric care.

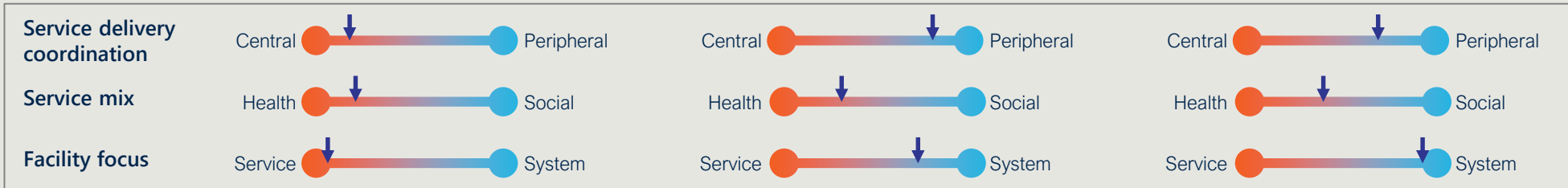
England, United Kingdom

Independent management of local facilities by local government bodies and NHS service providers – funded centrally.

Local autonomy supports **place-based and community-centred partnerships** with local service providers.

GP, hospitals, mental health, allied health, and social care

- Location
- Management
- Notable features
- Service mix



What does this mean for the Byford Health Hub?

The TIMC funding model connects profits from services people are able to pay for, with services that need to be delivered for free. It also offers a single point of entry and access for users across different health services. Applicability to Byford will likely depend on the mix of paid/subsidised services required.

WSICP shows how a heavily curated, continuous care program might work – both 'on the ground' with funded RN roles and connected digital systems, and behind the scenes, with pooled funding and shared governance between State and Commonwealth entities.

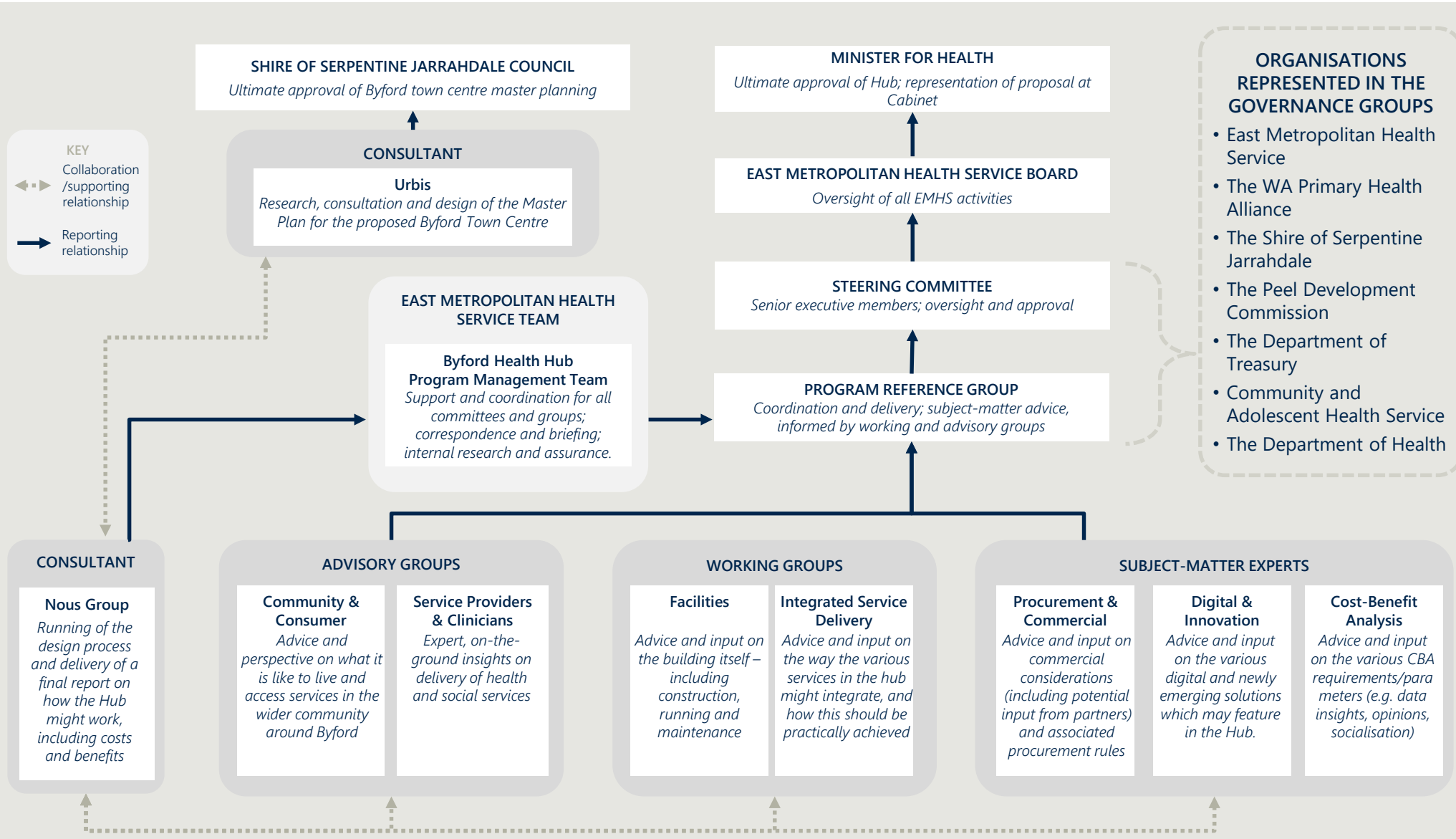
A high degree of local coordination may be attractive for the Byford Hub, but the funding environment will differ. The majority of services in the NHS (including GPs) are funded centrally by one government agency – whereas WA involves a more complex mix of private, state, commonwealth and not-for-profit funding.

Extras

- Diagram of who is involved in the Byford Health Hub Program
- Glossary of terms and definitions
- References

The Byford Health Hub Program has formal oversight, to ensure it runs well

Any major government program has formal requirements for how planning is managed and decisions are made, to ensure that public money is spent appropriately, and the work achieves what it sets out to. The groups and process that manage this is called 'governance' (who 'governs' what goes on). The governance for the Byford Health Hub program (the work that is making the Hub happen) is outlined below.



Glossary of terms

There are a lot of technical terms, names and concepts that relate to the Hub. This page brings together a few and provides some brief definitions.

Term	Explanation
Allied health	Qualified health professionals who are not doctors, dentists, nurses or midwives. Examples include dietitians, occupational therapists, physiotherapists, and speech pathologists.
Armadale Kalamunda Group (AKG)	A division of East Metropolitan Health Service responsible for running the Armadale Health Service and Kalamunda Hospital.
General Practitioner (GP)	A qualified doctor who works in 'general practice', that is, diagnosing, treating and referring patients in community-based settings for a broad range of health issues (including physical, psychological and social). GPs are what most people mean when they say 'going to the doctor'.
Health and Social Needs Analysis	A research activity where health and social information on a community is collected and analysed, to understand what that community may need in those areas. Health and social information can range from statistics like age; income; from a variety of sources, and then a community profiling analysis that aims to determine the specific health and social needs of a community using a range of qualitative and quantitative data sources.
Health and social service	In the context of the Hub, 'service' refers to the types of care/support that is provided from the Hub (e.g. mental health service). It is expected the Hub will be the base for multiple 'services'.
Health Hub	A place where multiple different health, social, and/or community services are located, usually in the same building.
Health Service Provider (HSP)	In WA, 'Health Service Provider' refers to the organisations that the State funds within the WA health system, which either cover specific geographic areas, or specific cohorts in WA: <ul style="list-style-type: none"> • North Metropolitan Health Service • East Metropolitan Health Service • South Metropolitan Health Service • WA Country Health Service • Child and Adolescent Health Service • PathWest (laboratory services to the health and justice systems, for example, blood tests, screenings, and forensic analysis)
Health System	All the HSPs working together – alongside private, not-for-profit and government-delivered services.

Term	Explanation
Integrated Care	An approach to care where services are connected in the way they run – through inputs, delivery, management and organisation related to diagnosis, treatment, care, rehabilitation and health promotion – so they feel more like one 'experience' to someone who comes to use them.
Integrated Service Delivery	Another name for 'integrated care' that is more focused on the services involved.
Memorandum of understanding	A formal contract outlining an agreement between two or more parties. Commonly used in Government to formalise working relationships between agencies and other organisations.
Mental health issue	Any adverse stress-related or health condition not caused by physical health, including depression and anxiety for example.
Operating model	The description of the way an organisation runs and conducts its operations.
Primary health care	The first point of contact that a person has with health services – e.g. general practice, pharmacies and allied health.
Secondary health care	'Secondary care' is medical care provided by a specialist or facility, usually upon referral by a primary care physician. Most often based in a hospital.
Service delivery model	A set of guidelines, procedures, and policies that outline the way in which services are provided to users in a consistent manner.
Social determinants of health	Non-medical factors or situations that people are born into that influence how healthy someone is over their life. These can include economic and political systems, social norms, education levels, living conditions, and access to food.
Socio-Economic Indexes for Areas (SEIFA)	A statistical assessment product developed by the Australian Bureau of Statistics to measure the relative levels of socio-economic advantage and disadvantage.
Tertiary health care	'Tertiary care' refers to highly specialised care, for example burns treatment, cancer treatment, heart surgery and many others. It is typically associated with larger hospitals (smaller hospitals may not have tertiary care capability).

References

- Australian Bureau of Statistics, 'Census of Population and Housing: Estimating homelessness', 2016.
- Australian Bureau of Statistics, 'Census of Population and Housing: Serpentine Jarrahdale General Community Profile', 2016.
- Australian Bureau of Statistics, 'National Health Survey: First results, 2017-18' 2020.
- Australian Bureau of Statistics, 'National Health Survey: Small Area Estimates 2017-18', 2020.
- Australian Bureau of Statistics, 'Number of All Schools by State and Territories 2010-2020', 2021.
- Australian Bureau of Statistics, 'Regional population by age and sex', 2020.
- Australian Bureau of Statistics, 'Survey of Disability, Ageing and Carers, 2018', 2020.
- Australian Bureau of Statistics, 'The Socio-Economic Indexes for Australia, 2016', 2016.
- Australian Government Department of Education, 'Benefits of Educational Attainment', 2019.
- Australian Institute of Health and Welfare, 'Armadale-Kelmscott Memorial Hospital', 2021.
- Department of Education, 'Alphabetical list of Western Australian Schools', 2021.
- Department of Health, 'Health and Wellbeing Surveillance System – Serpentine Jarrahdale 2010-16', 2016.
- Department of Health, 'Health and Wellbeing Surveillance System – Serpentine Jarrahdale 2015-2019', 2021.
- Department of Health, South Metropolitan Population Health Unit, 'Shire of Serpentine Jarrahdale Health and Wellbeing Profile', 2016.
- Dorling, et al. 'The evidence for integrated care', McKinsey & Company, 2015.
- East Metropolitan Health Service analysis, 2021.
- Health Direct Australia, 'Healthmap', accessed November 2021.
- Landrigan, et al. 'Protocol for the Development of a Food Stress Index to Identify Households Most at Risk of Food Insecurity in Western Australia', 2019.
- Ovreteit, 'Does Clinical Coordination Improve Quality and Save Money?', Health Foundation, 2011.
- Profile ID, 'Shire of Serpentine Jarrahdale Community Profile'.
- Roden, 'Life expectancy in Australia's Commonwealth Electoral Divisions, 2016–2018', Parliament of Australia, 2020.
- Royal Commission into Aged Care Quality and Safety, 'Models of Integrated Care, Health and Housing', 2020.
- Shire of Serpentine Jarrahdale, 'Health and Wellbeing Strategy, 2020-2024', 2021.
- The King's Fund, 'Place-based systems of care – A way forward for the NHS in England', 2015.
- The King's Fund, 'What is social prescribing?', 2017.
- Trankle, et al. 'The Western Sydney Integrated Care Program Qualitative Evaluation', Western Sydney University, 2017.
- World Health Organisation 'Global strategy on people-centred and integrated health services', 2015.