

Statewide design, service and infrastructure plan for Victoria's health system

2017-2037

'The building blocks alone do not constitute a system, any more than a pile of bricks constitutes a functioning building. It is the multiple relationships and interactions among the blocks—how one affects and influences the others, and is in turn affected by them—that convert these blocks into a system.'

Source: de Savigny & Taghreed 2009

To receive this publication in an accessible format, email <Coralie.Kennedy@dhhs.vic.gov.au>. Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne. © State of Victoria, Department of Health and Human Services, October 2017 Except where otherwise indicated, the images in this publication show models and illustrative settings only, and do not necessarily depict actual services, facilities or recipients of services. This publication may contain images of deceased Aboriginal and Torres Strait Islander peoples.

Where the term 'Aboriginal' is used it refers to both Aboriginal and Torres Strait Islander people. Indigenous is retained when it

 $\label{lem:available} \textbf{Available at $$\https://www2.health.vic.gov.au/hospitals-and-health-services/health-system-design-planning/statewide-plansers (a) and the system-design-planning (b) and the system-design-planning (b)$

is part of the title of a report, program or quotation.

Printed by Warratah Group, Port Melbourne (1702022)

ISBN 978-0-7311-7286-3 (pdf/online/MS word)

ISBN 978-0-7311-7285-6 (Print)

Aboriginal acknowledgement

The Victorian Government proudly acknowledges Victoria's Aboriginal community and their rich culture and pays respect to their Elders past and present.

We acknowledge Aboriginal people as Australia's first peoples and as the Traditional Owners and custodians of the land and water on which we rely.

We recognise and value the ongoing contribution of Aboriginal people and communities to Victorian life and how this enriches us.

We embrace the spirit of reconciliation, working towards the equality of outcomes and ensuring an equal voice.



Ministers' foreword

Victorians rightly want a health system that we can all be proud of and rely on now and into the future.

Every Victorian, regardless of where they live, should be able to access high-quality, safe care when they need it.

That's why we've been working hard every day to rebuild our health system and make the right investments to ensure we have the right resources, services and infrastructure in place to best meet the health care needs of the community.

Because every Victorian deserves first-class care when they need it most, we're investing an extra \$2.9 billion in healthcare, with major upgrades at some of our busiest hospitals. We're also planning for a new Footscray Hospital, in addition to the record health investment in our last two State Budgets.

Already our significant investments are beginning to pay dividends, with ambulances arriving faster, and more Victorians getting the surgeries, care and treatment they need sooner.

And doctors and nurses are now getting the support and the modern facilities and equipment they need to do their jobs in saving lives.

But we know that to keep pace with the growing demand for health care in our community we not only need to invest now, we need to plan for the future.

And that's exactly what our *Statewide design*, service and infrastructure plan for Victoria's health system 2017–2037 will do.

The plan provides a blueprint to guide investment in our health system over the next 20 years so

we know where and when we need to invest in infrastructure, programs, services and resources to meet the health care needs of communities across the state.

It will drive reform and improvement in our health system so we can find new, more effective ways to deliver better, safer care and treat more patients, sooner.

We would like to sincerely thank the Ministerial Advisory Council, chaired by Ms Patricia Faulkner AO, which was pivotal in shaping the directions and actions of this plan.

The statewide plan prepares our health system for the future—now.

We look forward to continuing to work together with all Victorians to deliver better health, better access and better care.

The Hon Jill Hennessy MP

Jul Henres.

Minister for Health Disability and Agei Minister for Ambulance Minister for Mental Services Health

Martin Foley MP

Minister for Housing, Disability and Ageing Minister for Mental Health Minister for Equality Minister for Creative Industries

Contents

Ministers' foreword	5
Contents	6
Executive summary	9
Section 1:	
Our future health system	17
Designing our future system	18
Why plan now?	18
What are our planning priorities?	20
How was the plan developed?	21
How will the plan be used?	22
System design principles	25
Our 20-year outlook	26
What will be different?	26
How will we get there?	28
How will we measure our progress?	29
Section 2:	
Our priorities for action	31
Priority area 1: Building a proactive system that promotes health and	
anticipates demand	32
Current state	32
Future state	37
Initial steps	38
Priority area 2: Creating a safety and quality-led system	46
Current state	46
Future state	49
Initial steps	49

Priority area 3: Integrating care across the health and social service system	54
Current state	54
Future state	55
Initial steps	56
Priority area 4: Strengthening regional and rural health services	64
Current state	64
Future state	66
Initial steps	67
Priority area 5: Investing in the future—the next generation of healthcare	76
Current state	76
Future state	77
Initial steps	77
Section 3: Healthcare locality planning	83
Delivering the healthcare infrastructure needs of local communities	84
Locality plans for outer-urban growth areas and inner Melbourne	86
Northern growth area	88
Western growth corridor	89
South-eastern growth area	90
Inner Melbourne	91
Locality planning for other parts of the greater Melbourne metropolitan area	92
Melbourne's inner north, inner south, eastern and southern areas	92
Locality planning for regional cities and rural areas	96
Barwon	98
Great South Coast	99
Central Highlands	100
Wimmera Southern Mallee	102
Loddon Campaspe	103
Mallee	104
Goulburn	105
Ovens Murray	106
Gippsland	107
Next steps	110
Glossary of key terms	112
Appendix 1: Membership of the Ministerial Advisory Council	114
Appendix 2: Our priorities for action—implementation plan	115
References	126



Executive summary

Our current health system delivers some of the highest standards of care and outcomes when compared with similar systems internationally. But our health system is under growing pressure—from unprecedented population growth and ageing, from the rise in chronic disease, from more people surviving what were previously fatal conditions, from the rising costs of care and technology, and from community expectations for better, more convenient and personalised services.

The Victorian Government is responding to these pressures by delivering lasting changes to the health system, focusing on five priority areas that will chart our path forward over the coming 20 years:

- building a proactive system that promotes health and anticipates demand
- 2. creating a safety and quality-led system
- 3. integrating care across the health and social service system
- 4. strengthening regional and rural health services
- 5. investing in the future—the next generation of healthcare.

These priorities recognise where we can use new opportunities to anticipate demand and build the capacity we need to future-proof our system. This statewide plan will guide workforce development, capacity building and infrastructure investment to ensure everyone in Victoria has access to the care they need, when and where they need it, regardless of where they live.

The plan will support joined-up planning across health services, local government, community health services, Primary Health Networks, Aboriginal community-controlled health services and other service sectors. It will guide strategic planning by public health services, and support work with the private sector on innovative ways to provide care and respond to demand.

The plan links to broader government planning, including the work of Regional and Metropolitan Partnerships, to ensure a unified approach to the health and wellbeing, environmental, housing, employment, education and transport needs of local communities.

It provides the pathway towards our health system of the future.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Priority area 1: Building a proactive system that promotes health and anticipates demand

We will increase prevention and early intervention.

We will do this by:

- tasking groups of providers to keep people healthy or prevent avoidable hospital visits, and giving them flexible funding to do it
- developing health and wellbeing hubs that make it easier for people to access what they need to stay well or recover sooner in the community
- improving data, information and online tools to help people better manage their own care and participate in the care they receive
- supporting family violence reforms and links to Support and Safety Hubs.

We will accelerate alternatives to hospitalbased care.

We will do this by:

- rolling out more Supercare Pharmacies to provide 24/7 access to pharmacy services and promoting integration, service collocation and shared arrangements for after-hours general practice, pharmacy, diagnostic and other services in health and wellbeing hubs
- developing clear thresholds and pathways for referrals to specialist services
- changing the way we provide specialist clinic services such as through greater use of telehealth, more flexible ways of working and getting people assessed more quickly by specialists, with better arrangements for them to return to primary care in the community.

We will target new investment to address priority needs and future demand.

We will do this by:

- investing in services and infrastructure to meet the needs of a growing population, particularly in our inner and outer metropolitan growth areas, and to manage the flow-on impacts for our major referral hospitals that provide specialist services for all Victorians
- developing locality plans that focus on the needs of particular areas aligned with Regional and Metropolitan Partnerships
- focusing on prevention, early intervention and closing the gaps in clinical mental health services and alcohol and other drug treatment services
- improving access to first responders by creating better service links, new capacity and reducing unnecessary ambulance dispatch.

We will actively collaborate with the private sector.

We will do this by:

 working to maximise benefits for all Victorians through joint planning with the private sector, development of referral pathways, collaborative development of capacity and flexible use of technology and infrastructure.

We will target new investment to drive innovative new service models

We will do this by:

- helping health service workers to innovate and improve through leadership and organisational development and by sharing best-practice and problem-solving approaches
- undertaking innovation projects across metropolitan Melbourne and regional areas.

Priority area 2: Creating a safety and quality led system

We will promote safe, high-quality services to Victorians – every time.

We will do this by:

- progressively developing a role delineation framework that sets out the requirements for providing particular kinds of care
- defining referral networks to promote seamless access to the right care, in the right place
- ensuring high-complexity, low-volume procedures are undertaken only in centres where they can be performed safely.

Priority area 3: Integrating care across the health and social service system

We will better support people who are vulnerable or have complex needs.

We will do this by:

- developing preventative, integrated care systems in the community for vulnerable children and families, and people at risk of avoidable hospital visits
- supporting reform initiatives under Victoria's 10-year mental health plan to boost prevention, and access to the range of treatment and support needed for recovery
- expanding access to specialist drug treatment and harm reduction services, and strengthening links with other services in contact with people who have problematic alcohol and drug use
- providing safe and respectful services for diverse communities, including: lesbian, gay, bisexual, transgender, and intersex people; people from culturally and linguistically diverse backgrounds; and Aboriginal and Torres Strait Islander people.

We will facilitate seamless service transitions for Victorians with a disability.

We will do this by:

- supporting the National Disability Insurance Scheme (NDIS) rollout
- developing pathways between health services and NDIS-funded services
- ensuring people with a mental illness are able to continue to access psychosocial rehabilitation services.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

We will address the health and care needs of older people.

We will do this by:

- working with the Commonwealth to increase the number of people enrolled in Health Care Homes and accessing community support packages
- providing flexible funding to health and wellbeing hubs to improve outcomes for older people including setting targets such as reducing avoidable emergency department presentations
- modernising public sector residential aged care services (PSRACS) through staged investment in facilities, renewal of rural PSRACS and more community-based support in rural areas.

We will improve health outcomes for Aboriginal people.

We will do this by:

- implementing initiatives under the Korin Korin Balit-Djak: Aboriginal health, wellbeing and safety strategic plan 2017-2027 (Department of Health and Human Services 2017b) including funding reforms that support self-determination and the sustainability of Aboriginal community-controlled health services
- helping Aboriginal organisations and health services to share knowledge and resources
- supporting research led by Aboriginal researchers to improve outcomes for Aboriginal Victorians
- listening to Aboriginal people about their needs and ideas about how health services can be improved.

Priority area 4: Strengthening regional and rural health services

We will continue to develop the rural health workforce.

We will do this by:

- supporting our workforce to provide new models of care
- investing in training and programs to support the registration of rural clinicians
- extending education and research links between rural and metropolitan services
- using digital technologies (including telehealth) to reduce isolation and support remote practice.

We will establish a formal partnership approach to overcome the challenges faced by rural and regional health services.

We will do this by:

- developing and implementing rural and regional health partnerships that can determine the best way to configure and provide services across communities in their geographic area
- defining clear referral networks based on system role delineation to ensure people in rural areas get quick access to the care they need
- providing a stronger role for outer regional services that will allow care to be safely provided closer to where people live.

We will adjust the service mix for an older local population.

We will do this by:

- progressively renewing facilities to ensure they meet contemporary standards and expectations of care
- expanding the range of care to support older people in the community or in their homes as long as possible.

We will strengthen access to core services in rural Victoria.

We will do this by:

- strengthening rural urgent care centres to better support the workforce and ensure timely urgent care is available to all rural Victorians
- developing regional approaches to wait list management for elective surgery to give more rural Victorians access to surgery sooner
- ensuring the quality, safety and sustainability of rural maternity and newborn services through investment targeted at specific areas of need
- completing the review of the Victorian Patient Transport Assistance Scheme to promote access to healthcare for rural Victorians.

Priority area 5: Investing in the future—the next generation of healthcare

We will invest in medical technology and industry development.

We will do this by:

- continuing to invest in medical technologies and the pharmaceuticals sector to develop a world-class industry and provide the community with early access to the latest health technology breakthroughs
- ensuring investment in technology goes where it is needed and can be most effectively used to provide better care and equity of access
- developing new ways of bringing together medical technology and medical research to drive innovation.

We will capture new and evolving fields of worldclass medical research.

We will do this by:

- further building Victoria's network of worldleading research agencies and collaborations through specialty services (such as the Victorian Heart Hospital and the Victorian Comprehensive Cancer Centre)
- ensuring that industry, research centres and health services are working together to grow jobs, strengthen the economy and secure the foundations of our future health system.

We will harness the power of genetics and genomics.

We will do this by:

- strengthening genetics and genomics services to drive more personalised care and improve clinical outcomes
- expanding treatment choices to improve quality of life and people's experience of care.

Healthcare infrastructure

Our current major infrastructure investment program is listed in Tables 1 and 2.

Table 1: Infrastructure pipeline for metropolitan and various statewide locations

Locality	Our five year priorities—ongoing and new commitments in 2017–181		
Northern growth area	Northern Hospital expansion. Expansion of Broadmeadows Surgery Centre.		
Western growth corridor	 Footscray Hospital redevelopment. Werribee Mercy Hospital reconfiguration and expansion. New Joan Kirner Hospital in St Albans. New Melton health and wellbeing hub. Critical infrastructure works at Western Health (Footscray and Sunshine). 		
South-eastern growth area	 Casey Hospital expansion. Expansion and upgrade of the Monash Medical Centre's emergency department, to support the opening of Monash Children's Hospital. A Victorian Heart Hospital. Expanded imaging and specialist clinics at Moorabbin Hospital. 		
Inner Melbourne	 Planning and development of the Melbourne Biomedical Precinct. Royal Melbourne Hospital and The Alfred Hospital critical infrastructure works. Redevelopment of Orygen Youth Mental Health (Parkville). Redevelopment of the Royal Victorian Eye and Ear Hospital. Development of the National Proton Beam Therapy Centre. Aikenhead Centre for Medical Discovery at St Vincent's Hospital. 		
Other metropolitan areas	 Austin Hospital critical infrastructure works. Maroondah Hospital cancer centre development. Upgrades at Angliss Hospital. New aged care facility at St Georges Health Service. Establishment of the Statewide Child and Family Mental Health Intensive Treatment Centre. 		
Statewide (various locations)	 Upgraded and new ambulance stations, vehicles and equipment. Increasing critical care capacity for neonates and adults. Clinical technology refresh—cybersecurity and connectivity. Expansion of prevention and recovery care services. Expansion of forensic mental health services. Renewal of mental health and alcohol and other drugs services facilities. New residential drug rehabilitation services. 		

¹ Future infrastructure investment priorities will be driven by the five priorities under this plan, and be determined through more detailed service and locality planning.

Table 2: Infrastructure pipeline for regional and rural Victoria

Regional Partnership	Our five year priorities—ongoing and new commitments in 2017–18 ¹		
	E cilia con la contra contra del		
Barwon	 Facility upgrades and expansion at University Hospital Geelong. Barwon Health North facility, including urgent care services, as part of the Northern ARC (Arts, Recreation and Community) Health and Wellbeing Hub. 		
	Safety and clinical systems upgrades at Barwon Health and Colac Area Health.Upgrade to urgent care centre at Otway Health.		
Great South Coast	 Improvements to elective surgery capacity and progress planning for stage two development of Warrnambool Base Hospital. New urgent care centre at Port Fairy. 		
	Upgrade to communications at Lyndoch Living.		
Central	Service and master planning for Ballarat Health Services.		
Highlands	New mental health prevention and recovery care service and additional drug treatment residential rehabilitation services for the Ballarat community. Tability redesign and plant and equipment works at Ballarat Usenital and the Oueen.		
	Facility redesign and plant and equipment works at Ballarat Hospital and the Queen Elizabeth Centre. Hospital and Elizabeth Centre.		
	Health and wellbeing hub to be operated by the Ballarat and District Aboriginal Co- operative Limited.		
	Extension to East Grampians Health Service community health centre at Ararat. It is a served as fourth a Disprise property of the Parachuse Mayork and a server of the Server of the Parachuse Mayork and a server of the Serve		
	• Upgrades for the Djerriwarrh Health Service maternity unit at Bacchus Marsh and construction of a new operating theatre suite.		
	Nursing home redevelopment and information and communications equipment for Daylesford Hospital.		
	A new cardiac catheterisation laboratory for Ballarat Health Services.		
Wimmera Southern Mallee	 Master planning for a redevelopment of the Edenhope and District Memorial Hospital Plant and equipment works for the Wimmera Health Care Group. 		
Loddon	Stage 2 Bendigo Hospital project.		
Campaspe	New Cobaw health and wellbeing hub, located in Kyneton.		
	Remodel of urgent care and acute care services at Kyabram District Health Service.		
	Medical imaging services at Maryborough District Health Service. Pedevolution and of Maryborough Linearitation and district Health Service.		
	 Redevelopment of Waranga Hospital, including aged care. Surgical services and equipment upgrades for Rochester and Elmore District Health Service. 		
NA U			
Mallee	 New subacute services at Swan Hill District Health. More intensive care services at Mildura Base Hospital and redesign of the acute mental health unit. 		
Goulburn	 Redevelopment of Goulburn Valley Health's Shepparton Hospital. Refurbishment of the Warrina Hostel at Yarrawonga Health. Plant works at Cobram District Health. 		
	 Remodel of Nexus Primary Health at Wallan. Upgrades to safety systems and strengthening maternity services at Kilmore and District Hospital. 		
Ovens Murray	 Upgrades of facilities and equipment at Albury Wodonga Health. New critical care unit and expansion of the emergency department and clinics at 		
	Northeast Health Wangaratta.		
	 Ward refurbishment and hospital systems and equipment at Benalla Health. Refurbishment of Buckland House at Mansfield District Hospital. 		
Gippsland	 Latrobe Regional Hospital special care nursery and maternity ward works. Central Gippsland Health Service theatre expansion. 		
	Additional operating room and a new short stay unit at West Gippsland Healthcare Group in Warragul and planning for the redevelopment of the hospital.		
	Essential services upgrades and neonatal resuscitation cots at Bass Coast Health.New health and wellbeing hub for Yarram.		

¹ Future infrastructure investment priorities will be driven by the five priorities under this plan, and be determined through more detailed service and locality planning.





Designing our future system



Why plan now?

Our health system exists to help people lead healthier, happier lives that they value. Having the best possible health system is vital, not just to the lives of every individual Victorian, but to the vibrancy and success of our whole state.

Our current health system delivers some of the highest standards of care and outcomes when compared with similar systems internationally. This does not mean we can rest easy—we must strive to improve outcomes and reduce the disparity between different groups in our society and between people who live in different parts of the state. We must also continue to provide access to modern, safe and affordable healthcare. Our success is more likely if we plan now for the health system that all Victorians need and can rely on into the future.

Health 2040: Advancing health, access and care (Department of Health and Human Services 2016c) sets out the Victorian Government's vision for:

 better health: focuses on prevention, early intervention, engaging with the community and getting people to take charge of their own healthcare—to maximise the health and wellbeing of all Victorians

- **better access**: focuses on reducing waiting times and delivering equal access to care through statewide service planning, targeted investment and unlocking innovation
- better care: focuses on how people experience their care, improving quality and safety, ensuring accountability for achieving the best health outcomes and supporting the workforce to deliver the best care.

Our planning allows us to shape a system that will support the government's vision for better health, better access and better care. But it will not be without its challenges.

Our health system is under growing pressure—from unprecedented population growth and ageing, from the rise in chronic disease, from more people surviving what were previously fatal conditions, from the rising costs of care and technology, and from community expectations for better, more convenient and personalised services. Advances in practice and technology, as well as drug trends and other social factors are influencing demand for services.

We are responding to these pressures by setting priorities and actions that will guide us in delivering lasting changes to the health system.

Placing prevention at the heart of healthcare is critical to improving health outcomes and health equity. Prevention must tackle the specific needs of local communities in all parts of Victoria. This 'place-based' approach to prevention builds on the unique strengths of people and communities to deliver solutions that are relevant and effective.



We also know that some groups in our community are more vulnerable and have poorer health outcomes including: communities with lower socioeconomic status; Aboriginal Victorians; people from culturally diverse backgrounds; refugees and asylum seekers; gender diverse groups; people with mental illness or disability; and people living in our rural and regional communities. We must act to close these gaps in outcomes.

Many of our community-based services report growing complexity in the needs of clients across both health and broader social care systems, and the need for planning and delivery approaches that support integration. This echoes the findings of the Royal Commission into Family Violence about the need for more joined-up approaches that identify people at risk and intervene early.

The digital age is the single biggest force driving major advances in our knowledge and practice. New models for prevention, treatment and care are evolving all the time. These changes create new ways of working and new requirements for the design and use of infrastructure.

Improving health in the Latrobe Valley

The Victorian Government is currently working with the Latrobe Valley Health Innovation Zone and Latrobe Health Assembly to design new prevention, screening and early intervention initiatives to keep people healthy and address the social determinants of health.

New non-surgical procedures are having an increasing impact, creating new ways to diagnose and treat patients. This changes how theatres are designed and used and lowers growth in demand for beds due to less invasive procedures and faster recovery.

For example, diagnostic imaging in cardiology has allowed catheters and stents to be used in place of more invasive surgery. The use of neuro-interventional radiology allows more targeted intervention for some types of stroke, leading to shorter and better recovery instead of lengthy hospital stays and rehabilitation.

We are also seeing major breakthroughs in medicine. New treatment drugs for hepatitis C are able to cure this chronic disease for more than 90 per cent of patients including those previously resistant to treatment. The legalisation of medicinal cannabis in Victoria is providing relief from the symptoms of otherwise debilitating conditions such as severe epilepsy and cancer pain.

Technology is also promoting greater connectivity between patients and providers. This allows better sharing of information and decision-making in real time, across long distances. Smartphones, wearables and other mobile devices are playing an increasing role in helping us to look after our health and to be part of our care team.

Being able to link and analyse the large volumes of data we now collect, or 'big data', offers untapped potential in both prevention and care. There is also new scope for prevention and treatment through genomics, which is opening up

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

the possibility of individualised healthcare based on our very own genetic make-up.

The growing complexity of need is demanding new partnerships, innovative models of care and more collaborative practice. Better informationsharing systems and funding and workforce reforms are catalysing innovation and new ways of working together to deliver better care.

Planning for a better future

Increasingly, planning for health services and infrastructure is being integrated with planning across other service sectors using a place-based approach. Place-based planning engages communities to actively shape solutions and address local needs.

Through Metropolitan and Regional Partnerships and community assemblies, the Victorian Government is giving people a much stronger voice in service and infrastructure planning and investment.

Growth in demand and complexity drives home the importance of public and private health services working together to build the health system of the future. New ways of funding and financing healthcare can engage private providers, spur collaboration, enhance integration and stimulate greater innovation.

This statewide plan is about harnessing these major forces of change as transformative opportunities to ensure Victoria continues to have a world-class, 21st century health system.

What are our planning priorities?

It is clear that it will not be enough to simply do more of the same. Our unprecedented challenges will require new and innovative ways of responding, and it cannot be business as usual.

We need to put the right capacity in the right places to respond to growth and to deliver more equitable outcomes. We need to ensure all Victorians have access to safe and high-quality care. We must work with local communities to provide complete solutions that work across health and social care and link to employment, education and economic priorities. We have to make sure the health system delivers the same outcomes for people living in rural and regional Victoria as for people living in Melbourne. We need to work with private sector providers to develop new ways to fund and deliver healthcare. We have to grasp the opportunities of new technology, new treatments and new ways of working to build the health system of the future.

To tackle the challenges before us we have identified five priorities that will chart our pathway over the coming 20 years:

- building a proactive system that promotes health and anticipates demand
- 2. creating a safety and quality-led system
- 3. integrating care across the health and social service system
- 4. strengthening regional and rural health services
- 5. investing in the future—the next generation of healthcare.

Alignment to Health 2040

The planning priorities work directly towards achieving the vision for the future of healthcare in Victoria as set out in *Health 2040* (Department of Health and Human Services 2016c).

Better health	Priority 1	
Better access	Priorities 3 and 4	
Better care	Priorities 2 and 5	

Our priorities recognise where we can use new opportunities to anticipate demand and build the capacity we need to future-proof our system.

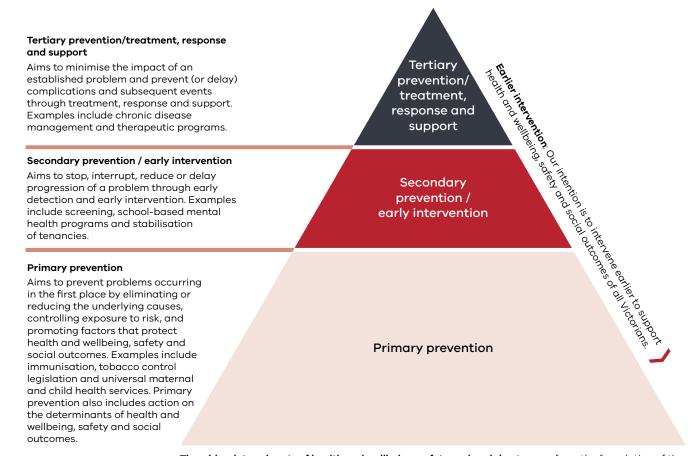
This plan aims to ensure all Victorians receive the best possible healthcare—no matter what their condition, where they are treated or who they are. This includes preventing problems occurring in the first place by eliminating or reducing the underlying causes of poor health (see Figure 1). The plan guides where and how services should be provided to deliver world-class care—every time.

How was the plan developed?

A Ministerial Advisory Council appointed by the Victorian Government guided the development of the statewide plan. The council, chaired by Ms Patricia Faulkner AO, comprised health service board chairs, chief executive officers, clinicians, health sector academics and independent experts. A full list of members is at Appendix 1.

The council was pivotal in shaping the priorities and reforms for the future system. Assessment of the challenges and opportunities for our current system was informed by the first-hand insights and expertise of its members, as well as through wider community and sector consultation supported by the council during 2016.

Figure 1: The prevention and early intervention continuum



The wider determinants of health and wellbeing, safety and social outcomes form the foundation of the prevention and intervention continuum. These include income, employment, social status, education, early childhood development, the physical environment, food security, housing, social networks and access to services.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

The plan itself delivers on the final recommendations of the 2015 Travis Review: Increasing the capacity of the Victorian public hospital system for better patient outcomes (Department of Health and Human Services 2015a). The Travis Review highlighted the importance of moving beyond thinking about capacity just in terms of the number of hospital beds in a ward—a figure that means very little to a patient waiting for care. Rather, it called for planning focused on delivering capacity across the system to provide access to the best, safest and most appropriate care.

The plan also contributes to our response to the recommendations of the 2016 report *Targeting zero: Supporting the Victorian hospital system to eliminate avoidable harm and strengthen quality of care* (Duckett et al 2016). It provides a clear focus on building capacity and modernising infrastructure. It emphasises the importance of defining the roles of health services and the relationships between them to ensure every Victorian has access to the right care in the right place, regardless of where they live.

Forecasts of future health system demand are based on the Victorian Government's Victoria in Future 2016 projections (Department of Environment, Land, Water and Planning 2016) and Department of Health and Human Services' 2016 modelling. Preliminary aggregate data from the 2016 Census is becoming available at the time of publication. Total Victorian population numbers in 2016 are higher than previously estimated. Data in this plan will be updated when revised population forecasts become available.

How will the plan be used?

The department and health services will use the statewide plan to help guide service, workforce and infrastructure planning and investment priorities. It will also guide investment in equipment and technology to put the right capacity in the right place. It will provide the basis for a broad and long-term view of health including the contributions to health and wellbeing from outside the health system.

It will foster better, joined-up planning across health services, local government, Primary Health Networks, Aboriginal community-controlled health organisations and other service sectors. It will guide strategic planning by public health services and the goals included in their annual statement of priorities. It will support population health planning through each local government's municipal public health and wellbeing plan and assist in delivering on the directions and priorities of the Victorian public health and wellbeing plan 2015–2019 (Department of Health and Human Services 2015b). Importantly, the plan will also provide a basis for public health services to work with their private sector counterparts on innovative ways to finance healthcare and respond to demand.

The plan will be directly supported by design, service and infrastructure plans for major types of care—or service streams—and for every area of the state. This is to ensure that we are looking at what, where and how much capacity is needed for particular types of care and in particular places while also ensuring the system as a whole is working well. In this way, the cycle of service stream and locality planning will guide further service and infrastructure investment priorities, under a statewide, system-wide health planning framework.

The Victorian Government has already started this work. Because of the immediate challenges driven by rapid population growth, the first priority has been to plan for the needs of the state's outer-urban growth areas to the north, west and southeast of Melbourne, and to respond to the expected rapid growth in the inner Melbourne area.

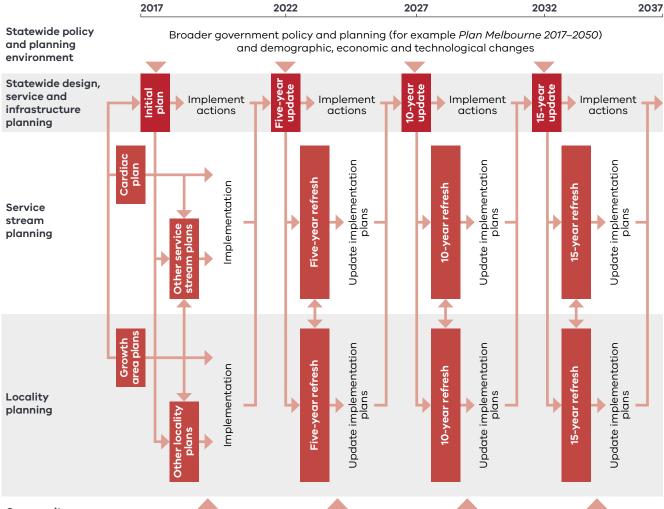
These plans will build on and link to broader government planning—including five-year plans for jobs, services and infrastructure, being prepared by the Office for Suburban Development —and priorities arising from the work of Regional and Metropolitan Partnerships. Importantly, community engagement through regional and metropolitan assemblies will provide regular opportunities for healthcare planning and priority setting to be informed by local leadership and community insights into what works, what's needed and what's important.

The first of the supporting statewide service stream plans—the Design, service and infrastructure plan for Victoria's cardiac system—was released in May 2016 (Department of Health and Human Services 2016b). This plan delivered the first component of planning work for the new Victorian Heart Hospital, which is now well underway.

The cardiac plan is available at: https:// www2.health.vic.gov.au/about/publications/policiesandguidelines/design-service-infrastructure-plan-for-victorias-cardiac-system>.

The statewide plan (this document) will be updated every five years for the next 20 years (Figure 2). These updates will take account of broader changes in the environment arising from policy and planning work across government, as well as economic, demographic and technological changes. Each five-yearly review of the statewide plan will provide directions and guidance for developing or refreshing service stream plans and locality plans. This planning cycle will incorporate new priorities arising from local engagement through regional and metropolitan assemblies conducted by Regional and Metropolitan Partnerships.

Figure 2: The 20-year planning cycle for the statewide design, service and infrastructure plan



Community engagement and local area priorities

Local priorities identified regularly by Regional and Metropolitan Partnerships through regional and metropolitan assemblies.

(Metropolitan Partnerships are tasked with providing annual advice to Government on local priorities and these will be a key input into the five-year plans for jobs, services and infrastructure being developed by government and updated annually.)

Alignment to planning across government

Locality plans will link to broader government directions and planning to ensure their outcomes and infrastructure priorities join up with other government services for local communities. This includes linking to suburban jobs, services and infrastructure plans that are currently being prepared.

The priorities of Metropolitan Partnerships and Regional Partnerships are key points of alignment for healthcare locality planning and will be used to ensure healthcare services and facilities are developed in ways that support local solutions to wider community needs.

Locality plans in metropolitan areas will be framed by the overall vision for the future of Melbourne, as set out in *Plan Melbourne 2017-2050* (Department of Environment, Land, Water

and Planning 2017a). This includes a future Melbourne with many centres of thriving activity where all residents have access to a range of services and facilities such as healthcare, within 20 minutes of their home.

Victoria's 30-year infrastructure strategy
(Infrastructure Victoria 2016) acknowledges
the importance of service reform not just
infrastructure solutions, alongside good
infrastructure planning to ensure essential
services are accessible and used to maximum
benefit. Locality plans will address health
infrastructure priorities that not only respond
to growth and ageing infrastructure pressures,
but also opportunities to promote new models
of prevention and care to make best use of
existing and future infrastructure.

System design principles

The following health system design principles are intended to guide decisions about planning and development of services and infrastructure, in a way that supports our longer term vision for the future health system.

- Health system design is driven by population need, underpinned by strong prevention and early intervention systems to improve health outcomes.
- Victoria's health services have clear role delineation, are geographically coordinated, and are well-connected to the broader health and social care system.
- Where safe and appropriate, services will be delivered outside of the hospital setting and as close to home as possible.

- Enhanced system configuration and more flexible use of resources will release existing capacity in our health services and better distribute new capacity.
- Designated tertiary referral/specialist health services have a key role in ensuring access to patients from across Victoria who require higher complexity care.
- The causal relationship between the volume of services being provided and the quality of these services will be reflected in system design and service planning.
- The prioritisation and distribution of high cost medical equipment across the system will promote alignment of roles, capability and capacity.

Our 20-year outlook



What will be different?

There is only one certainty and that is that there will be change. The causes of morbidity and mortality today may not be the same in 20 years' time. Instead, we will be faced with other health issues, which are difficult to predict with any real certainty. That is why we are developing a health system that is responsive, is innovative and drives improved population-wide health outcomes.

We can prepare ourselves by seeking to shape this future. This starts with a vision of a health system for tomorrow where the challenges of today no longer dominate and threaten its future.

Key design features of the future system

Our future health system (see Figure 3) will focus on prevention and early response. It will deliver the best care for people when and where they need it, regardless of whether they are in hospital or in the community.

There will be flexibility about how care is delivered, matched by a high degree of accountability. This includes much greater funding flexibility to encourage innovation and make the best use of existing resources.



When needed, people will have a multidisciplinary team working with them to provide their care. They will have a single point of contact providing continuity over time, supported by specialists and other care providers as needed. There will be a culture of working together, underpinned by clearer roles, networks and communities of practice. Shared systems and incentives will help to deliver needed prevention and care, from before birth through to the end of life.

Our future health system will be predictive and proactive in everything we do. It will use 'big data' from multiple sources, bringing together patient experience and outcomes, safety and quality data and new technology and research.

The system will be easier for people to navigate. People will be better informed and able to make genuine choices about their care. They will also be able to direct how care is designed so it works for them, their families and carers. Providers will have cutting-edge access to data, information and tools that they can readily use in practice and tailor to an individual's needs and preferences.

We will have a system where home health and community health are central. There will be less need for visits to specialists. Hospitals will be designed and used for emergency and acute care only, including birthing, surgery and other highly specialised procedures or services. As a consequence, they will need fewer beds per head of population.

Nevertheless, despite the centrality of home and community healthcare, and the potential of digital presence and other technologies to transform how healthcare is delivered, most healthcare in the coming decades will continue to be about having a physical place where care is provided, where people meet face to face. That means a big part of planning for local needs will continue to be about providing access to facilities—the bricks and mortar of healthcare—that are fit for purpose and able to deliver the right services in the right places. Making best use of existing and future infrastructure capacity will be driven through the reform priorities of this plan.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Place-based approaches to planning will ensure services are designed to be responsive to local need, located or accessible near to where people live and work, and form part of a cohesive community infrastructure that promotes healthy, thriving and safe communities. We will invest earlier to make sure services are available when and where they are needed.

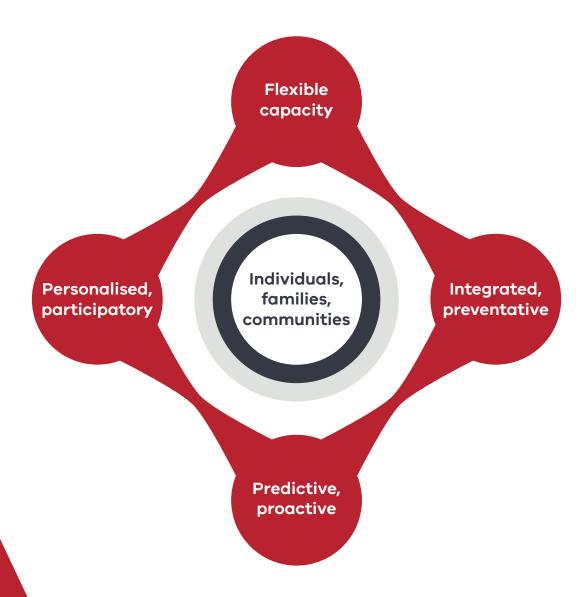
Finally, we will have an integrated health and social care system focusing on prevention across all levels of the system. This will allow us to address the key factors affecting health and wellbeing, in turn reducing disease, intervening early and protecting people whose health and wellbeing is at risk.

How will we get there?

Our planning priorities provide the overarching framework for what needs to be done over the short, medium and longer term to achieve the future state.

The statewide plan charts a course based on the five priorities set out in Section 2. It specifies actions to be progressed in the first five years, before the next stage of design and investment that will take us further towards the 20-year horizon.

Figure 3: Key design features of the future system



How will we measure our progress?

We will publish a biennial progress report to communicate achievements against actions set out for the first five years of the statewide plan.

We will track our longer term progress towards the service expectations and outcomes for Victorians described for each of the five priority areas. These are aligned with progress measures set in *Health 2040* against our goals for better health, better access and better care.





Priority area 1: Building a proactive system that promotes health and anticipates demand



Current state

Population growth and distribution

Victoria is the fastest growing state in Australia, with an average annual population increase of 130,000 people since 2011 (Australian Bureau of Statistics 2016a). Over the next 20 years, Victoria's total population is expected to grow by 41 per cent—reaching an estimated 8.33 million by 2037 (from 6.08 million in 2016).

Increasing urbanisation is expected to continue, with an estimated 6.58 million people predicted to be living in the Melbourne metropolitan area by 2037 (rising by 44 per cent from 2015). Slower but steady growth is projected in regional and rural Victoria, with 1.9 million forecast to live in rural and regional Victoria (a 30 per cent increase on the 2015 population).¹

Much of Victoria's population growth has been in inner Melbourne and the outer metropolitan north, west and south-east corridors. Major growth is forecast to continue in these areas over the next 20 years and will drive demand for health services.

Key facts: Population growth and distribution

Over the period between 2015 and 2037 Victoria's population is projected to grow by an average of 1.6 per cent per year, with growth of 1.7 per cent per year in metropolitan Melbourne and 1.2 per cent per year in rural Victoria.

By 2037, 79 per cent of Victoria's population is expected to live in metropolitan Melbourne, compared with 77 per cent in 2015.

The highest population growth is expected in:

- inner Melbourne (3.1 per cent per annum)
- the outer northern, western and south-eastern areas of Melbourne (2.7, 2.4 and 2.3 per cent per annum respectively)

The regional areas of Barwon, Goulburn and Central Highlands are also expected to grow by 1.5, 2.0 and 1.7 per cent per annum respectively.

But some rural towns are projected to decline in population in Wimmera Southern Mallee, or grow by less than one per cent per annum in the Great South Coast, Ovens Murray and Mallee.

Department of Health and Human Services analysis of unpublished Department of Environment, Land, Water and Planning population projections.



Figure 4 shows the projected growth in hospital stays over this period. Figure 5 shows that strong increases in the younger (under 15 years) and older (over 70 years) age groups are key drivers of high forecast growth in the transition zone between metropolitan and rural parts of the state—known as the peri-urban area.

Life expectancy

Victorian life expectancy compares favourably to other states and territories, second only to the Australian Capital Territory for males and third behind the Australian Capital Territory and Western Australia for females (Australian Bureau of Statistics 2016b).

Our life expectancy in Victoria in 2015 was 84.7 for females and 81.1 for males. Men who were 70 years of age in 2015 could expect to live, on average, an additional 15.9 years, whereas women of the same age could expect another 17.9 years of life.

Population ageing

Population ageing is expected to continue. By 2037, the number of Victorians 70 years of age or older is projected to increase by an average annual rate of 3.3 per cent.

Those 85 years of age or older will be the fastest growing age group—expected to increase by 135 per cent (or an average of 4.0 per cent per year) between 2015 and 2037. By contrast, the population under 15 years of age is expected to increase by just 1.3 per cent each year over the same period.¹

1 Department of Health and Human Services analysis of unpublished Department of Environment, Land, Water and Planning population projections. As older Victorians are significant consumers of health services, this increase will place additional pressure on existing services, particularly in the growth areas.

Burden of disease

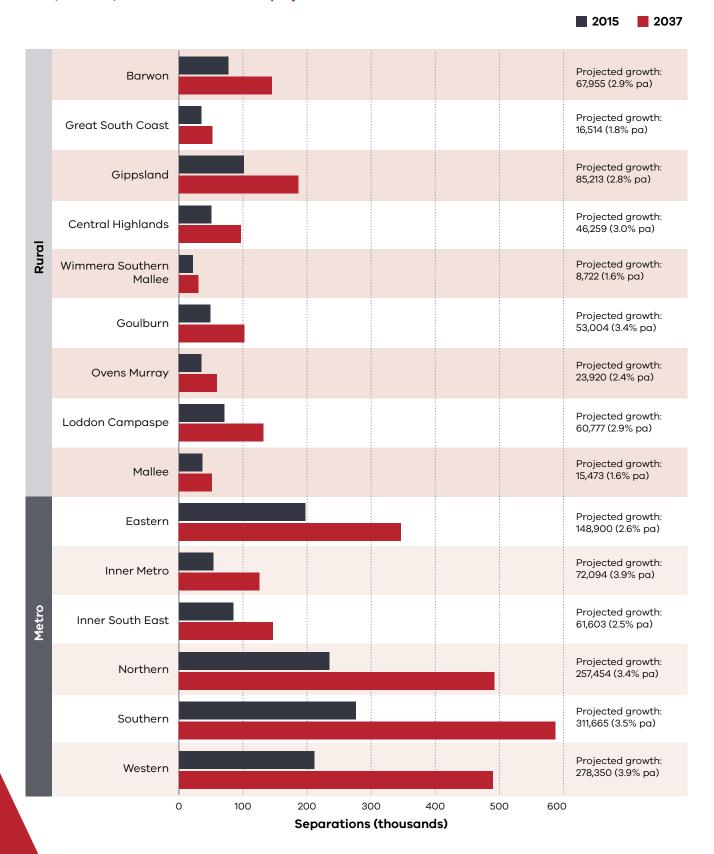
Chronic diseases (such as cancer, cardiovascular diseases, mental health and substance use disorders and musculoskeletal conditions) and injury are the leading causes of ill health and death in Australia, and have been for some decades (Australian Institute of Health and Welfare 2016c).

Over recent decades, premature deaths associated with some chronic diseases have declined dramatically. This means more people are living into old age with one or more chronic conditions.

Despite this, premature death remains a significant issue. The three leading causes of premature death for all Australians are coronary heart disease, lung cancer and suicide. In 2015 nearly one in five deaths (18 per cent) among people 25–44 years of age were due to suicide (Australian Institute of Health and Welfare 2016c).

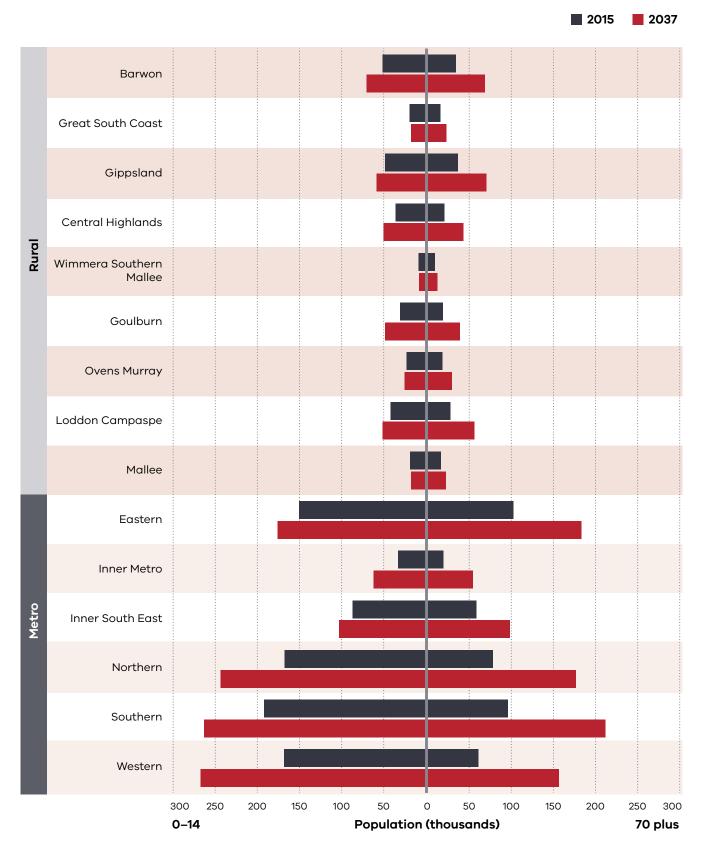
Mental health and substance use disorders are responsible for 12 per cent of Australia's total burden of disease. They are the third biggest cause of ill health behind cancer and cardiovascular disease and are the main cause of ill health within late childhood, adolescence and adulthood up to the age of 49 years (Australian Institute of Health and Welfare 2016c).

Figure 4: Demand for public hospital admitted episodes by Metropolitan and Regional Partnership area, Victoria, 2015 (actual) and 2037 (projected)



Source: Department of Health and Human Services Inpatient Projection Model 2016

Figure 5: Population in the youngest and oldest age categories by Metropolitan and Regional Partnership area, Victoria, 2015 (actual) and 2037 (projected)



Source: Department of Health and Human Services analysis of Department of Environment, Land, Water and Planning 'unpublished population projections 2015'

Chronic diseases cause more than three-quarters of all premature deaths and ill health. Half of all Victorian adults report having at least one chronic disease and one in five have two or more chronic diseases. These chronic diseases are often preventable, yet almost all adults have at least one risk factor and three in 10 have three or more risk factors. More than one-third of patients admitted to hospital have a chronic condition.

Inequality and disadvantage

Disadvantaged communities tend to have poorer health outcomes and lower levels of positive behaviours—like regular exercise and a balanced diet—that promote good health.

Unemployment, socioeconomic disadvantage and the percentage of low-income families and people experiencing mortgage stress are higher across outer north, west and south-east Melbourne (Figure 6).

People living in disadvantaged areas tend to have poorer health or are at greater risk of ill health including having higher rates of obesity, type 2 diabetes, high blood pressure and smoking. These areas also tend to have more children whose vital early stages of development are at risk.

Because people living in disadvantaged areas also tend to have lower rates of private health insurance cover, they are higher users of public health services.

Aboriginal Victorians

Victorian Aboriginal communities continue to be disproportionately disadvantaged in health, wellbeing and safety outcomes including illness, homelessness, psychological distress, family violence and substance abuse. Aboriginal people in Australia are 2.3 times more likely to die early or live with poor health than non-Aboriginal Australians (Australian Institute of Health and Welfare 2016a).

Cultural diversity

Victoria has a rich history of cultural diversity, and this is increasing with rapidly changing global migration patterns (Phillimore et al. 2015). This brings with it shifting patterns of language, cultural values and health status—adding to both the richness and complexity of local communities. The current speed and level of change creates challenges for planning and providing services to people living in the most diverse neighbourhoods, which frequently function as 'arrival zones' for newcomers because of affordable housing (Davern et al. 2015).

Key facts: Migration patterns

More than 49 per cent of Victorians were either born overseas or have at least one parent born overseas

Net annual overseas migration to Victoria is forecast to be 65,000 by 2030 and 75,000 by 2051.

Around 4,000 refugees settle in Victoria each year through the Humanitarian Programme.

An additional 4,000 Syrian and Iraqi refugees will settle in Victoria over the next few years.

Another 10,000 people who arrived as asylum seekers live in the Victorian community on bridging visas while they wait for the determination of their refugee status.

Regional refugee settlement is expected to increase in future due to the new Safe Haven Enterprise Visa conditions.

Sources: Department of Environment, Land, Water and Planning 2016; Department of Health and Human Services 2017a; Australian Bureau of Statistics 2017.

Legend
Index of relative socioeconomic disadvantage 2011,
statistical area level 1

Quintile

Most disadvantaged

No data

Figure 6: Percentile rank within metropolitan Melbourne, Index of Relative Socio-economic Disadvantage by statistical area level 1

Source: Australian Bureau of Statistics 2011

Future state

- ✓ Our health system will be geared towards prevention first, with treatment as needed.
- ✓ Our services and facilities will be sensitive to gender, cultural, age and sexual diversity through access to specific and responsive services, including welcoming, safe environments.
- ✓ The digital age will mean self-care and active participation in care become the norm.
- ✓ Government funding support will be more strongly tied to the outcomes delivered for people and communities—and less about how many times a service was provided.

- ✓ More care will be delivered in the community, better supporting vulnerable people including those with chronic disease.
- ✓ Most primary and social care services will be delivered through, or in partnership with, a local health and wellbeing hub, making it easier for people to access services and navigate the system.
- ✓ Integrated, place-based planning will address the social, physical and environmental factors that affect health and will build meaningful local ways to improve health and wellbeing.
- New technologies, drugs and changes to the workforce will mean more life-saving treatment can be delivered prior to hospital care.

Initial steps

Increasing prevention and early intervention capacity

We will increase the capacity and reach of prevention and early intervention services by better integrating how they are planned and delivered at the local level, changing the way we commission services to encourage working together for people who need more integrated care, and providing better information and tools for more personalised care.

Action 1: Integrating prevention and early intervention

We are establishing a new way of working—one that builds on the unique strengths of people and places to deliver solutions that are relevant to the needs of local communities, are effective at addressing their problems and are sustainable over time.

We will make it easier for a range of partners — including local councils, public health services, community health services, Aboriginal community-controlled health services and Primary Health Networks—to come together to develop shared plans and aspirations for the health and wellbeing of their local communities. Over time, this will include aligning municipal health and wellbeing plans, health service statements of priorities and other key documents for planning and setting priorities for delivering healthcare.

Groups of providers will need to work together to improve the health and wellbeing of people in their area. There will be a greater focus on measuring whether we are making people healthier, rather than counting how many times they received a service.

We will work with Primary Health Networks to improve the way the system works for people with similar care needs including better linking primary healthcare with areas such as drug treatment and support and mental healthcare.

Health Care Homes are a Commonwealth Government initiative that will provide bundled payments to general practices and Aboriginal community-controlled health services to provide a home base for patients with chronic and complex conditions. In Victoria, we will work with the Commonwealth to support the roll-out of this initiative, with stage 1 to be in the catchment of the South Eastern Melbourne Primary Health Network.

State-funded community health programs are accessible across the state and are currently delivered by 86 providers—through 31 independent community health centres and 55 community health services run by metropolitan and rural public health services. The program targets disadvantaged populations with the poorest health and the greatest economic and social needs, providing health promotion and services such as community nursing, allied health and counselling. Community health services also provide a wide range of other health and social support services, spanning areas such as early childhood, immunisation, family violence, disability and aged care.

We will strengthen the role of community health in the Victorian health system, by making them a key partner in provider alliances and health and wellbeing hubs. This recognises the important role that community health has in driving integration, supporting vulnerable groups and providing an alternative to hospital attendance for some types of healthcare. A more joined-up approach to planning across different levels of government and funded agencies will promote better alignment of investment and service delivery platforms. This is explored further in Action 2.

We will also work more closely with Aboriginal community-controlled health organisations to support the delivery of culturally respectful and holistic responses to Aboriginal communities.

These changes to primary care will complement the changes to individualised funding for disability under the National Disability Insurance Scheme (NDIS) and the Commonwealth's recent shift to 'bundled' community support packages in aged care.

Action 2: Commission healthcare in a way that encourages integration centred on people's needs

We will change the way we fund, monitor and evaluate how healthcare is provided—the way we 'commission' services—to get providers working together and to make them responsible for delivering person- and family-centred care focused on improving health outcomes.

We will give funds to health services and Primary Health Networks that can be used flexibly to meet the needs of people with health conditions that put them at risk of being admitted to hospital. Working together, health services and Primary Health Networks will in turn commission groups of providers to reach out to individuals and families in their homes and in the community. These groups of providers will be tasked with making sure people at risk of hospital admission have the care and support they need to stay healthy.

The most important part of this new commissioning approach is that providers won't be responsible for just delivering a certain number of hours of care or type of service. Instead, they will have to show they have actually improved people's health including by avoiding hospital admissions for things that can be addressed through earlier care provided in the home or community.

This means providers will need to deliver integrated care. For the people needing the care, it will mean that services are seamlessly organised around their needs and, wherever possible, their preferences. There will be greater opportunities for care to be provided in their home or in a single, community-based location close to where they live or work.

To achieve this goal, we will set up integrated hubs for health and social services within a single location. These 'health and wellbeing hubs' will be established at existing service sites and in new locations where people live and work.

Health and wellbeing is not just about getting the right healthcare. Social services and other care and supports are essential, particularly for people who are disadvantaged, vulnerable or have complex needs. The new funding approach for health services will work alongside similar initiatives for social care and disability services, ensuring an integrated approach to the full range of needs for individuals and families.

The health and wellbeing hubs—and the flexible funding approach supporting them—will have strong links to family violence reforms. This will bolster opportunities for prevention and early intervention in family violence and more broadly child vulnerability as major social challenges for Victoria and priorities for the whole system.

The Victorian Budget 2017/18 invested \$448.1 million to establish 17 Support and Safety Hubs across the state. The first Hubs will be launched in the Barwon, Bayside Peninsula, Inner Gippsland, Mallee and North-East Melbourne regions with functionality building from the end of this year. The statewide co-design for the hubs commenced in late 2016. Local co-design and implementation of the Hubs will be led by the new coordination agency Family Safety Victoria (FSV). FSV will establish and initially manage the Hubs.

Our health and wellbeing hubs will form part of local area access networks, and build service co-design and/or co-location opportunities with the new Support and Safety Hubs. This approach will promote a coordinated access point for safe, inclusive and wrap around services for those at risk of or experiencing family violence, and families in need of support with the care, wellbeing and development of children and young people.

Health and wellbeing hubs and new funding arrangements will be rolled out across the state, but we will initially focus on our growth areas to provide the new services they require for disadvantaged, vulnerable and multiple needs groups. Action 15 has further details about how health and wellbeing hubs will meet the needs of these groups in the community.

Action 3: Providing better information and navigation tools

We will improve data, information and online tools, making them available on smartphones and other devices. This will improve the way people take care of themselves, navigate the service system and customise care to their needs. Patients and families will be able to routinely choose and book appointments online (from a menu of providers) in a safe, secure and convenient way.

Accelerating alternatives to hospitalbased care

We will develop community- and home-based service capacity, reducing the need for people to go to a hospital for non-emergency or routine care, and encouraging people to seek help early. The nature of chronic disease means that most care can, and should be, delivered through non-acute services in the community. Victoria is fortunate in having a strong network of community health services that can play an important role in this.

We will also provide more care outside hospitals by: having clearer pathways and guidelines about optimal care; using technology to increasingly deliver 'virtual' or remote care; and making more widespread use of care coordinators and navigators, assistants and advanced practice roles.

Action 4: Expanding primary care service options

The Victorian Government has committed \$28.7 million to introduce 20 Supercare Pharmacies by 1 July 2018 to provide pharmacy services 24 hours a day, seven days a week. Supercare Pharmacies will have an experienced nursing service for four hours every night, for assessment and treatment of minor injury and illness. The Supercare Pharmacies initiative will be evaluated in 2019 to assess its performance and recommend any needed changes to delivery after 2020.

In addition, a new Pharmacist Chronic Disease Management pilot is being established in 2017 to test how pharmacists and general practitioners can work together better to help patients manage chronic disease and medication more effectively.

We will build on these initiatives by encouraging integration through flexible funding, supporting collocation of other services and fostering shared arrangements to better enable after-hours general practice, pharmacy and diagnostic services.

Action 5: Redesigning specialist clinics

We will make hospital specialist clinics available where they are needed within and beyond the hospital walls. They will have much greater capacity to support primary care providers to deliver early and ongoing management of people's needs in the community. This will involve:

- developing clear thresholds and pathways for referral to specialist services or for medical or surgical care (this work will be done jointly with Primary Health Networks and will flow out of work on role delineation)
- focusing hospital specialist clinics on rapid assessment and management in order to get patients back to community- or home-based care without avoidable delays
- increasing use of mobile assessment and treatment services to reach into home and community settings including residential services
- advanced practice roles and use of generalists supported by specialists
- setting targets for using telehealth to
 - support primary care providers in early and ongoing management of a patient's needs
 - increase regional access to specialist services to address service gaps
 - minimise the need for people to travel
- expanding access to services that can be provided in people's homes, including Hospital in the Home, chemotherapy and renal dialysis, facilitated by telehealth and other mobile or remote technologies.

Targeted investment to address priority needs

The strongest population growth is largely occurring in outer metropolitan and some regional areas with limited services and higher levels of socioeconomic disadvantage. Even under the best-case scenario, additional infrastructure investment will be required in the short term to expand existing capacity. Where possible we will renew and redesign existing infrastructure to enable contemporary models of delivery and safe, high-quality care. We will also investigate and adjust funding to support more equitable health outcomes by ensuring services can respond to the varying needs of local communities.

Additional capacity to address demand

The Victorian Budget 2017/18 provides \$2.9 billion to improve health care services across our suburbs and our state. This includes additional capacity to provide critical services and treat more patients over the next four years:

- \$1.31 billion to manage demand for inpatient care, and for public emergency departments and urgent care centres across the State
- \$26.5 million to resource Ambulance Victoria
 to manage increased demand for emergency
 response and transfers. This builds on the \$500
 million plan to improve Ambulance response
 times announced in November 2016, which
 includes funding for 450 new paramedics and
 the construction of six super response centres
 in Melbourne's growth corridors.
- \$319.8 million to improve access to elective surgery
- \$201.1 million for more capacity to provide bedbased and community mental healthcare, with another \$20 million announced since
- \$85.2 million to boost forensic mental health services
- \$78.4 million to improve access to alcohol and other drug treatment services.
- \$29.6 million to deliver Victoria's cancer plan, and prepare for thunderstorm asthma emergencies and other events related to extreme weather.

The private sector also has a vital role to play. We will explore opportunities for new funding and financing arrangements that build better links with the private sector and capitalise on the shared responsibility to meet growth in demand and complexity.

Action 6: Meeting the needs of a growing population

Starting from 2017–18, funding totalling \$1.67 billion over four years will deliver additional health care services to meet the needs of a growing population.

There is also an additional \$428.5 million in new hospital upgrades and equipment that will provide patients and staff with the world class facilities they deserve. This includes major infrastructure investments to address our unprecedented population growth pressures and modernise our facilities to support safer, better care:

- \$162.7 million to expand the Northern Hospital with a seven-storey tower that includes 96 new inpatient beds, three new operating theatres and more treatment rooms
- \$50 million to develop a business case and begin design work for the construction and potential land purchase required for a new Footscray Hospital
- \$7.5 million for planning and design work for the future redevelopment and expansion of Warrnambool Base Hospital to cater for growing demand in the south west of Victoria
- \$63.2 million to provide an emergency department at Monash Medical Centre for our sickest kids
- \$29.8 million for critical infrastructure works at Austin Health, to make sure patients in the north-east can receive the best care, close to home
- \$60 million for new medical equipment and to replace ageing infrastructure in health services across the state, with another \$20 million announced since.

Because of the immediate challenges driven by rapid population growth, an immediate priority has been to plan for the needs of the state's outer-urban growth areas to the north, west and south-east of Melbourne, and to respond to the expected rapid growth in the inner Melbourne area. We will continue to respond to population growth by investing in additional service and infrastructure capacity to treat more patients sooner. Further priorities will be determined as healthcare locality plans are completed across the state.

Healthcare locality plans will be aligned with the work of Regional and Metropolitan Partnerships. These plans will link to priorities identified through regional and metropolitan assemblies and the outcomes of the five-year plans for jobs, services and infrastructure, being prepared for each Melbourne metropolitan area by the Office for Suburban Development. This close alignment to broader plans and priorities will ensure healthcare services and facilities meet local needs as communities change and grow.

As part of this process, our capital planning will need to become more flexible and responsive to locality planning, with stronger engagement of communities where infrastructure priorities have been identified.

Action 7: Closing critical gaps in mental health services

Victoria does not have enough mental health community and bed-based capacity to meet the growing demand and complexity of needs in our community. This means that only people with severe symptoms or very acute illness are able to get access to a bed, and opportunities to support them in the community are very limited.

As a result, more people needing inpatient care are showing up at emergency departments after their condition has reached a crisis point. This crisis-driven response creates a vicious circle: increasing emergency presentations drives a need for more bed-based care, diverting more resources from community settings where care could have been provided sooner.

People with mental illness face unique challenges. Their physical health is generally poorer and they may need assistance with disability and substance abuse. People with a mental illness are also over-represented in other social services including homelessness and the criminal justice system.

Victoria's 10-year mental health plan (Department of Health and Human Services 2015c) prioritises meeting unmet demand, prevention and early intervention, system integration and workforce development. The 10-year plan is underpinned by a focus on the outcomes of care to ensure our efforts are making a real difference.

It includes a whole-of-government suicide prevention framework, with the Victorian Government allocating \$27 million in the 2016–17 Victorian Budget to support two major suicide prevention initiatives—place-based local trials and assertive outreach—which commenced in early 2017 and will continue for the next six years. The place-based local trials partner with Primary Health Networks to deliver Suicide Prevention Partnerships in 12 local communities across Victoria.

In the *Victorian Budget 2017/18* the Victorian Government has committed \$201.1 million over four years in a major boost to bed-based and community mental health capacity, plus an additional \$85.2 million for forensic mental health. Together with an additional \$39.3 million to support a range of actions in 2017-18, this investment will strengthen the mental health service system, including by:

- opening additional mental health beds and extending the availability of multidisciplinary care within inpatient units seven days a week
- \$20 million for expanded community-based treatment and support
- \$8.4 million to develop the workforce for, and improve access to, acute mental health services for Aboriginal Victorians
- \$43.9 million to expand forensic mental health services that keep the community safe
- expanding the mental health short stay model to better care for patients in some of our busiest emergency departments
- \$8.3 million for a new prevention and recovery care service in Ballarat
- \$10 million for renewal of existing facilities to ensure they are fit for purpose and safer
- supporting adoption of and access to best clinical practice by establishing a mental health clinical network.

In addition, we are creating housing opportunities for vulnerable people who are sleeping rough through the \$9.8 million Towards Home initiative.

Action 8: Expanding access to alcohol and other drug treatment services

Communities across Victoria are grappling with the challenges of alcohol and other drugs, including ice. The harm associated with alcohol and other drugs continues to place a significant burden on both the health and human services systems.

As a result of historic underinvestment in alcohol and drug treatment services, there is significant pressure on the current treatment system, particularly residential services. This has affected the ability of the treatment system to achieve strong outcomes for individuals and families.

The number of clients presenting with an addiction and a mental illness, also called 'comorbidity' or 'dual diagnosis', is increasingly common: 30 per cent of clients present to services with a dual diagnosis. Treatment of clients with a

dual diagnosis is generally more complex, often requiring longer treatment times and specially trained clinicians.

The exponential increase in use and associated harms of the methamphetamine known as 'ice' over the last four years, combined with increases in alcohol harm and the number of complex clients, has meant the treatment system is increasingly being challenged to provide the right service mix to meet client needs. It has also contributed to high waiting lists for key services, particularly residential services.

Under the *Ice action plan* (Victorian Government 2015), we are making strong progress to expand access to alcohol and other drug treatment services. More than \$180 million has been invested since 2015-16 as part of the *Ice action plan*.

Stage one of the *Ice action plan* in 2015–16 saw \$45.5 million in new commitments of:

- additional support for families
- expanding drug treatment services
- enhancing the capacity of Needle and Syringe Programs
- training and supervision for workers
- Community Ice Action Groups in regional areas. Stage two's \$57.6 million investment in 2016–17 included commitments of:
- further training and support for frontline ice workers
- a 20-bed facility in the Grampians region
- · expanding the Drug Court of Victoria
- continuation of a partnership program to respond to ice in Aboriginal communities.

We will continue this expansion through stage three of the *Ice action plan* in 2017–18, with \$78.4 million in new investment announced to:

- establish 30 new residential rehabilitation beds
- create new treatment places for parents and those on community corrections orders
- plan for and purchase land for three new residential rehabilitation facilities in regional Victoria
- expand support for people at risk of harm within the treatment system
- increase earlier access to telephone and webbased support services
- support upgrades to alcohol and other drug and mental health service facilities.

Action 9: Improving access to first responders

We will improve critical access to pre-hospital care. As part of this we will strengthen ambulance capacity and transport across the health system. We will also reduce the need to travel through better use of technology and by delivering more care closer to home, when it is safe and efficient to do so.

Clearer system role delineation will make it easier for patients and providers to access definitive care in a timely way (see 'System role delineation' under Priority 2 for more details).

In addition, access to ambulance services will be further improved through the Ambulance Response Time Rescue Fund of \$60 million to:

- improve ambulance response times, especially for Code 1 responses
- better match resources to patient needs and manage demand for services
- improve paramedic health and wellbeing
- improve rural ambulance services.

This is in addition to the investment the government made in November 2016 of \$526 million to expand ambulance services and provide additional paramedics to meet performance targets including:

- employing 450 new paramedics over the next three years
- establishing six new 'super response centres' supported by more than 200 paramedics to meet growing demand in Melbourne's suburbs
- building new or upgrading 15 branches across the state, on top of the 20 upgrade projects already underway
- creating 12 new services in rural and remote towns with a local paramedic and vehicle, based on a successful model trialled at Wedderburn and Warracknabeal.

We are also ensuring that ambulances, especially emergency ambulances, are reserved for the most critically ill by:

 increasing the number of clinicians available to assess and link more non-urgent triple zero (000) callers with alternative services

- providing alternative and more appropriate care options for patients who don't need an emergency ambulance (this may include access to after-hours locum services or the use of non-emergency patient transport)
- supporting links with local primary care providers to reduce dispatches of emergency ambulances where a primary care response is more appropriate
- identifying opportunities to maximise capacity in the system and patient choice, through ambulance services working collaboratively with public and private health services.

Active collaboration with the private sector

Currently, the private sector (private hospitals and day procedure centres) provides 38 per cent of hospital admissions in Victoria and accounts for approximately 40 per cent of the state's total hospital beds. With the private sector providing such a large and critical part of the state's health services, it is important to have a more systematic approach to opportunities for public–private collaboration.

The majority of private health services are located in the Melbourne metropolitan area. Most Victorians who use private health services live in inner city Melbourne and the eastern and southern suburbs.

Privately provided healthcare is growing quickly. In the past 12 months, an additional 500 private hospital beds have been registered in Victoria, representing an overall increase of five per cent in a single year. Private hospital services will continue to grow in response to demand from private patients. These services have the capacity and capability to also respond to demand pressures in the public health system.

Action 10: Working with the private sector to maximise benefits for all Victorians

Increased partnering between the public and private sectors to meet the needs of all Victorians has the potential to deliver innovative and cost-effective models of healthcare.

We will establish new ways of working collaboratively with the private healthcare sector in Victoria including:

- joint planning on the configuration and distribution of health services
- agreement on service pathways that work across public and private services (building

- on the role delineation and referral networks described under Priority area 2
- providing patients with appropriate services close to home, particularly by exploring options to increase private services in rural areas
- flexible use of technology and infrastructure across the public and private sectors to get the maximum benefit from the combined resources of the two sectors.

A good example of how this can work in practice is the close consultation and collaboration on the development of Casey Hospital with the neighbouring private hospital being developed by St John of God in Berwick.

Targeted investment to drive innovative new service models

The Victorian Government has committed to implementing the recommendations of the Travis Review which highlighted the significant role innovative models of care can play in improving the performance of Victoria's public hospitals and meeting growing demand.

Action 11: Identifying, scaling and embedding innovative practice across the Victorian healthcare system

Better Care Victoria was established in November 2015 to support sector-led innovation and improvement projects and the development of capability for this work across the state. First-year investment of \$10 million in 2016–17 has funded:

- two rounds of innovation project funding resulting in \$8 million in seed funding to support 22 innovation projects across metropolitan Melbourne and regional areas
- the Improving Emergency Access Collaborative with 11 health services, a 12-month project to reduce the time patients wait to be treated in emergency departments
- professional development for senior and clinical leaders across the health system to drive innovation in their organisations and make the changes stick
- online tools and resources to help organisations make improvements and share best practice.

We will continue this work through:

- scaling up existing projects and other examples of best practice that have shown they can deliver benefits
- testing new innovations that improve access to high-quality care

- funding more collaborative work across organisations aimed at improving access to care (such as the time spent waiting for elective surgery)
- providing targeted improvement support to turn around performance in underperforming services
- funding a longer term project to test how the system could be transformed to provide the kind of care that will be needed in the future
- building the capacity of health service workers to innovate and improve through leadership and organisational development, and by sharing best-practice and problem-solving approaches.

What a proactive health system will mean for Victorians...

- Increased numbers participating in immunisation and screening programs to reduce preventable conditions including preventable infectious diseases and cancers
- People better supported to look after their health, navigate the service system and customise care to their needs
- Fewer people waiting longer than recommended for elective surgery, emergency department care and ambulance services
- More equitable access to outpatient services and specialist mental health and drug treatment services across the state
- Reduced need to travel because more care is being delivered closer to home or via technology, when it is safe and efficient to do so

...and their health system

- Investment in additional service and infrastructure capacity to treat more patients sooner, particularly where there is high population growth
- Alignment of health service planning and investment across Commonwealth, state and local government-funded partners for populations in defined geographic areas
- Funding services in new ways to create stronger incentives for prevention, early intervention and more integrated service delivery, including through health and wellbeing hubs.

Priority area 2: Creating a safety and quality-led system



Current state

Better, safer care

Victoria is home to some of the world's best health services, clinicians and medical research institutes. However, there is more we can do to reduce unwarranted variation in practice and outcomes, and to prevent avoidable harm.

Targeting zero: the review of hospital safety and quality assurance in Victoria (Duckett et al. 2016) is clear that safety and quality needs to be elevated right across the health system. The Victorian Government has committed to implementing all the recommendations through Better, safer care: Delivering a world-leading health system (Department of Health and Human Services 2016a), which strives for patient care that is consistently world-class, continuously improving and achieves the best possible outcomes for all Victorians.

Good progress is already being made including the establishment of new safety and quality entities that will lead the way—the Victorian Clinical Council, Safer Care Victoria and the Victorian Agency for Health Information.

Key developments

Under Better, safer care we have:

- established Safer Care Victoria to work with health services on monitoring and improving the quality and safety of care delivered across our health system, with the goal of achieving zero avoidable patient harm
- established the Victorian Agency for Health Information to analyse and share information across our health system to ensure everyone has an accurate picture of where we are getting it right and where we can do better
- appointed the Victorian Clinical Council to put clinicians front and centre to provide clinical expertise to the government, the department and health services on how to make the system safer and provide better care to all Victorians
- appointed the Ministerial Board Advisory
 Committee to ensure our hospital and health
 service boards have the right mix of skills,
 knowledge and experience to strengthen local
 governance and decision-making
- begun work on a new Quality and Safety
 Bill to be introduced into parliament in 2018
 (addressing a number of *Targeting zero's*recommendations requiring a legislative
 response), with a major review of the *Health*Service Act 1988 to follow
- started revitalising Victoria's Clinical Networks, to improve specific outcomes of care across each major clinical stream including establishing six new networks to focus on areas such as mental health and infectious disease.



Managing complexity and risk

A key recommendation of the *Targeting zero* report was the need for stronger risk management across the health system 'so that hospitals only offer care that is within their capabilities, with high-risk care concentrated in the centres where it is safest' (Duckett et al. 2016, p. xv).

Currently, there are designated providers for a number of statewide services including:

- major trauma services
- stroke thrombolysis and endovascular clot retrieval
- specialist maternity, neonatal and paediatrics services
- complex cancer services
- organ retrieval and transplantation services.

Our statewide trauma and stroke service systems are well-established and represent world-leading examples of the significant improvements in morbidity and mortality outcomes that can be achieved by consolidating highly complex, time-critical treatments or services.

We need to build on this foundation to ensure the safest possible care is provided across all service types.

Changing workforce

A strong and capable health workforce is essential for delivering safe, high-quality care.

Victoria's health workforce, like the wider population, is ageing. This is making it even more difficult to maintain a suitable local workforce in some specialties, particularly in our rural areas.

The roles and skills of the workforce are evolving in response to: changing consumer expectations; changing patterns of illness and the burden of disease; the shift to wellness and prevention; and emerging technologies and advances in practice.

Key facts: Workforce challenges

Our health workforce is ageing faster than the general population. Most notably, 27 per cent of medical practitioners, 24 per cent of nurses and 37 per cent of midwives are 55 years of age or older compared with 17 per cent of all employed Victorians.

Current projections suggest an adequate supply of medical practitioners and registered nurses but a potential shortfall in midwives and enrolled nurses over the next five to 10 years.

The health workforce is not evenly spread across Victoria or matched to areas of high demand.

The 2016 Commonwealth Department of Employment sample surveys of Victorian employers identified:

- statewide recruitment challenges and shortages for midwives and some allied health professionals (such as sonographers) in regional and rural areas
- employers in regional and rural areas are unable to fill advertised regional positions
- specific challenges in the aged care sector in recruiting registered nurses and allied health professionals.

The public and private sectors also depend on the same workforce for some clinical services. For example, most Victorian surgeons work across the public and private sectors. In some rural areas, the sustainability of medical, nursing and allied health workforces relies on them being able to do work in both the public and private health sectors.

Our carer workforce is also critical to the health system. It has been estimated that it would cost \$60.3 billion to replace the hours of care provided by unpaid carers in Australia (Deloitte Access Economics 2015). Carers play a key role in keeping people well, supporting loved ones to remain in their own homes and to participate in everyday community life.

Workforce support - Ice action plan

Under Victoria's *Ice action plan*, a free online training program has been funded that provides workers and managers with information about managing people who are violent and aggressive, either from using ice or other factors.

This training provides detailed information to workers about how to de-escalate potentially violent incidents and ensure the safety of themselves, other workers and community members who may be in the area.

It also guides managers on best practice organisational approaches and workplace practices that can reduce violent behaviours and protect workers.

Organisations are being encouraged to use the training program as a basis for delivering face-to-face contextualised training that responds to the specific needs of individual workplaces.

Additional materials are now being integrated into the training program for workers who are exposed to higher risk because of the nature of their work, including emergency department staff, paramedics and people working in mental health facilities.

These customised modules will respond specifically to the risks that these workforces face when providing frontline services in high-stress environments and in uncontrolled situations, including in people's homes.

This new wave of training will further develop the skills and confidence of workers to manage difficult and potentially violent encounters with ice-affected people.

Future state

- ✓ Clearly delineated health service roles will underpin coordination and integration of services across the system—ensuring the right types and levels of care are available where they are needed.
- ✓ A highly networked system will enable patients to move seamlessly and quickly through the system, regardless of where they live.
- ✓ All public and private services will operate safely within their capability, with a high degree of transparency and accountability.
- Advances in practice and technology will make complex procedures routine and may make some obsolete as better alternatives become available.
- ✓ The community will know who delivers what level of care and the outcomes of that care, guiding individual choices and simplifying navigation of the system.
- ✓ As long as it can be delivered safely and with good-quality outcomes, most care will be delivered locally—with the exception of more complex treatment that will be readily available in larger regional centres or Melbourne.
- ✓ New workforce models, roles and skills, shaped by role delineation, will help meet demand and deliver safe, high-quality care.
- ✓ Workforce development, education and training will foster leadership, collaboration, clinical excellence and a strong safety culture.

Initial steps

System role delineation

By clearly designating roles of service providers and standardising protocols and referral networks around them, patients can access the level of care they require in a timely way regardless of where they enter the system.

We will achieve this through the staged introduction of a role delineation framework for the Victorian health system. The framework will identify designated roles and levels of required capability for major clinical or service streams.

What is a role delineation framework?

Formal role delineation specifies the minimum requirements each health service must meet to provide safe, high-quality services to patients of varying complexity in a particular clinical or service stream (such as cardiac care or maternity care).

It is underpinned by capability frameworks that set out: the required skills, experience and capacity of the workforce; the infrastructure and equipment requirements; and the formal relationships needed between services to make sure people have access to the right level of care in the right place.

Role delineation makes patients safer and gives them access to high-quality care by ensuring:

- patients are treated at facilities that can appropriately manage their level of clinical risk, with referral as appropriate, based on agreed referral pathways
- that within each capability level, health services are providing the same quality of care, regardless of location
- relationships between services are clear, in turn strengthening roles and referral pathways.

Role delineation will help plan for the future by identifying when the capability of a health service should be adjusted in response to changing population need, emerging technology and best practice.

Where appropriate, it will also set minimum volumes for procedures and interventions to make sure services are doing enough of particular kinds of procedures to perform them safely (see Action 13 for more detail).

Role delineation will enhance the role of regional health services, expanding their capacity, capability and breadth of services. Services that today mean someone living in rural Victoria has to go to Melbourne for treatment will be increasingly available at regional health services. For example, treatments such as cancer therapy or cardiac catheterisation will be available in more locations across the state through the continued expansion of regional integrated cancer centres and the establishment of regional cardiac catheterisation laboratories.

Comparative data on clinical and patient outcomes will be used to drive further improvements in safety and quality.

Formally defined and agreed referral networks will be established as a part of the introduction of role delineation. These referral networks will ensure certainty for people needing a particular type or level of care. This is especially important to ensure people living in rural areas can quickly and seamlessly access more complex care if they need it. Referral thresholds and pathways built into referral networks will ensure everyone is clear about when and where a particular patient should be referred elsewhere to get the care they need.

These changes will ensure health services (public and private) have the right clinical and support capability to provide safe, high-quality health services to Victorians.

Once in place, role delineation will guide public investment, including decisions about what high-value equipment or technology is required and where it should be located (regardless of the funding source).

Action 12: Clearly defining roles and referral networks

Our statewide specialist and tertiary health services play a number of important roles in the system, providing system leadership, delivering higher complexity services to patients in their local area and across Victoria, and by promoting workforce and service development, research and innovation in practice.

Victoria's Heart Hospital

The Victorian Government provided funding of \$15 million in the 2015–16 State Budget, with a further \$135 million allocated in the 2016–17 Budget for the Victorian Heart Hospital.

The Victorian Heart Hospital will bring together the world's best cardiovascular care and groundbreaking medical research and training to become Australia's first dedicated, purpose-built heart hospital.

It will be a partnership between Monash Health, Monash University and the Baker IDI, and will be built on the Monash University site in Clayton.

The Victorian Heart Hospital planning is now well underway, guided by Victoria's *Cardiac design*, service and infrastructure plan.

We will further embed the role of statewide and tertiary health services by:

- consolidating their role in providing highly complex care, especially if this is also low volume
- identifying designated centres that will support groups of hospitals in rural locations to provide more complex care out of hours (see box 'Networked support for rural hospitals' on page 67)
- setting up standard referral pathways across outer metropolitan, regional and rural health services
- using technology to help get patients back to their local health service for recovery as quickly as it is safe and appropriate to do so.

We will implement key actions from the *Design,* service and infrastructure plan for Victoria's cardiac system (Department of Health and Human Services 2016b) including:

- realigning system roles and referral and care pathways to improve access to comprehensive cardiac care across metropolitan and rural Victoria.
- implementing cardiac service networks and moving to one specialist cardiac surgery centre per network over the next five years.

Action 13: Setting minimum volume thresholds

Targeting zero highlighted the need to identify procedures and interventions where there is a material relationship between the volume undertaken and the clinical outcomes for the patient.

This concept of a 'material volume–outcome relationship' is widely acknowledged in the health sector. If there is a material relationship between volume and outcomes for a particular treatment, it means that the more times an individual health service performs the procedure or intervention, the better the clinical outcome for the patient. This is linked to individual clinicians and teams being able to maintain their skills through practice.

The United Kingdom, the United States, New South Wales and Queensland already have minimum thresholds for specific procedures (such as for cardiac and cancer care).

Health services providing such care should also have the right infrastructure, capability and experience to provide care during and after the procedure or intervention.

Targeting zero called for such procedures and treatments to be concentrated within a defined set of 'high-volume' centres.

We will identify and review the evidence for material volume–outcome relationships across our health system, starting with organ transplant, cardiac, maternity and cancer care. This work will be led by Safer Care Victoria in partnership with the Victorian Clinical Council, the Victorian Agency for Health Information and the Department of Health and Human Services. We will aim to build on what health services and other institutions already do to make sure care is safely provided.

Where there is a recognised relationship between the volume and outcomes of care, we will designate which public and private health services can provide this care by mandating minimum volume thresholds that health services must meet to be able to safely provide these services.

In the public system, this may mean some work is done only at a smaller number of high-volume locations. This could result in some outer metropolitan, regional and rural centres no longer providing some kinds of treatment. However, this change will enable more low-complexity work to be provided by these centres. This redistribution of activity across the system, aided by clearly defined roles and associated support networks, will allow more care to be delivered safely closer to where people live.

Action 14: Defining clinical service capability

Defining each health service's capability relies on consideration of a range of interrelated factors including: patient and procedure complexity and risk; staffing types and levels; support service availability; equipment needs; and clinical governance, education and training programs.

In Victoria, maternity and newborn services is currently the only area in which a formal framework of this kind exists. Under this framework, each service has a defined capability level that indicates the kind of care it can provide (Figure 7). We now need to extend this work to other core areas of clinical practice and rigorously apply capability levels across both the public and private health sectors.

Over the next five years, Safer Care Victoria and the clinical networks will work in partnership with the department to develop and roll out capability frameworks as follows:

- develop capability frameworks for major clinical streams and implement them across the public and private sector
 - this will include assessment of capability by the department (in consultation with the health service) and publication of agreed capability ratings
- monitor compliance and outcomes including using patient-reported outcome measures for every major procedure or intervention
- use the capability frameworks to guide decisions about the type of capacity needed in each place including decisions about what high-cost medical equipment is needed and where it should be located
- look for opportunities to match up public and private providers with the same level of capability in order to maximise the efficient use of resources
- regularly reassess and update capability frameworks to reflect major advances in technology and practice, which will increasingly enable more care to be provided outside of specialist centres.

In 2017 work to develop Victorian capability frameworks for emergency care and cardiac services has begun.

As capability frameworks are progressively rolled out, they will provide greater transparency to facilitate more care being delivered locally where this is safe and appropriate.

The capabilities required to safely and efficiently meet the needs of Victorians across the state will drive how we invest over time in new service and infrastructure capacity.

What a safety and quality led system will mean for Victorians...

- Greater transparency of capability, making it easier for the community to make informed choices
- Timely access to the level of care required regardless of where people enter the healthcare system
- Treatment at facilities that can appropriately manage a patient's level of clinical risk, or referral to a facility that can

...and their health system

- All health services operate within capability and volume requirements, with a high degree of transparency and accountability
- Better alignment of roles with service, workforce and infrastructure capability and capacity
- Formalised referral networks promote timely, seamless access to the right care, in the right place.

Figure 7: Capability levels for maternity and newborn services

Level 6 services

Complex pregnancies, births and neonatal intensive care. Management of labour, birth and puerperium at all gestations.

Levels 4 and 5 services

Medium-complexity pregnancies and babies and moderate complications. Management of labour, birth and puerperium at 34 weeks' gestation (level 4) or 32 weeks' gestation (level 5).

Levels 2 and 3 services

Normal and low-complexity pregnancies and babies. Management of labour, birth and puerperium at 37 weeks' gestation or more.

Level 1 services

Normal and low-complexity pregnancies and babies.
Provision of antenatal and postnatal care in partnership with appropriate birthing hospital.

Adapted from Safer Care Victoria 2017.

Priority area 3: Integrating care across the health and social service system



Current state

Some people experience poorer outcomes

Demographic changes, including ageing and greater cultural and linguistic diversity, have brought with them a growing complexity of needs. This is particularly the case for our most socially disadvantaged and marginalised communities. Complexity can be exacerbated by mental illness, substance abuse, family violence, homelessness, chronic disease or disability. Experiencing barriers to access can also contribute to poorer health, including for Aboriginal Victorians and gay, lesbian, trans, gender-diverse and intersex individuals. The intersection of multiple forms of disadvantage can further impact equity of outcomes in some population groups. In particular, Aboriginal women and women with a disability are at even greater risk of poorer health outcomes as a result of the very high rates of family violence they experience.

The challenge of integrated care

People with complex needs require both health and social services and support, typically from multiple providers and carers. However, integration of 'care' and 'cure' sectors has largely been elusive to date. For people with mental illness in particular, transitions between service types and providers can create significant confusion and disruption in a person's treatment and care.

Some existing services offer a degree of integration. For example, community health services provide a wide range of health and social care programs and can drive local integration for people needing those services. Others, like super clinics, have achieved some integration by offering a variety of services from a single location.

However current funding and organisational arrangements limits the capacity of such services to maximise integration. There is scope to enhance use of these and other services to drive better integration and more localised service delivery.

True integration promises better access and experiences for individuals and their families, as well as greater equity in outcomes for all Victorians.

The need to intervene early

The effort to improve the health status of all Victorians must start early in life. A healthy start to life can provide the foundation for lifelong physical, social and emotional wellbeing and has the greatest potential to reduce inequalities.

Pregnancy and the postnatal period are important lifecycle stages during which health professionals can help women and families to give their children the best start in life. It is also a time of known higher risk for mental illness and family violence, which can have a long-term impact on the physical, social and emotional health of women and babies.



Key features of integrated systems

Best practice systems share the following key features (Rouse, cited in Hopson 2013):

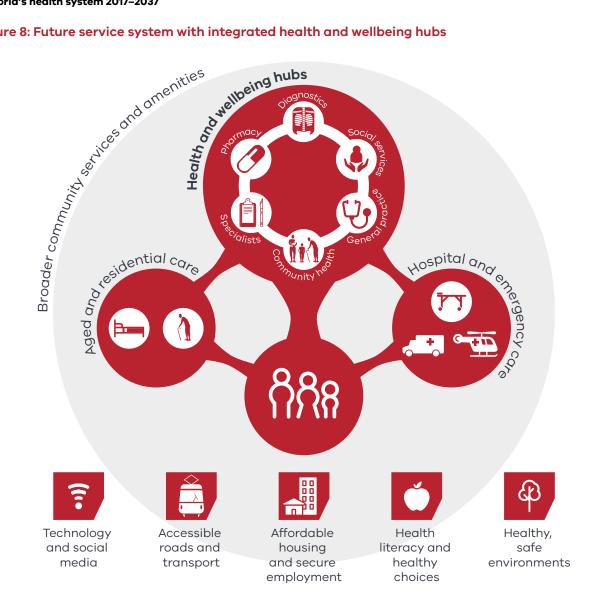
- strong leadership across sectors and disciplines
- multidisciplinary teams led by primary care practitioners
- effective coordination across all types of care including social support and mental healthcare
- seamless transfer between acute, primary and community settings
- funding arrangements that support practitioners to provide care in an integrated way with ongoing dialogue between the lead practitioner and specialists
- identifying people at greater risk, assessing their needs and providing care before things get worse
- focusing effort on preventing disease and ill health and improving people's ability to care for themselves
- improvement processes driven by data
- a single electronic medical record with patient and clinician access and interaction
- aligned incentives across systems (outcomes, user experience, process, value for money).

Future state

- Children and families will be safe, with ready access to supports for their collective health and wellbeing to help them thrive.
- ✓ People will have genuine choice and control over the supports available to meet their holistic needs.

- ✓ More integrated prevention and early intervention will impact on the social determinants of health and wellbeing, in turn reducing inequity, protecting our most vulnerable and minimising the burden of disease.
- ✓ Integration of prevention and care will achieve even greater benefits for people with multiple or complex needs and their families or carers.
- ✓ The way practitioners work together, the way services are run and the way they are funded will all be aligned to improve integration of systems of care.
- ✓ Better use of data and technology will help to create services driven by people's needs, location and preferences.
- ✓ People will be supported in their communities by wraparound services that promote prevention and early management, and can scale up or down to meet changing medical and social needs.
- ✓ Integrated health and wellbeing hubs will provide a full range of services from a single location in the community (see Figure 8).
- ✓ Older people will be able to live as well as possible in the community for as long as possible.
- Co-design and partnerships involving consumers, their families and carers, local communities and workers will be common practice and shape what services are being delivered.

Figure 8: Future service system with integrated health and wellbeing hubs



Initial steps

Responding to vulnerable and complex needs groups

Action 15: Establishing health and wellbeing hubs

Action 2 described how flexible funding will be used to support the operation of integrated health and wellbeing hubs. These will be communitybased hubs for a range of health and social services to be coordinated from and/or delivered in a single location. The mix and level of services within the health and wellbeing hubs will vary, depending on the needs of the local community.

They will be linked to wider service networks and hubs, including the Support and Safety Hubs, to promote stronger systems of prevention and care.

A key objective of health and wellbeing hubs will be to keep people healthy by preventing ill health, intervening early to stop conditions becoming worse, and providing care and treatment that can keep people out of hospital.

Often it is the most vulnerable and disadvantaged people in the community who are at greatest risk of being admitted to hospital for reasons that could have been avoided with better care provided earlier on. Community health services—due to their specific role in targeting disadvantaged groups—will be central to providing integrated care for these people and their families.

Strengthening the capability of organisations to deliver safe and respectful care to diverse

communities is important. Services provided through health and wellbeing hubs will link with mental health, social care and disability services, including through flexible funding arrangements. The 'one stop' hubs will provide easy access and convenience for people, as well as strengthening the social and economic vibrancy of our communities. They will provide a 'centre of gravity', attracting other health services (including private services) to their location.

Where possible, the hubs will operate from existing service sites that will be transformed as necessary to extend the range of services and to ensure the services are fully integrated. Rather than a collection of separate doors into individual services, they will operate as a single access point to a variety of services that can be packaged up and tailored to family and individual needs.

Some hubs will also be established in new facilities, serving the needs of growing communities and new development precincts in Melbourne's growth areas. This includes the Melton Health Hub currently under construction.

Health and wellbeing hubs will also be established in rural areas. Hubs are currently planned for Cobaw, Geelong, Ballarat and Yarram. Locations for further hubs in Victoria will be identified through the locality planning work described earlier.

Action 16: Safeguarding our children and families

This plan builds on reforms under Victoria's 10-year mental health plan (Department of Health and Human Services 2015c), our family violence prevention strategy Free from violence: Victoria's strategy to prevent family violence and all forms of violence against women (Victorian Government 2017), Ending family violence: Victoria's plan for change (Department of Premier and Cabinet 2016a) and the Roadmap for reform (Department of Health and Human Services 2016e), as well as the transition to the NDIS. This includes the Victorian Government's commitment to the establishment of a new Family Violence Prevention Agency for Victoria, to lead the prevention of all forms of family violence and violence against women in Victoria.

We will actively identify women and families who most need care and support during pregnancy, when giving birth, when caring for a new baby—and beyond. Integrated mother, child and family

services will ensure those who are vulnerable and at risk receive the care and support they need.

Health services, social services and disability services will work together using flexible funding to target areas where the most vulnerable families live (such as areas with low socioeconomic status; high rates of obesity, chronic conditions or family violence; or other risk factors).

We will ensure access to vital care and support in the early developmental stages of children's lives, including immunisation. Bundling up funding to bring together previously separate services will help to provide care built around individual needs, allowing local providers to deliver earlier, integrated responses that support the whole family as well as the needs of individual family members. This will give providers the flexibility to find the right solution for each family.

We will also ensure there are clear pathways for referral to other services and funding arrangements that support collaboration between health services, health and wellbeing hubs and the network of Support and Safety Hubs being established across the state under *Ending family violence: Victoria's plan for change*.

Action 17: Building integrated whole-of-life clinical mental health services

To achieve the aims of *Victoria's 10-year mental health plan*, the clinical mental health system needs to provide care that adjusts to people's changing needs over their lifetime, with integrated service provision across the health, social care and justice systems. This will make it easier for people to move between different types and stages of care. People at different ages will have access to the right services for their age group, ensuring appropriate and consistent services will be available across everyone's life span.

There are many facets to an individual's health and social care needs, and integrated and multidisciplinary care must become the norm in Victoria's clinical mental health system. To achieve this, we will support robust coordination and collaboration with the broader health and primary care systems including in conjunction with the Commonwealth's Primary Health Network initiative.

Critical links will also be established with NDISfunded services to ensure people with a mental illness get the support they need to live in the community. Alcohol and drug services will be

supported to screen for mental health issues and to better care for people with a dual diagnosis. Links will also be made with forensic services, particularly in relation to treatment models for youth and their post-release care and support.

Action 18: Strengthening alcohol and drug treatment services

We will continue a strong focus on preventing harmful drug use while increasing investment in reducing the harm caused by alcohol and drug use and strengthening specialist treatment and support services.

Key facts: Alcohol and drug misuse

Between 2009 and 2016, there was a 26 per cent increase in the number of overdose deaths in Victoria. This includes a 26 percent increase in overdoses involving pharmaceutical drugs, and a 75 per cent increase in overdoses involving illicit drugs.

There continues to be an increase in alcohol and other drug related treatment episodes where amphetamines were the primary drug of concern, increasing from 19 per cent of treatment episodes in 2014-15 to 21 per cent in 2015-16.

Ambulance attendances for illicit substances increased by 29 per cent between 2013-14 and 2014-15, influenced by a 48 per cent increase for ice.

Sources: Coroners Court of Victoria 2017; Phillimore J, Bradby H, Knecht M, Padilla B, Brand T, Cheung S, Pemberton S, Zeeb H 2015; Australian Institute of Health and Welfare 2017a.

The Victorian Government has already committed more than \$180 million in new funding to reduce the illegal supply of the 'ice' methamphetamine, as well as reducing demand for the drug and reducing the harm it causes. As part of this investment, \$18 million has supported the rollout of new structured drug rehabilitation programs for up to 500 Victorians a year, with most of these new services in rural and regional areas.

In addition, \$24.4 million has supported the expansion of residential rehabilitation across Victoria, with the announcement of: an additional 18–20 residential rehabilitation beds in the Grampians region; funding to commence capital planning and acquire land for new residential rehabilitation facilities in the Gippsland, Hume and Barwon regions; and an additional 30 beds in existing services. In total, this means the government will have provided funding to increase the capacity of residential rehabilitation by more than 60 per cent once these new facilities are fully operational, providing a much needed boost to these important services..

We will continue to focus on expanding drug treatment services. We will strengthen their connection to other critical parts of the service system that come into contact with people who have problematic alcohol and drug use and we will continue to explore options for supporting earlier intervention.

A service planning process is commencing to draw together the best available evidence about effective treatment and to look at forecast demand for state-funded alcohol and other drug treatment services. This will help us to better target future investments to the locations and population groups with the greatest need.

At the same time there will continue to be a focus on expanding harm reduction activities including the trialing of innovative approaches to reduce the harm caused by problematic drug use. Use of peer-led networks and a new, post-overdose outreach response are being trialled, alongside the rollout of initiatives to expand the use of naloxone, a life-saving drug that reverses the effects of opioid overdose.

Our ability to deliver on our future aspirations for state-funded alcohol and other drug treatment services depends on sustaining and building the workforce. Workforce priorities include promoting the alcohol and drug treatment sector as a career of choice and developing leadership and management capability across the alcohol and drug workforce for current and emerging leaders.

Seamless service transitions for Victorians with a disability

The National Disability Insurance Scheme (NDIS) is the new way of providing support for Australians with a disability, their families and carers.

About 460,000 Australians under the age of 65 with a permanent and significant disability will receive the reasonable and necessary supports they need through the NDIS to undertake activities of daily living and participate in the social and economic life of the community.

The Australian Government's Productivity Commission (2011) estimated approximately 57,000 people with a psychosocial disability will eventually benefit from a full NDIS.

Action 19: Supporting the NDIS rollout

The NDIS will reform how we deliver and fund disability services. It will provide participants with more choice and control over how, when and where their supports are provided.

The experiences gained through the Barwon trial and rollout of the NDIS in the north-east metropolitan area is shaping the rollout of the NDIS in other areas across Victoria. Specifically, we will clarify the role of health services under the NDIS.

To date, the Victorian Government has been the main funder of care to people with a psychosocial disability. We will ensure Victorians with a mental illness are able to fully benefit from the NDIS. We will reconfigure our community mental health services to make sure people can continue to access the psychosocial support they need to live in the community.

Specifically, the role of community mental health services will be strengthened in two areas:

- providing psychosocial rehabilitation for people who require shorter term support and are not eligible for the NDIS
- ensuring people needing longer term disability support can access it through the NDIS.

The latter is particularly important for people with a mental illness who are at higher risk because of other complex issues including homelessness, drug use or the absence of informal support networks.

Pathways between mental health services, Commonwealth primary care and NDIS-funded services will be developed to ensure the reforms make it easier for people to remain living in the community, which will in turn reduce the need for, and duration of, acute care.

There are also many people currently receiving services through the Home and Community Care Program for Younger People who will transition to the NDIS over the period to June 2019. A great deal of work is being done to make this transition a smooth one. This work is also looking at how regional assessment services and aged care assessment services can best support people in need of this kind of care in the future. The healthcare system also needs to maintain and strengthen its capacity to support Victorians with a disability who will not be part of the NDIS. The State disability plan 2017–20 (Victorian Government 2016) commits to improving care for these people through redeveloped disability action plans.

Addressing the needs of older people

In Victoria, as in many other jurisdictions, meeting the future needs of older people will be one of the biggest tests for the health system. As the number of older people increases, so too will the number of people with conditions such as dementia.

Dementia is the single greatest cause of disability in older Australians (65 years or older) and the third leading cause of disability burden overall. More than 50 per cent of residents in Australian government-subsidised aged care facilities have dementia.

In 2017 there are estimated to be 104,622 Victorians with dementia, and this number will increase to 134,486 by 2025 and 280,241 by 2056. This is estimated to cost Victoria \$3.7 billion in 2017, which is expected to rise to \$4.7 billion by 2025, and to \$9.4 billion by 2056 (Brown et al, 2017). As we live longer, we are more likely to have one or more chronic conditions.

Older people account for a large proportion of the care provided in hospitals. They are more likely to present to an emergency department and are more likely to require a hospital admission as a result of their emergency presentation. Older people also stay longer in hospital (an extra 0.6 day per admission, on average).

Key facts: Older people

By 2020 the number of people 65 years of age or older is projected to increase by 17 per cent.

The Victorian population 85 years of age or older is projected to increase by 135 per cent over the period 2015 to 2037.

While only 12 per cent of the Australian population, older people carry 31 per cent of the disease burden. Australians over 85 years of age make up two per cent of the population but account for 10 per cent of the disease burden – 81.5 per cent of people 85 years of age or older have multimorbidity (defined as two or more comorbidities). Of these, 30 per cent live with five or more significant conditions.

In 2015–16 the 15 per cent of the population who were 65 years of age or older accounted for more than 48 per cent of all admitted days of care provided in hospital.

As Victoria's population continues to age, more people will live longer with chronic diseases such as diabetes, heart disease, renal disease, cancers and musculoskeletal conditions such as arthritis.

Sources: Barnett, K, et al 2012; Australian Institute of Health and Welfare 2016b; Department of Health and Human Services analysis of unpublished Department of Environment, Land, Water and Planning population projections.

Action 20: Supporting older people

We will help people to age well in the community for as long as possible by developing more flexible, cross-disciplinary models of prevention and care. This will include expanding the care provided in older people's homes and the level of support in the community, to improve access to services, and to maximise their ability to live independently. This will be driven by:

- working with the Commonwealth to increase the number of older people enrolled in Health Care Homes and with funded community support packages
- setting up funding arrangements that include targets to
 - significantly reduce avoidable hospital emergency presentations and readmissions for older people
 - avoid people having to stay in hospital because community-based support packages or residential care places are not available.

We will invest in modernising public sector residential aged care services (PSRACS) to provide the most vulnerable older people with long-term care that helps them to live active, fulfilling lives for as long as possible. This is particularly important in rural and regional areas where PSRACS are a major part of the public healthcare provided in many towns.

The investment approach will involve:

- continuing the replacement and consolidation of metropolitan residential aged care facilities through staged investment
 - key priorities include new facilities in the south-east, west and north of Melbourne
- renewal of rural PSRACS including collocation with other services in rural towns to promote flexibility, quality and viability
 - this will be informed by new design guidelines developed in line with best practice to support older people—particularly those with dementia—to be as independent as possible
- development of more community-based support in rural areas.

The design of PSRACS will also increasingly focus on providing appropriate facilities for people who need intensive support.

Modernising public sector residential aged care

The Modernisation of Metropolitan Melbourne Public Sector Residential Aged Care initiative is the government's multi-year plan for improving the quality, safety and sustainability of the sector.

It will redevelop 792 existing beds, including for aged persons' mental health, into purpose-built facilities and physical environments that better support contemporary models of care and meet the community's expectations of the quality and comfort of that care.

Stage 1 of the modernisation initiative is underway following a \$55.57 million investment in the 2016–17 State Budget. It will see a 90-bed state-of-the-art public residential aged care facility developed at St Georges Health Service in Kew.

The Victorian Government is also supporting rural and regional services to improve the quality of facilities for residents and staff through the \$200 million Regional Health Infrastructure Fund.

Improving health outcomes for Aboriginal people

Koolin Balit: Victorian Government strategic directions for Aboriginal health 2012–2022 (Department of Health 2012) sets out key principles, priorities and actions for the Department of Health and Human Services, together with Aboriginal communities, other parts of government and service providers, to improve Aboriginal health. Improving access to services and outcomes for Aboriginal people is a key objective under the priority of managing illness better with effective health services.

A new 10-year Aboriginal health, wellbeing and safety strategic plan has been launched, entitled Korin Korin Balit-Djak: Aboriginal health, wellbeing and safety strategic plan 2017-2027 (Department of Health and Human Services 2017b). The strategic plan recognises and builds on the success of programs and initiatives including those implemented under Koolin Balit. It takes an integrated, single-policy approach to Aboriginal health, wellbeing and safety. The strategic plan sets out how we will advance self-determination in health, wellbeing and safety across Victoria's health and human services sectors.

Providing care that is culturally safe, responsive and free from racism is an essential component of providing services for Aboriginal people. It acknowledges the deep connection to country and culture, family, spirituality and ancestry in a meaningful way.

The need for a new approach to Aboriginal health improvement

The Victorian Government Aboriginal affairs report 2016 (Department of Premier and Cabinet 2016b) indicates that Victoria still has a long way to go to close the gap in health and wellbeing between Aboriginal and non-Aboriginal Victorians. Despite some wins, the overall picture is one of a lack of progress across a broad range of indicators. The significant investments and policy commitments to this point have made little impact. The prevalence of poor health and mental health and wellbeing issues endured within Aboriginal communities continues to grow. This is why a new approach grounded in self-determination is needed.

Victoria's Aboriginal community-controlled health services sector provides an important platform for delivering quality health and human services to Aboriginal Victorians. We will strengthen our support to Aboriginal community-controlled health services, and engage them in developing improved services to their communities. We will also consider their infrastructure needs to better support their capacity to deliver services.

We will improve employment opportunities for Aboriginal people in the health and human services sectors, boost cultural awareness and provide safe working environments for Aboriginal people. These are all vital to ensure organisations can attract, recruit and retain Aboriginal employees and deliver culturally responsive services.

Action 21: Supporting Aboriginal health and wellbeing

Priorities to support Aboriginal health and wellbeing within the health system over the next five years include:

- developing and implementing policies that support Aboriginal organisations and mainstream services to better meet the needs of Aboriginal Victorians
- reforming the way we fund services for Aboriginal people in a way that supports self-determination
- helping Aboriginal organisations and health services share knowledge and resources to better respond to priority areas for Aboriginal employment within the sector
- supporting research—led by Aboriginal researchers and underpinned by Aboriginal principles and methodology—to understand the opportunities and barriers that impact on improving outcomes for Aboriginal Victorians including the Aboriginal workforce.

What integrating health and social care will mean for Victorians...

- A single point of access to 'wraparound' prevention and care for families and individuals at risk of or with chronic disease
- Easier access and transitions for people with multiple needs – between different types and stages of care across the life span
- Older people are able to remain living well in their homes for longer
- People with a disability who are eligible can benefit from the NDIS
- Minority groups experience culturally safe and responsive care, free from racism

...and their health system

- A much stronger role for primary care in targeting vulnerable population cohorts
- Easier for health and social care providers to share funding, information and expertise so they can provide individualised, joined-up care for people
- Making integrated care more accessible in the one place by investing in health and wellbeing hubs – starting with our growth corridors
- Expansion of and stronger links between mental health (including forensic mental health), alcohol and other drug treatment services, and housing support services
- Modernisation and renewal of our public residential aged care facilities for those who are no longer able to live in the community
- Defined referral pathways and collaborative service models between health services and the NDIS, particularly for those who require a range of integrated supports.

Priority area 4: Strengthening regional and rural health services



Current state

Unique role

Health services are an integral part of their communities—particularly in rural and regional areas where they enhance the local community infrastructure, economy and identity. Many rural health services provide broader types of services compared with their metropolitan counterparts, including primary care and aged care services.

Health services are often the largest employers and purchasers of services in rural and regional towns. This means they play a bigger role in the local economy that goes beyond just providing healthcare. As an industry, healthcare has boomed in recent years, with 65 per cent of all jobs added in regional Victoria in the past 10 years coming into the health and social services sector.

Health services provide expert care that impacts on the health of individuals and the broader community. Their knowledge and expertise also makes them authoritative and credible voices for preventive health. When rural health services participate in work such as shared population health and wellbeing planning at a local level—aligning with local government municipal public health and wellbeing plans and working with other local agencies and Primary Health Networks—

they can help to ensure a common vision for a community that addresses local needs.

Workforce

Recruiting and retaining a skilled healthcare workforce is particularly challenging in rural areas. In many cases, the availability of appropriately skilled staff can be the single biggest contributing factor limiting the ability to provide a broader range of services for rural communities, particularly where care is required 24 hours a day, seven days a week.

Rural areas face persistent challenges in attracting and retaining general practitioners and proceduralists (doctors who can perform specialised tasks like surgical and anaesthetic procedures). Many of the people currently working in rural Victoria who have these skills are approaching retirement age. Many areas are reliant on visiting medical officers to provide more specialised and complex care. This situation is not sustainable over the longer term.

Unique challenges

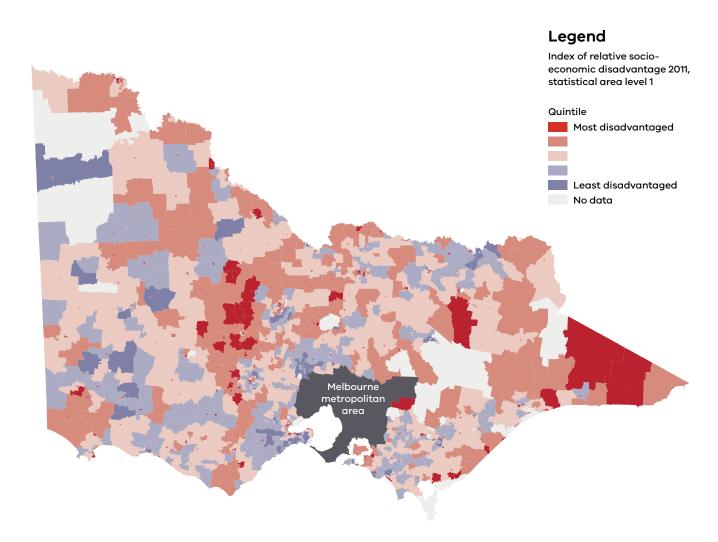
Health services in regional and rural Victoria also have their own unique set of challenges and complexities.

Generally, Victorians living in rural and regional areas have shorter life expectancy and poorer health outcomes such as lower cardiac and cancer survival rates. They also score poorly on lifestyle risk factors and generally have higher socioeconomic disadvantage, both of which can have a big impact on health and wellbeing (see Figure 9).



Photo credit: John Gollings

Figure 9: Index of relative socioeconomic disadvantage for rural Victoria, by statistical area level 1



Some rural communities have an ageing and diminishing population, while others are growing. In 2015–16 there were 1.5 million people living in rural and regional Victoria, which is forecast to grow to 1.9 million over the next 20 years.¹ The greatest growth is expected to continue to be in the regional centres of Geelong, Bendigo and Ballarat. In addition, the growth in our peri-urban areas is extending the metropolitan fringe, absorbing communities that were previously considered rural towns. In these peri-urban areas, services are adjusting to rapidly changing local communities. They are also extending and building relationships with metropolitan services, as patient referrals and flows to and from Melbourne increase.

Rebuilding rural Victoria

Our focus on increasing the capacity, capability and breadth of services offered at regional health services has been supported through a strong commitment to infrastructure projects for these services.

In recent years the Victorian Government has committed over a billion dollars in investment to expand and improve healthcare facilities in rural Victoria including: the \$630 million Bendigo Hospital Project; the \$73 million redevelopment of Latrobe Regional Hospital; a \$168.5 million redevelopment of Goulburn Valley Health's Shepparton Hospital; and a \$200 million Regional Health Infrastructure Fund that is providing upgrades for a large number of rural and regional hospitals.

Further details on these investments and priorities for the future are provided in Section 3.

Fewer specialised services are available locally, and people in many rural and regional areas of Victoria have to travel long distances to access tertiary and specialist care.

Geographic isolation can also increase risks to safety and quality assurance, and increase the cost of delivery.

Infrastructure needs

To meet the increased demand from growing regional and local populations, a range of existing infrastructure projects are currently underway.

In addition, the Victorian Government is supporting rural and regional services through a \$200 million Regional Health Infrastructure Fund—the largest of its kind in Victorian history. The fund is assisting rural and regional health services and other eligible agencies to improve:

- the safety and quality of services
- · service capacity
- models of service delivery
- patient and staff amenity
- service efficiency.

Future state

- ✓ A highly networked, technology-enabled system will give people in rural areas access to the range of services they need as close to home as is safe and appropriate.
- ✓ More complex treatment will be readily available in larger centres, with only the most complex of procedures or services requiring travel to a tertiary or specialist facility. Clearly defined roles and networks will mean no avoidable delays in patient transfers.
- ✓ There will be a highly talented, skilled and supported rural workforce, with rewarding careers.
- ✓ There will be new types of workers and new ways of working in rural areas—particularly in urgent care centres—supported by targeted recruitment programs and incentives for skilled workers to stay in rural communities.
- ✓ The majority of health and social care will be community- and home-based, making it more accessible for rural Victorians on a day-to-day basis.
- ✓ There will be greater access to transport and accommodation subsidies for those people who do need to travel long distances to access larger regional and metropolitanbased services.
- 1 Department of Health and Human Services analysis of unpublished Department of Environment, Land, Water and Planning population projections.

Initial steps

Workforce development

Action 22: Strengthening our rural workforce through collaboration and innovation

Delivering high-quality and sustainable healthcare services in rural and regional Victoria relies on being able to attract and sustain a capable workforce. Maldistribution of the health workforce has improved but is still significant. Smaller rural health services face the greatest workforce challenges.

Over time, the increased subspecialisation of the medical specialist workforce has meant there are fewer clinicians who provide general care. Many rural hospitals rely on general practitioners—particularly those with procedural or advanced skills—to provide medical services. These clinicians are in scarce supply, and attracting them to rural areas is difficult.

Recruitment to specialist nursing, midwifery, some allied health profession roles and medical administrator leadership roles can also be extremely difficult in some rural communities.

Networked support for rural hospitals

We will trial a model that gives regional and outer regional hospitals the support they require to care for patients with more complex needs, 24 hours a day.

Under this model, one or two specialist sites will support a network of hospitals providing lower complexity care.

Telemedicine and mobile and virtual technologies will be used to provide a 'presence' at the remote site. This will be particularly important overnight, when patients may deteriorate and the local hospital may not have adequate staffing cover to provide needed care. In such situations, emergency and critical care support will be provided remotely from the specialist centre.

Regional and outer regional services may be considered for the trial, with links to specialised services in Melbourne available if escalation is required.

Victoria's Stroke Telemedicine Service

The Victorian Stroke Telemedicine Service plays a key role in addressing inequities in outcomes between metropolitan and rural stroke patients by:

- providing rural and regional patients with access to Melbourne-based stroke neurologists, 24 hours a day, every day of the year
- facilitating early expert assessment and access
 to time-critical therapies for patients, which
 would not otherwise be available locally as
 most regional and rural hospitals do not have a
 neurologist on site.

Completing the rollout of the network across regional health services will enable more than 90 per cent of Victorians to be within a 60-minute drive of a thrombolysis-delivering service.

This has a direct impact on access to healthcare. For example, the inadequate supply of allied health professionals in rehabilitation and community service settings means many patients must travel long distances to receive postoperative rehabilitation or go without this care.

We will continue to build the rural health workforce supply through targeted investment in:

- rural clinical training networks
- subsidised rural cadetships
- graduate and training positions
- coordinated rural training pathways
- programs to support rural clinicians to meet registration requirements.

The distribution of the workforce will be further improved through greater service collaboration and use of digital technologies to reduce isolation and to support remote practice. This includes more widespread use of:

- shared appointments of key leadership roles and specialist clinicians who operate at services across a region or across metropolitan and regional Victoria
- advanced nursing roles in rural urgent care centres, supported by local general practice and visiting or remote specialists and telehealth
- outreach clinics delivered in the community by visiting specialists or via telehealth
- education, training and research pathways through greater links between regional and tertiary/specialist referral hospitals, and research centres.

The Victorian Government has already begun the work to strengthen telehealth services. The Minister for Health recently announced 15 successful projects that will share in \$5 million from the 2016 Victorian Telehealth Specialist Clinic initiative. These projects are designed to better connect rural patients to their medical specialists via the internet.

We will also trial a model in which one or two specialist sites support a network of lower complexity hospitals to manage their more complex clinical caseload out of hours (see box 'Networked support for rural hospitals' on page 67 for more information).

Rural generalists are doctors who can work as a general practitioner and are able to provide more complex care, such as surgery, within a rural hospital. We will work with the Commonwealth government and other states and territories to expand training and other educational opportunities for rural generalists.

We will also support the rural workforce through the changes resulting from the introduction of role delineation, which will expand the capacity, capability and breadth of services offered by rural health services.

Developing a partnership approach

Action 23: Defining rural and regional health partnerships

To overcome many of the unique challenges faced by rural and regional health services, we will move to a formal partnership approach. This will build on the long history of partnerships in Victoria but will seek to strengthen them further and extend them across the system.

The rural and regional health partnerships will span each region and have direct links into major metropolitan health services. The partnerships will engage with a range of stakeholders—including Regional and Metropolitan Partnerships—to deliver improved health outcomes for rural Victorians. Figure 10 shows the Regional Partnership areas.

The growth at the outer boundary of the Melbourne metropolitan area means that existing partnerships have to evolve to take account of the changes in these communities.

South-western Victoria subregional clinical service plan

The three largest health services within Victoria's Great South Coast are South West Healthcare, Western District Health Service and Portland District Health.

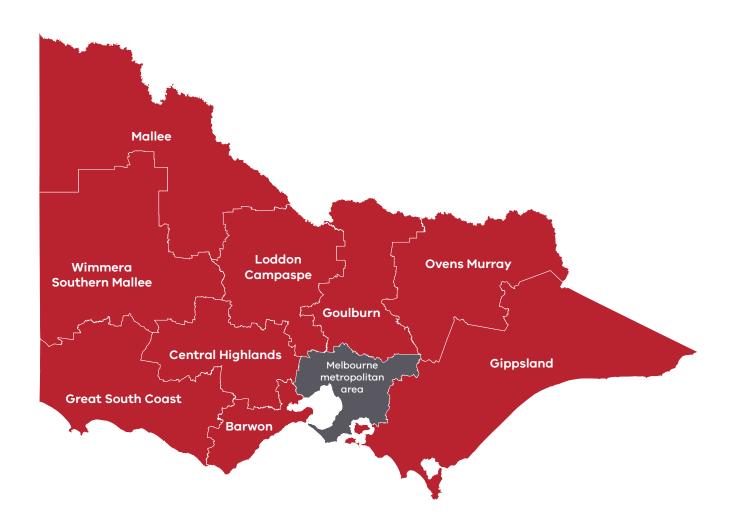
In 2016 a project to undertake an extensive service plan was commissioned to determine how these three services could best work together.

The plan, due for release in 2017, considers the existing service design across the area and provides analysis and recommendations for current and future service configuration to meet the health needs of local communities into the future.

In doing so, the plan examines the role of services and the capacity and capability they should have to ensure they are sustainable. It considers current service gaps and highlights the potential benefits of reconfiguring and more closely aligning health services in the Great South Coast area.

The plan proposes a subregional model to strengthen the delivery of health services. This partnership approach to delivering care aims to: improve and strengthen local governance; enable an increased range of clinical services to be provided within the capability of local services; and further increase self-sufficiency within the subregion as a whole.

Figure 10: Regional Partnership areas



A more regional approach to the way services are planned, delivered and coordinated will strengthen regional and rural service provision. This should be balanced with local autonomy and flexibility to meet individual communities' needs. Partnerships with border towns in New South Wales and South Australia will work to address the needs of cross-border populations as part of planning and partnership development.

Within a region, the existing regional health service plus up to two newly identified 'outer regional' health services will lead each service partnership. Each partnership will comprise a number of smaller health services in the area.

Partnership members will work together to actively improve overall regional self-sufficiency. Clear delineation of the role of each service will ensure each geographic area has the required mix of services and levels of capability.

Agreed referral and transfer pathways will ensure people have access to higher specialty care where necessary. In many clinical areas regional health services already provide the highest capability level needed for patient care in that region.

Each rural and regional health partnership will require members to work together at a number of levels including:

- approaches to strategic, service and workforce planning
- training and professional development
- leadership and clinical governance
- quality and safety (for example, defined regional mortality and morbidity committees)
- person-centred care and co-design of services with consumers
- delivery of care including service mix, capability and referral pathways
- opportunities to support services through joint approaches to key enablers including workforce and technology use.

There is potential for significant strengthening of rural and regional services, networks and partnerships through a process of co-design with local communities on how services should be configured and provided.

Table 3 shows how a better defined partnership approach might look in future. This approach will be refined through further work to understand and finalise these arrangements.

Under these arrangements, local decisionmaking and accountability will be preserved, while individual services will be strengthened by access to the resources, skills and capacity of the broader partnerships. A stronger role for outer regional health services will reduce the flows directly from rural to regional health services in cases where the care can be safely provided closer to home. There will be a stronger role for regional and outer regional health services in supporting local self-sufficiency, as well as clearer relationships with metropolitan tertiary referral hospitals to facilitate access to more specialised or statewide services.

Table 3: Proposed delineation of regional health services

Partnership areas	Proposed outer regional	Regional
Barwon Great South Coast	Southwest Healthcare	Barwon Health (Geelong)
Central Highlands Wimmera Southern Mallee	Wimmera Health Care Group	Ballarat Health Services
Gippsland	Bass Coast Regional Health Bairnsdale Regional Health Service	Latrobe Regional Hospital
Goulburn Ovens Murray	Northeast Health Wangaratta	Goulburn Valley Health Albury Wodonga Health
Loddon Campaspe Mallee	Mildura Regional Hospital Echuca Regional Health	Bendigo Health

Partnerships will also build links with other health providers (including private hospitals) and social services, as well as education, training and research providers—in recognition that healthcare goes well beyond hospitals. We have begun a process of co-design with the sector and local communities regarding the proposed configuration of the rural and regional health partnerships, which are to be finalised by late 2017.

Action 24: Defining referral networks

Over the past decade, Victoria has established role delineation for statewide trauma services, stroke services and—most recently—regional cancer centres. This will now be extended to other major clinical or service streams. Making sure the right care is provided in the right place means patients quickly get the care they need and can be assured of high-quality outcomes.

Clear referral networks will be established for both planned and emergency presentations by patients with care needs beyond the capability of local rural health services.

Referral networks will be based on the system role delineation framework. Clear roles for services will mean a clear basis for agreement on when a person needs to be referred on for care, ensuring everyone gets the right care, in the right place, every time.

Depending on the nature of the care required, referral networks may vary. For example, referrals for obstetric or neonatal care will be different from networks developed for cardiac surgery. In each case the patient should be easily transferred to where appropriate clinical care is best provided. Clear processes should be in place to make sure patients are transferred quickly if the need for more complex care arises.

Referral networks also need to include agreement on when to transfer patients back to their local health service for recovery, rehabilitation and ongoing care.

Victoria's network of regional cancer centres

From 2016, expansion of cancer services across regional Victoria will be driven by partnerships with regional cancer centres, located as follows:

- in the Barwon and Great South Coast regions at Barwon Health's Andrew Love Cancer Centre and South West Regional Cancer Centre in Warrnambool
- in the Central Highlands region—the Ballarat Regional Integrated Cancer Centre, with planning underway to develop the Wimmera Cancer Centre
- in the Loddon Campaspe region—the Integrated Cancer Centre at the new Bendigo Hospital
- in the Ovens Murray region—the Albury-Wodonga Regional Cancer Centre, with the colocation of a range of public and private providers into the one centre
- in the Gippsland region—the Gippsland Cancer Care Centre at Latrobe Regional Hospital.

Continuing to enhance and expand the regional cancer centres is a key part of addressing cancer survival disparities between regional and metropolitan Victorians.

Referral networks will provide greater workforce development opportunities including opportunities to work across the 'network'. This will improve the ability of local services to provide a bigger range of the care that people in their community may need.

For example, improved links to specialist services will improve the care people receive in emergency situations. In many cases, the urgent care centres in rural communities are staffed by local general practitioners and nurses who need access to timely specialist advice and support. This can be enhanced using digital health technology. This model is already in place in many areas and is currently being developed to support people needing emergency care for cardiac conditions. These links will also enhance opportunities for professional development and clinical education for staff at participating health services.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Adjusting the service mix for an older local population

Action 25: Supporting older people in the community

Outside the Melbourne metropolitan area the ageing of the population is fastest in our regional centres, which changes the types of services needed locally (Figure 11).

The way services are delivered also needs to change to ensure people can remain in their communities longer, only having to travel beyond their local health service for more complex treatment and specialist care.

The forecast data for the next 20 years shows that fewer acute services will be needed in rural Victoria into the future. In their place there is a clear need for an expanded role in care of the aged—not just residential aged care but a broader range of hospital and community-based care. This includes urgent care, rehabilitation, palliative care, community nursing and chronic disease self-management.

We will reconfigure services to support people in the community or their homes for as long as possible. This includes support for community palliative care agencies to provide at-home palliative care, allowing more Victorians with a terminal illness to be cared for, and die, in their place of choice.

We will also progressively redevelop our existing health and residential aged care facilities to promote contemporary models of care and flexible use of infrastructure.

Strengthening access to core services in rural Victoria

Action 26: Strengthening rural urgent care services

While urgent care centres are well established in rural Victoria, it is difficult to maintain a medical workforce to support them. Innovative approaches and new models are needed to support the workforce and to ensure timely urgent care is available to all rural Victorians.

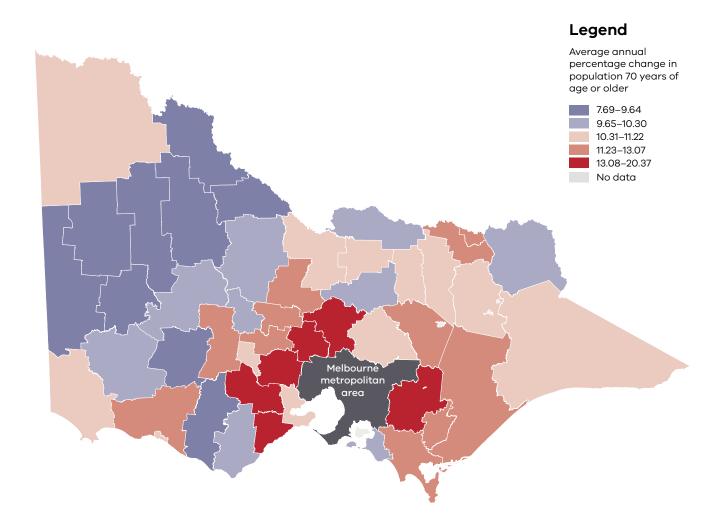
In rural public hospitals, rural and isolated practice endorsed registered nurses (RIPERNs) have advanced clinical assessment skills and can administer and supply certain medications. In addition, some urgent care services are supported by nurse practitioner roles. In some of our remote communities, remote area nurses (RANs) located in bush nursing services are invaluable first responders, providing emergency care support in conjunction with Ambulance Victoria.

We will bolster the use of advanced practice nursing roles to support urgent care services in rural Victoria, with ready access to medical support remotely and locally. This will ensure high standards of care and be more rewarding for both nurses and doctors, who may otherwise be overstretched or working in isolation in these areas. It will also further attract and sustain talented, highly skilled professionals to live and work in rural Victoria.

Support to isolated staff will also be boosted through better use of telehealth and better access to telehealth services.

Urgent care in rural Victoria will be strengthened by previously discussed structural changes including clear role delineation, the formalisation of referral networks (including consultation and liaison services), integration of services and collocation with other services.

Figure 11: Projected average annual change in the rural population over 70 years of age, by local government area, 2016–2026



Action 27: Strengthening rural maternity and newborn services

Public and private maternity and newborn services across rural and regional Victoria provide care to women and babies with low- and moderate-complexity care needs. These services work under a tiered system that means most women and babies living in regional and rural Victoria can access all but the most specialised and complex care within their region.

We will introduce a number of changes to ensure the quality, safety and sustainability of these services and to balance local access with safety and quality care. Specifically, we will:

- agree on an operating model for the six regional health services within regional and outer-regional partnerships
- support future investment in the Gippsland,
 Central Highlands, Wimmera Southern Mallee and Barwon regions
- encourage rural health services to use established planning tools like the Australian Rural Birthing Index.

These changes will strengthen the arrangements under which local access to care is provided within each region. They will also help services respond to projected demand and the changing health needs and social circumstances of women, babies and families in rural Victoria.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Action 28: Improving rural and regional access to elective surgery

Patient access to elective surgery in rural and regional areas is likely to be improved by implementing approaches to wait list management that enable greater 'pooling' of capacity across networks of services. Under the current system, health services generally manage access to elective surgery within the confines of their own resources. This contributes to variation in the time patients wait for their procedure at different health services, while capacity at some sites is not being fully used.

Working with the sector, we will develop a more regional approach to wait list management, underpinned by the referral networks and partnerships to be developed across each region. This will involve further work on the way wait lists are managed and the systems used, including improving transparency of wait list information for the public.

Action 29: Accessing emergency care

Access to care in an emergency is an essential component of the work of all rural and regional health services, from regional centres with 24/7 emergency departments to urgent care centres and bush nursing centres in isolated areas, staffed by RANs.

Victoria has a well-established emergency retrieval system for critically ill patients, but transfer of patients with less critical, but still significant, healthcare needs will be improved by:

- streamlining referral within each rural and regional health partnership
- improving links to specialist services through digital health technology
- enhancing regional opportunities for shared professional development and clinical education.

These changes will boost access to specialist care and improve outcomes for people with emergency care needs that would otherwise be beyond the capability of many rural health services.

Action 30: Improving patient transport assistance

Rural areas have a unique need for patient transport and accommodation because lack of viable options can directly impact on the capacity of people to access the care they need.

In many cases people are able to make their own arrangements to get to necessary health services by either private or public transport. However, community transport services are essential for many rural people who cannot drive or use public transport and would otherwise be unable to access the healthcare they need. Access to community transport across Victoria is variable, with most community transport services relying on volunteers.

Where people have no option but to travel long distances to access specialist medical services, eligible rural Victorians and approved escorts may obtain financial assistance for transport and accommodation costs through the Victorian Patient Transport Assistance Scheme (VPTAS).

In 2017 we will complete a review of the VPTAS. The review will ensure the scheme enables access to safe, high-quality healthcare for rural Victorians. It is expected that travel distances may reduce for some people in rural and regional areas as partnerships are strengthened, role delineation is introduced and greater use is made of telehealth—all of which will reduce the need to travel to regional and metropolitan centres.

What a stronger regional health system will mean for rural Victorians...

- Routine care is provided locally, with less need to travel for specialist care when this can be safely provided within the region
- Reduced delays if transfer is required, particularly for time critical services
- If transferred to a larger centre for more complex care, there is more support for recovery and palliation as close to home as possible.
- Access to emergency care across more sites

...and their health system

- Wider range of care provided locally as a result of technology enabled, networked service arrangements that boost regional and subregional self-sufficiency
- More advanced practice roles in urgent care services in rural Victoria, with ready access to medical support remotely and locally
- Stronger collaboratives for translational research and spread of innovation, which span metropolitan and regional Victoria
- Reconfiguration of services and facilities to adjust to an ageing population in many rural communities.

Priority area 5: Investing in the future—the next generation of healthcare



Current state

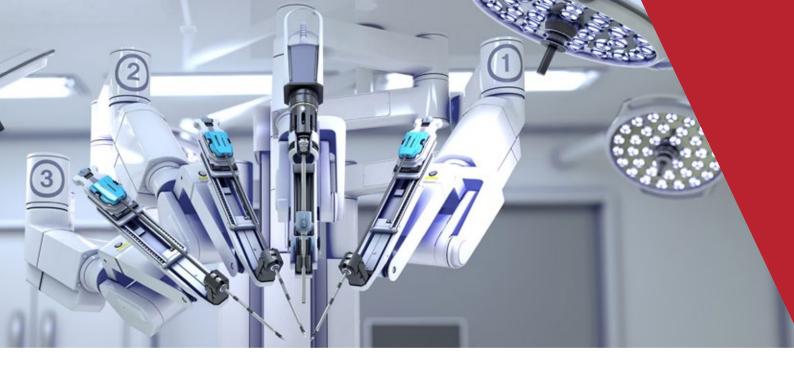
One thing is certain—our health system of the future will look and operate very differently from the way it does today. It will not only need to expand its service and infrastructure capacity to match population growth, it will also need to shift the very nature of that demand by transforming the way services are designed and delivered. Workforce, infrastructure and technology will need to reinforce each other, fostering excellence, integration and innovation across the whole health system.

This transformation requires investment now in continuing 'breakthrough' knowledge and practices, which are increasingly being made possible and powerful by the digital age. Importantly, we need to ensure new knowledge and insights are quickly translated into everyday practice and spread across the system to improve the equity of outcomes.

Victoria is home to world-leading research centres and alliances such as the Victorian Comprehensive Cancer Centre, Melbourne Genomics Health Alliance, the Parkville Biomedical Precinct, the Alfred Medical Research and Education Precinct, the Monash Health Translational Precinct, Orygen Youth Mental Health and our two designated Ebola centres at the Royal Melbourne Hospital and the Royal Children's Hospital. They help to keep our economy thriving and are vital to shaping the future of healthcare. Their many ground-breaking developments save lives and may one day result in cures for some of our biggest killers.

Victoria also has two of only four Australian health research centres that have been recognised as being among the world's best for translating medical research into improved practice for patients. In 2015 the National Health and Medical Research Council granted recognition to two Advanced Health Research and Translation Centres in Victoria: the Melbourne Academic Health Centre and the Monash Partners Academic Health Science Centre. These centres were recognised because they excel in research, the translation of evidence into excellent patient care and the education of health professionals—at an international level.

We need to continue investment in research and trials to drive our innovation capacity. We also need to do more to translate research into practice, ensuring that our research investment improves the care people receive. Only then can it help build a path to the next-generation health system.



Future state

- ✓ Victorians will live even longer, with improved quality of life and reduced mortality.
- ✓ More treatments will be minimally invasive, with greater precision and efficacy.
- ✓ What care is provided and how it is delivered will be much more personalised. Patients will know their risk factors for disease. They will also be able to choose the treatments or interventions most likely to prevent disease or reduce its impact on their health.
- ✓ There will be cures for some of our biggest killers, including cancer. This will change the very nature of some specialties, allowing greater investment in the next generation of prevention and more capacity for early intervention.
- ✓ The promise of today's technology will be extended in new ways including wider use of patient devices (such as instruments that allow for remote monitoring), medical robotics, cell therapies, artificial organs and treatments that rely on the use of diagnostic imaging—such as CT scanners—to see inside the body while a procedure is being carried out.
- ✓ Proven technologies, and their effective adoption and diffusion, will be the infrastructure backbone of healthcare—not buildings.

Initial steps

Investing in medical technology and industry development

The Victorian Government's Medical technologies and pharmaceuticals sector strategy
(Department of Economic Development, Jobs, Transport and Resources 2016) provides the framework for Victoria to continue growing the medical technology and pharmaceuticals sector. This framework supports Victoria's wider health services research strategy (see 'Capturing new and evolving fields of world-class medical research' on page 79), which provides a focus for future investment, building on the state's expertise in the academic health science centres and in other fields of health and medical research.

The Medical technologies and pharmaceuticals sector strategy envisions development of a world-class medical technology and pharmaceuticals industry, creating sustainable and rewarding jobs, and providing the community with early access to the latest health technology breakthroughs.

Action 31: Investing in industry development

The Victorian Government is making significant investments in the state's medical technologies and pharmaceuticals sector including:

- providing \$4 million as part of a \$10 million initiative to help our pharmaceutical industry create new products, grow exports and develop skills
- contributing \$10 million to the \$80 million BioCurate partnership between Monash University and the University of Melbourne to accelerate the development of quality medicines to treat a wide range of diseases
- committing \$60 million to the Aikenhead
 Centre for Medical Discovery, Australia's
 first research and education centre for
 biomedical engineering (a further \$60 million
 has been committed by the centre's partner
 organisations, but the project is awaiting a
 matching commitment of \$60 million from the
 Commonwealth Government to allow it
 to proceed)
- allocating \$5.8 million to provide the Victorian Comprehensive Cancer Centre Alliance with expanded cancer research and clinical trial capacity
- providing \$6 million to accelerate the creation and commercialisation of medical technology through the medtech collaboration initiative.

The medical technologies and pharmaceuticals sector is also benefiting from the Victorian Government's broader industry investments including: the \$60 million LaunchVic initiative to grow start-up and entrepreneurial activity; the \$200 million Future Industries Fund, which provides grants to specialist firms and companies; the \$500 million Regional Jobs and Infrastructure Fund; and the \$508 million Premier's Jobs and Investment Fund.

Victoria's vibrant health and medical research institutes are key enablers of the biotechnology, medical technology and pharmaceutical sectors.

Action 32: Providing stronger governance and coordination to invest wisely

Health technology typically includes high-value equipment, medicines, diagnostics, medical devices or procedures.

Developments in health technology continue to raise the safety and quality of care, improve patient outcomes and promote efficient health system practices. However, health technology is also the major driver of the increasing cost of healthcare.

We will work with other jurisdictions to establish a national approach to investment and disinvestment in health technology. This will be underpinned by systematic, coordinated processes to prove the value of state-of-the-art diagnostic and therapeutic treatments. These processes will ensure the cost of new technology does not outweigh its benefits in improving care or the outcomes of care.

In Victoria investment in high-value technology will be guided by this assessment (regardless of funding source) and will be aligned to the system role delineation framework. In other words, we will only invest in new technology that provides value for money and only where the technology is appropriate to the role and capability of the service seeking to acquire it. This will ensure:

- the required operating infrastructure and workforce is available
- the technology is directly used to advance practice by those who are responsible for related care
- there is equity of access to new technology that provides better care but would otherwise be unaffordable for some Victorians.

As an initial step we will establish a more consolidated investment approach to advanced medical imaging technology.

New ways of bringing together medical technology, information technology and medical research will be explored to drive further innovation. This will be bolstered by a stronger, more integrated network of health, academic and research centres and precincts.

Capturing new and evolving fields of worldclass medical research

Action 33: Developing system-wide translational research capacity

Victoria's health and medical research sector is a leader in Australia and is home to some of the best scientific researchers and medical pioneers in the world. The biotechnology, medical technology and pharmaceutical sectors that support health and medical research employ more than 20,000 people in Victoria and have a combined market capitalisation of more than \$40 billion. The work of these researchers has changed lives through new options or advances in care that have improved longevity and quality of life for many Victorians.

We are further building our network of world-leading research agencies and collaborations including through the new Victorian

Comprehensive Cancer Centre and the planned Victorian Heart Hospital. The concept of specialty hospitals is gaining momentum around the world—they can attract the best and brightest within a speciality, with the focus and critical mass to drive both clinical excellence and innovation.

The Victorian cancer plan 2016–2020 (Department of Health and Human Services 2016f) and the Design, service and infrastructure plan for Victoria's cardiac system (Department of Health and Human Services 2016b) will support stronger integration of health and medical research. This will happen through centres of excellence as well as by building stronger links between metropolitan and regional research centres. The result will be improved access to cutting-edge research developments, capability and use.

World-leading practice and research in youth mental healthcare

Under Victoria's 10-year mental health plan, we are developing the new Orygen Youth Mental Health Care and Research Centre at Parkville.

The centre will provide seamless integration with translational research, clinical innovation in specialist and primary care, community-based care and workforce enhancement.

The state-funded, purpose-built facility will draw together public and private investments at the state and national levels for research and clinical care.

As Australia's leading translational medical research institute for youth mental health, the centre will further enhance the opportunities to grow investment in this vital area of research.

We will continue to build our research capacity, capitalising on the existing strengths of Victoria's commercial, education, research and healthcare service sectors. Victoria already has a number of well-established health and education precincts. The National Employment and Innovation Clusters were identified in *Plan Melbourne 2017–2050* (Department of Environment, Land, Water and Planning 2017a) as important areas for medical, research and education activity. We will continue to grow their capacity and capability, ensuring industry partners, universities and health services are working together to grow jobs, strengthen the economy and secure the foundations of our future health system.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

The government has also released Healthier lives, stronger economy: Victoria's health and medical research strategy 2016–2020 (Department of Health and Human Services 2016d). The \$20 million allocated over the life of the strategy will be used to: develop the research workforce; quickly translate research breakthroughs into clinical practice and measure their adoption and effectiveness; and stimulate industry engagement and critical export opportunities to build investment in health and medical research over the longer term.

Harnessing the power of genetics and genomics

The next-generation health system will develop intelligence about the way risk, disease and recovery vary from person to person.

Genetic information will allow us to expand choices for treatment and support—this will have an increasingly profound impact on quality of life, the experience of people who survive serious illness and end-of-life care for Victorians.

Action 34: Developing personalised medicine

Genetics and genomics services rely on information about the human genome, or the fully mapped sequence of human genes. Although this field is less than a decade old, genetics and genomic information is becoming increasingly important and useful in more targeted diagnosis and treatment for many patients. Victoria's genetics and genomics services system will be strengthened to drive more personalised care and improve clinical outcomes.

Genetics has now been found to underpin common adult-onset medical conditions (such as cancer and heart disease), as well as rare childhood disorders.

Genomic sequencing is now being used more widely to allow clinicians to diagnose illness more quickly and easily. It is also being used to understand how a patient is likely to respond to treatment and to personalise their treatment plan accordingly. This can maximise the clinical outcome for the patient and minimise discomfort. Genome sequencing is also increasingly being used in public health surveillance—for example, to more quickly pinpoint the source of food contamination when there is an outbreak.

In some instances, diagnosis using genome sequencing has led to identification of an inexpensive treatment that, if administered early enough, prevents developmental delay in children or disease progression that would otherwise require treatment, lead to lifelong disability or even early death.

A Victorian genomics strategy is being developed to support the integration of genomic information into routine practice across the health system.

The Victorian Government is making this happen sooner by providing:

- in 2016–17, \$25 million over four years towards developing genomic sequencing capability across Victoria through the Melbourne Genomics Health Alliance
- in 2017–18, an additional \$8.3 million over four years to make genome sequencing available in selected clinical services.

What investing in our next generation of health care will mean for Victorians ...

- Greater access to world-leading technologies and advances in treatment
- Quicker diagnosis of illness and public health risks
- More personalised care and improved clinical outcomes

... and their health system

- Expanded number of services that have genomic sequencing capability
- Rapid uptake of proven, value-for-money innovations in diagnostic and therapeutic treatments
- Alignment of investment in new technology with the role and capability of services
- A stronger network of health, academic and research centres and precincts, bolstered by our specialist and major tertiary referral services.





Delivering the healthcare infrastructure needs of local communities



The previous section of this plan sets out the priorities for system design across Victoria to meet the challenges facing the healthcare system. It describes the things we need to do to get the system as a whole working well—now and into the future. We recognise that we need to make better use of existing capacity, not just invest in more of the same if the health system is to be proactive, adapt and innovate. Future service and infrastructure investment will therefore be shaped by the priorities of this plan, and detailed through service stream and locality planning.

Despite the benefits of technology and the potential of digital presence, most healthcare is —and will continue to be in the coming decades—about having a physical place where care is provided, where people meet face to face. That means a big part of planning for local needs is about providing access to facilities—the bricks and mortar of healthcare—that are fit for purpose and able to deliver the right services in the right places.

Over the next couple of years, plans for local areas will be developed that lay out the healthcare service and infrastructure priorities to meet the needs of people living in every part of Victoria. The Victorian Government has already started this work. Given the immediate challenges driven by rapid population growth, a priority has been planning for the healthcare needs of the state's outer-urban growth areas to the north, west and south-east of Melbourne, and to respond to the expected rapid growth in the inner Melbourne area.

Healthcare planning in metropolitan areas will align to the *Plan Melbourne* strategy, outcomes and actions. It will be guided by the directions set out in the *Suburban development statement* (Department of Environment, Land, Water and Planning 2017b), including its five-year plans for jobs, services and infrastructure—being prepared by the Office for Suburban Development with the Metropolitan Partnerships.

With the unique challenges faced by regional and rural Victoria set out in section 2, healthcare planning has also been underway to further consider statewide and local priorities across Regional Partnership areas. Healthcare planning in regional areas will align with the *Victorian Regional Statement* (Regional Development Victoria, 2015) and be guided by Regional Partnership processes including community assemblies.



Photo credit: John Gollings

New infrastructure projects in 2017-18

The Victorian Budget 2017-18 will invest an additional \$428.5 million in new hospital upgrades and equipment that will provide patients and staff with the world class facilities they deserve. This includes major infrastructure investments to address our unprecedented population growth pressures and modernise our facilities to support safer, better care:

- \$162.7 million to expand the Northern Hospital to meet the health care needs of Melbourne's rapidly growing outer northern suburbs.
- \$50 million to develop a business case and commence design work for the construction and potential land purchase required for a new Footscray Hospital
- \$43.9 million to expand forensic mental health bed-based services that keep the community safe, which will also enable infrastructure works at Thomas Embling Hospital
- \$10 million for renewal of mental health and alcohol and other drug treatment facilities across the State
- \$9.7 million to expand regional drug residential rehabilitation services
- \$7.5 million for planning and design work for the future redevelopment and expansion of Warrnambool Base Hospital to cater for growing demand in the south west of Victoria.
- \$63.2 million to provide an emergency department at Monash Medical Centre for our sickest kids

- \$40 million to upgrade key infrastructure at the Royal Melbourne Hospital, while planning commences on the next steps for the Melbourne Biomedical Precinct
- \$29.8 million for critical infrastructure works at Austin Health, to make sure patients in the north east can receive the best care, close to home
- \$11.9 million for a clinical technology refresh to protect against cyber-attacks and improve network connectivity
- \$2.2 million to increase critical care capacity, including additional neonatal and adult intensive care beds.

There is also:

- \$60 million for new medical equipment and replacement of ageing infrastructure in health services across the State, with another \$20 million announced since
- \$2.5 million for statewide health infrastructure planning to progress priority asset projects.

In addition, a further \$9.8 million has been allocated to redevelop, refurbish or upgrade infrastructure at 23 community health services so more people will get the care they need closer to home. This includes:

- more than half the funding—\$5.88 million for five community health facilities in rural and regional Victoria
- in Melbourne, \$2.92 million for major projects in six centres, with a further 12 each receiving about \$90,000 for minor capital works.

Locality plans for outerurban growth areas and inner Melbourne



As well as building on statewide policy and planning directions, the locality plans for the outer-urban growth areas and inner Melbourne work within an overall vision for the future of Melbourne. *Plan Melbourne* sets out a vision to guide Melbourne's growth to 2050. It sees a future Melbourne with many centres of thriving activity where all residents have access to a range of services and facilities, including healthcare, within 20 minutes of their home.

The locality plans set out the health service and infrastructure priorities to achieve this vision through expansion of existing facilities and new facilities needed to respond to rapid growth. Each plan looks ahead 20 years, forecasting the type and location of infrastructure to meet the needs of local communities as they grow and change.

One of the biggest challenges of rapid growth is the need to ensure local access to services and amenities for people moving into new areas. The locality plans are being developed based on a detailed understanding of planned precincts, new suburbs and urban renewal sites. They take account of when, where and how quickly the population will grow in each area. They also consider changing demographics and how these will impact on the kinds of health services needed.

Development of the growth area locality plans

Locality planning work to date has involved health services, local government, Primary Health Networks and other local stakeholders.

Current health and wellbeing issues and future risks to health and wellbeing have been identified.

Plans have assessed the impact on healthcare services from forecast demographic changes and population growth.

They consider other planning processes and factors related to the delivery of other government services such as education and transport.

The infrastructure priorities they identify respond to the government's broader infrastructure strategy and contribute to the statewide infrastructure plan including priorities for investment.

Planning is a cyclical process, so priorities will be regularly reviewed and further developed as service stream and locality planning continues.



The plans for growth areas have identified a number of issues common to each locality:

- Rapid population growth has already exceeded the capacity of existing health and social care services, requiring residents to seek services outside of their local area when local access would be appropriate and preferred.
- Residents of many of these areas are at risk of preventable illnesses and may in the future need to rely heavily on public health and human services.
- With the exception of inner Melbourne, common health issues exist in each area, particularly issues related to chronic disease, mental health and ageing.

Each plan has a focus on prevention and self-management. They focus on strengthening care that keeps people out of hospital by keeping them healthy, managing chronic disease and providing community- and home-based alternatives to hospital care. Each plan also recognises the need for a range of acute services to be locally accessible, acknowledging that hospitals are not necessarily located where people live now or where the highest levels of population growth will occur in the future.

Healthcare infrastructure priorities for the growth areas are driven by the current and projected population growth, changing demographics and the significant health and wellbeing issues identified in the plan. These priorities are intended to work alongside the introduction of new ways of providing care, strengthened health promotion activity and prevention strategies—all aimed at reducing growth in demand for health services. Even with additional effort in these areas, significant infrastructure investment will be needed to meet demand growth pressures.

Key findings and directions from the plans are summarised below.

Northern growth area

The northern growth area stretches from Thomastown in the south to Broadford in the north and from Bulla in the south-west, across to Whittlesea in the east. It is home to around 395,000 people. The main public health services in the area are the Northern Hospital, Craigieburn Health Service, Broadmeadows Health Service and Kilmore and District Hospital.

The northern growth area is projected to experience an unprecedented amount of population growth over the next 15–20 years, with annual growth forecast to be nearly twice the rate for Victoria as a whole, and hospital admissions by residents forecast to grow by 3.4 per cent per annum. The population is expected to reach in excess of 623,000 by 2031, an increase of more than 228,000. Growth will be uneven, with some parts of the locality (such as Whittlesea, Craigieburn, Kilmore and Wallan) expected to see five to 10 times more new residents than other areas.

The locality has a high unemployment rate, a high proportion of low-income households and high levels of mortgage/rental stress. High levels of poor health behaviours and chronic disease mean a large and increasing demand for health and social services. Without significant changes, these health and wellbeing issues are expected to continue and may become worse over time.

Access to services is already a key issue for the northern growth area. There are long wait lists for existing services and many people need to travel outside the area to access services. This situation will be exacerbated by the establishment of new suburbs in greenfield locations that do not have health services.

As with other growth areas, population growth in the northern corridor will come from both new residents moving to the area and from births, driving high growth in younger age groups and leading to increased household sizes. However, inner parts of the growth area have older, settled residents, and the number of people aged 65 years or older is expected to nearly double.

Without new ways of preventing and managing chronic illness and more community- and home-based care for the ageing segment of the population, hospital capacity will need to nearly double within the next 20 years in order to support the rapidly growing population.

In response, planning for the northern growth corridor has identified the following infrastructure priorities:

- expansion of existing hospital and healthcare service sites to meet demand pressures from population growth
- further planning for additional hospital and community capacity in this growth corridor to promote local access over the longer term.

The Victorian Government is responding to this challenge by investing \$17.3 million to expand surgery at Broadmeadows Health Service, enabling more than 2,500 additional procedures to be delivered locally.

In addition, the 2017-18 State Budget provides \$162.7 million to expand the Northern Hospital by completing a seven-story tower that includes 96 new inpatient beds, three new operating theatres and more treatment rooms.

Western growth corridor

The western growth corridor stretches from Footscray to Bacchus Marsh in the west, and from Sunbury in the north to Werribee in the south. In 2015 the population was over 809,000. The major public healthcare facilities located in the area are Footscray Hospital, Sunshine Hospital, Mercy Werribee Hospital, Williamstown Hospital, Sunbury Day Hospital, Melton Health and Djerriwarrh Health (Bacchus Marsh).

The western growth corridor is expected to grow by around two-thirds over the next 15 years to in excess of 1.42 million people, an increase of more than 600,000 people. The area includes some of the fastest growing parts of the state such as Wyndham, Rockbank and Sunbury. This is reflected in annual projected growth of more than five per cent in hospital admissions from residents of some parts of the area such as Wyndham.

The western growth corridor has higher than average unemployment. Compared with the state as a whole, there are significantly higher proportions of people working in manufacturing and the transport, postal and warehousing sector. People living in the area report poorer health status across a range of measures when compared with the Victorian population including higher rates of obesity, type 2 diabetes and high blood pressure. They also have lower screening rates for diseases such as breast and bowel cancer. The area also has higher than average rates of children who are developmentally vulnerable.

A key challenge in meeting the healthcare infrastructure needs of the western growth corridor is ensuring there are community-based healthcare facilities accessible to people living in those parts expected to see particularly high levels of population growth. Accessible healthcare in local community settings will be vital to improving people's health and reducing growth in demand for hospital services.

The west of Melbourne also requires significant hospital infrastructure investment to keep existing facilities operating, to reconfigure and expand their capacity and to provide new capacity to meet the demands of rapid growth. Nearly twice the number of hospital points of care are projected to be needed across the west over the next 20 years.

Infrastructure priorities identified in planning for the western growth corridor include:

- new health and wellbeing hubs to provide local access to healthcare services in locations with very high expected population growth
- redevelopment and expansion of existing hospital services in the inner west
- further planning for additional hospital capacity on the peri-urban fringe of this growth corridor to promote local access over the longer term

The Victorian Government has begun to address this need through major infrastructure investments in the western growth corridor:

- \$200 million to build the new Joan Kirner Women's and Children's Hospital that will provide an additional 237 beds, 39 special care nursery cots, four theatres and ambulatory services
- \$85 million for the redevelopment and expansion of Werribee Mercy Hospital, delivering six extra operating theatres and 64 new inpatient beds including eight critical care beds.
- \$61.3 million for urgent infrastructure works at Western Health (Footscray and Sunshine Hospitals)
- \$21 million¹ for the new Melton health and wellbeing hub, which will bring together community health, mental health and family services under the one roof.

In addition, the 2017-18 State Budget includes a commitment to building a new Footscray Hospital, with provision of \$50 million to develop a business case and commence design work for the construction.

¹ Inclusive of partner contributions.

South-eastern growth area

The south-eastern growth area covers the cities of Casey and Cardinia, extending from Hallam in the north to Pearcedale in the south, and from Lynbrook at the western end across to Lang Lang in the south-east corner. The major public health facilities in the area are Casey Hospital and Cranbourne Integrated Care Centre. There are approximately 400,000 people living in the area, with most residing in and around Cranbourne, Berwick, Narre Warren, Officer and Pakenham.

The area has a generally younger population and higher birth rate than other parts of Victoria. The south-east is culturally diverse and is home to a significant proportion of residents who were born overseas including a high proportion of humanitarian arrivals (in the City of Casey) compared with the Victorian average.

The population of the south-eastern growth area is forecast to grow by around 200,000 to 600,000 by 2031. Almost all of that growth (nearly 170,000 people) will occur in the central and western part of the area—in and around Officer, Pakenham and Cranbourne.

Compared with Victoria as a whole, the area has a higher proportion of healthcare card holders and welfare-dependent families with children. The area has a lower than average rate of private health insurance coverage. The proportion of the population who did not complete Year 12 and do not hold a higher education qualification is higher than the state average. Rates of family violence are significantly higher than the Victorian average. Compared with Victoria as a whole, there is a much higher proportion of the population with greater than a two-hour daily commute and who do not live close to public transport.

The south-east has high prevalence of a number of chronic diseases including diabetes, heart disease and asthma. Rates of obesity and rates of high blood pressure are also higher than the state average.

The south-eastern growth area as a whole, and particularly those parts with the highest levels of growth, has inadequate access to local healthcare services. Access to general practitioners, dental care, allied health and pharmacies is lower than the state average. The ability of residents to access community-based health services will only worsen without significant investment.

With Casey Hospital providing the area's only public overnight and multiday acute hospital services, many people already need to travel out of the area for hospital care. This puts increased pressure on Dandenong Hospital and Monash Medical Centre. Without alternatives to better prevent illness or divert demand, hospital capacity in the area must increase by five times its current level over the next 15–20 years

Planning for the south-eastern growth area identifies the following infrastructure priorities to meet these challenges:

- extending health and wellbeing hubs in centres of population growth to bring more care closer to where people live
- expansion of Casey Hospital (taking into account growth of the neighbouring St John of God private hospital) to meet the acute care needs of the area's population.

The Victorian Government is addressing this need by investing \$134.9 million for a major expansion of Casey Hospital that will treat 12,000 more patients, conduct 8,000 more surgeries and support 500 more births. This investment will increase the size of the hospital by 35 per cent. In addition, our investment of \$6.2 million for the new Pakenham health and wellbeing hub will complement the existing hub at Cranbourne to provide care for more people in the south-east growth corridor of Melbourne.

Inner Melbourne

The inner Melbourne area covers the City of Melbourne and part of the City of Port Phillip, extending from East Melbourne to Docklands in the west and from Kensington and Parkville in the north to Albert Park and Port Melbourne in the south. The major public health facilities are the Royal Melbourne Hospital, The Alfred, St Vincent's Hospital, the Royal Women's Hospital, the Royal Children's Hospital, the Royal Victorian Eye and Ear Hospital, the Royal Dental Hospital and Peter MacCallum Cancer Centre. Each of these serves the local population, as well as significant numbers of people who travel from other parts of Victoria.

Currently around 183,000 people live in the inner Melbourne area. The area has a much younger demographic than Victoria as a whole, with approximately twice the proportion of people aged between 20 and 29 years. The population of the inner Melbourne area is expected to grow by more than 120,000 to exceed 300,000 in the next 15 years. All parts of the locality will experience high rates of growth, with the largest growth in the south (Port Melbourne and Albert Park) and the west (Southbank and Docklands). Housing for the increased population will be provided through a combination of infill of existing areas and new residential precincts in the urban renewal zones of E-Gate, Dynon, Macaulay, Arden and Fishermans Bend.

The population of the inner Melbourne area as a whole has relatively high socioeconomic status. However, there are pockets of disadvantage, and the unemployment rate for the area is higher than the Victorian average. Inner Melbourne has a high proportion of residents who were born overseas and speak a language other than English at home—a reflection of the high international student population. The proportion of the population employed in financial, insurance, professional, scientific and technology jobs is significantly higher than for the state overall.

Residents of inner Melbourne report considerably better than average outcomes across a number of health issues affected by lifestyle such as obesity, type 2 diabetes and blood pressure. Residents are less likely to smoke, more likely to meet activity guidelines and more likely to have private health insurance than the Victorian population as a whole.

Around 390,000 people travel into the City of Melbourne for work, and this is expected to grow to an estimated 526,000 people over the next 10–15 years. In addition, around 68,000 students travel into the city each weekday for study purposes, and a further 260,000 people visit the City of Melbourne for reasons not related to work or study, including for healthcare appointments or treatment.

Residents of inner Melbourne are generally very well served in terms of access to healthcare, and the inner Melbourne area is home to a number of facilities providing tertiary and specialist hospital services. However, new facilities will be required to ensure local access to community-based health and social services for residents of the planned new residential precincts. The intensively used infrastructure of some of the existing tertiary facilities in the area also require refurbishment, reconfiguration and expansion to meet local and statewide demand.

Locality planning for inner Melbourne identifies the following infrastructure priorities:

- further planning for urban renewal zones
- planning for redevelopments of key hospitals to meet the needs of a growing population and offer contemporary standards of care into the future.

The Victorian Budget 2017/18 provides \$40 million to upgrade key infrastructure at the Royal Melbourne Hospital while planning continues on the next steps for the Melbourne Biomedical Precinct.

Further service planning is also underway with Alfred Health. In the interim, critical infrastructure works are nearing completion at The Alfred, with a major fire services upgrade.

Locality planning for other parts of the greater Melbourne metropolitan area



Melbourne's inner north, inner south, eastern and southern areas

Areas of Melbourne outside the growth areas include: the suburbs of the inner north and the inner south; the outer north-east of the Melbourne metropolitan area; and the southern part of Melbourne. There are more than 2.6 million people living in these parts of Melbourne, and this population is expected to grow to over 3.2 million over the next 15 years. While these areas are more established and generally well serviced compared with the growth areas of Melbourne, planning is needed to ensure existing assets are properly maintained and developed, including expansion required to meet population growth.

Locality planning for these areas will need to focus separately on priorities for each of:

- the inner north (the suburbs between the northern growth area and the CBD)
- the east (stretching from Oakleigh and surrounding suburbs out to the Yarra Ranges)
- the inner south (the established suburbs in Boroondara, Stonnington, Glen Eira, Bayside and eastern Port Phillip)
- the south (from Dandenong down to the end of the Mornington Peninsula).



These parts of Melbourne contain many key healthcare facilities that meet the needs of their local communities including a number of tertiary facilities that also provide specialised acute care to people living in other parts of Victoria. The main facilities include: Austin Hospital in the inner north; Box Hill Hospital, Maroondah Hospital, Angliss Hospital and Monash Medical Centre in the east; Caulfield Hospital and Moorabbin Hospital in the inner south; and the Kingston Centre, Dandenong Hospital and Frankston Hospital in the south.

Key infrastructure priorities for these areas with funding commitments over 2016–17 and 2017–18 include:

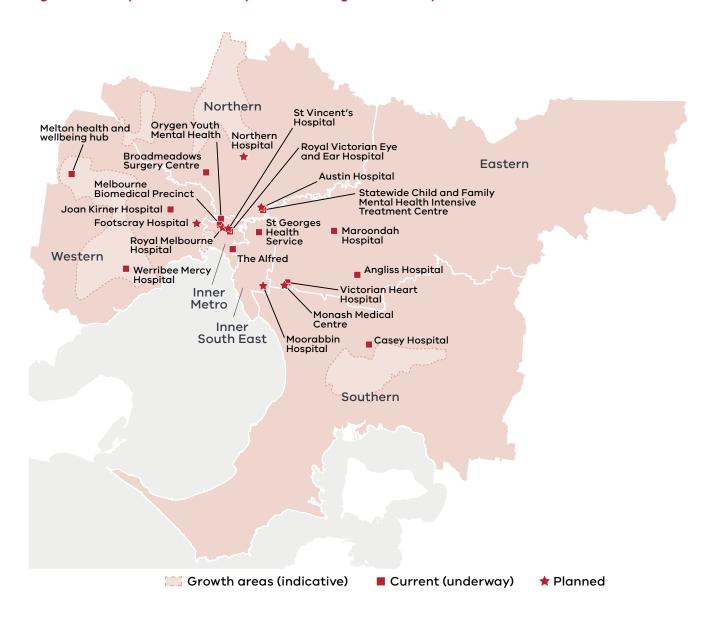
- the Victorian Heart Hospital
- expansion and reconfiguration of the emergency department at Monash Medical Centre to provide for the newly opened Monash Children's Hospital
- infrastructure works and expansion at Austin Hospital
- Maroondah Hospital cancer centre development
- upgrades at Angliss Hospital
- expansion of forensic mental health services
- new public residential aged care facility at St Georges Health Service in Kew.

Table 4: Infrastructure pipeline for metropolitan and various statewide locations

Locality	Our five year priorities—ongoing and new commitments in 2017–181
Northern growth area	Northern Hospital expansion. Expansion of Broadmeadows Surgery Centre.
Western growth corridor	 Footscray Hospital redevelopment. Werribee Mercy Hospital reconfiguration and expansion. New Joan Kirner Hospital in St Albans. New Melton health and wellbeing hub. Critical infrastructure works at Western Health (Footscray and Sunshine).
South-eastern growth area	 Casey Hospital expansion. Expansion and upgrade of the Monash Medical Centre's emergency department, to support the opening of Monash Children's Hospital. A Victorian Heart Hospital. Expanded imaging and specialist clinics at Moorabbin Hospital.
Inner Melbourne	 Planning and development of the Melbourne Biomedical Precinct. Royal Melbourne Hospital and The Alfred Hospital critical infrastructure works. Redevelopment of Orygen Youth Mental Health (Parkville). Redevelopment of the Royal Victorian Eye and Ear Hospital. Development of the National Proton Beam Therapy Centre. Aikenhead Centre for Medical Discovery at St Vincent's Hospital.
Other metropolitan areas	 Austin Hospital critical infrastructure works. Maroondah Hospital cancer centre development. Upgrades at Angliss Hospital. New aged care facility at St Georges Health Service. Establishment of the Statewide Child and Family Mental Health Intensive Treatment Centre.
Statewide (various locations)	 Upgraded and new Ambulance stations, vehicles and equipment. Increasing critical care capacity for neonates and adults. Clinical technology refresh – cybersecurity and connectivity. Expansion of prevention and recovery care services. Expansion of forensic mental health services. Renewal of mental health and alcohol and other drugs services facilities. New residential drug rehabilitation services.

¹ Future infrastructure investment priorities will be driven by the five priorities under this plan, and be determined through more detailed service and locality planning.

Figure 12: Metropolitan Partnership areas showing current and planned infrastructure investment



Locality planning for regional cities and rural areas



Locality planning for regional and rural health services in Victoria will continue to closely align with, and build on, planning processes and outcomes across government. They will link to Regional Partnerships to maximise synergies across local community interests and government services.

The Victorian Government established these Regional Partnerships to bring together representatives from local business, education, social services and community groups with the three tiers of government (federal, state and local). They give regional communities more say in planning and decisions affecting them and build stronger connections with government. The partnerships have been defined across nine areas that cover rural and regional areas of Victoria and that reflect the existing economic and social networks that exist throughout regional Victoria. Local community priorities will be identified through regular regional assemblies conducted by Regional Partnerships.

The new Victorian Planning Authority (VPA, formerly the Metropolitan Planning Authority) is working with other government agencies, landowners, developers, councils and local communities to ensure a coordinated, placebased approach to managing Victoria's population growth. In order that planning is coordinated across government, the VPA works closely with councils, Metropolitan Partnerships, Regional Partnerships, Regional Development Victoria and other parts of government. Healthcare locality planning will need to align with plans developed by the VPA to ensure local access to healthcare services in areas covered by VPA planning.



Photo credit: John Gollings

Locality planning in regional and rural Victoria will also need to take account of the changes outlined in earlier parts of this document including:

- the impact of workforce changes and the extension of access to telehealth
- the implementation of more clearly delineated roles for rural and regional health services, influencing the type and level of services they offer
- the impact of formal networks on referral arrangements and pathways for providing care
- changes to emergency care, elective surgery and patient transport arrangements
- changes in services for older people and for maternity and newborn services.

This section provides a brief description of each Regional Partnership area and identifies current and planned infrastructure investments. Future priorities will be established as detailed locality planning occurs.

Barwon

The Barwon area encompasses: the Great Ocean Road coastline; the Otway forests; the farming communities around Colac and Winchelsea; and Victoria's biggest regional city, Geelong. Just over a quarter of a million people live in the area—almost half are under 35—and this region is growing rapidly.

The local economy has a strong advanced manufacturing and processing sector and potential for growth in biotechnology, information and communication technologies and the carbon fibre sector.

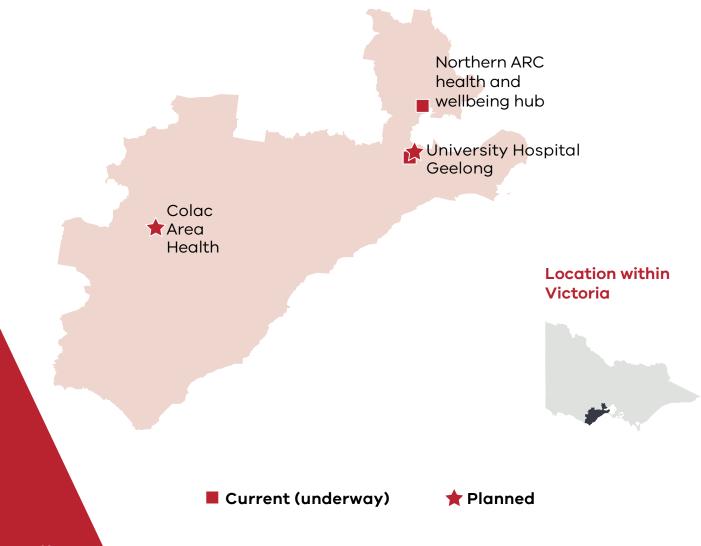
Issues facing the area include growing the education and health sectors, strengthening road and rail networks, further developing the advanced manufacturing sector, managing the

impacts of transitioning industries and creating new jobs.

Figure 13 shows the locations of current and planned infrastructure investment in the Barwon area.

The Victorian Government is already investing in upgrades and expansion at University Hospital Geelong and a health and wellbeing hub in Corio. In addition, recent investment announced under the Regional Health Infrastructure Fund includes \$1.9 million for various system upgrades at Barwon Health facilities and \$642,000 to replace fire protection and early warning systems at Colac Area Health.

Figure 13: Barwon area—current and planned infrastructure investment



Great South Coast

The Great South Coast extends from Lake Corangamite in the north down to the Shipwreck Coast, encompassing the farming communities around Camperdown and stretching west to the South Australian border. More than 100,000 people live in the area and around 33,000 residents call Warrnambool home, making it the region's largest centre.

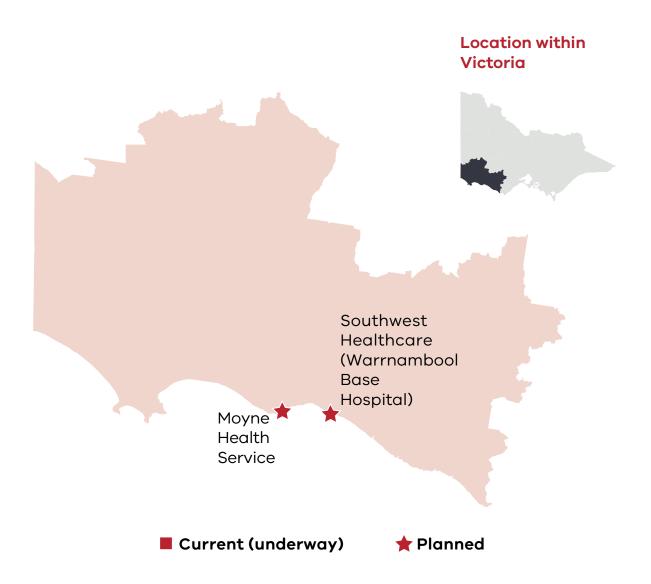
The area has a strong agricultural and fishing sector, alongside a growing tourism industry that sees thousands of visitors coming to the area each year. It is home to a deep-water port located at Portland and has an established rail network and a number of commercial airports. The region also has a growing sustainable energy sector and food processing capabilities.

Some of the key priorities for the area are: implementing the Shipwreck Coast master plan to protect the coast; increasing visitor numbers and their contribution to the local economy; improving education outcomes; and improving opportunities for disadvantaged communities.

Figure 14 shows the locations of current and planned health infrastructure investment.

Healthcare infrastructure investment announced under the Regional Health Infrastructure Fund includes \$2 million for improvements to elective surgery capacity at Warrnambool Base Hospital and \$2.1 million for an urgent care centre at Port Fairy. This has been followed by a commitment of \$7.5 million in the 2017-18 budget to progress planning for stage two development of Southwest Healthcare's Warrnambool Base Hospital.

Figure 14: Great South Coast area—current and planned infrastructure investment



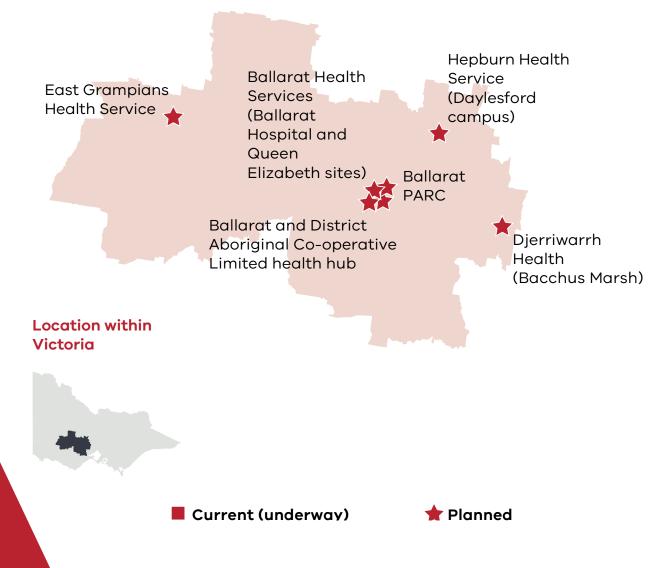
Central Highlands

The Central Highlands area straddles the east-west transport corridor, with the latter connecting Melbourne, western Victoria and Adelaide, covering the segment stretching from Ballarat to Ararat. The area's major centre, Ballarat, has the fastest growing population of any regional city in Victoria. The region is home to approximately 189,000 people, of whom about 100,000 live in and around Ballarat. Towards the peri-urban fringe, Melton and its surrounding areas are experiencing even higher population growth rates.

The area is predominantly agricultural, and one of the main priorities is capturing new opportunities in agricultural industries. The area is also seeking to build on strategic advantages such as its proximity to Melbourne and its natural and cultural tourism assets. Important priorities for the community are addressing health challenges for the growing population—particularly development of a prevention model suited to women's health, men's health and combatting obesity—and improving the quality of the region's transport connections.

Figure 15 shows the locations of current and planned health infrastructure investment.

Figure 15: Central Highlands area—current and planned infrastructure investment



Recently announced investment under the Regional Health Infrastructure Fund includes: a \$4.1 million extension to East Grampians Health Service community health centre at Ararat; \$1.6 million for a renovation of the Djerriwarrh Health Service maternity unit at Bacchus Marsh and \$9 million for construction of a new operating theatre suite; \$4 million for facility redesign and plant and equipment works at Ballarat Health Services—Ballarat Hospital and Queen Elizabeth sites; \$6 million for a health hub to be operated by the Ballarat and District Aboriginal Co-operative Limited; and \$2.83 million to fund a nursing home redevelopment and information and communications equipment for Hepburn Health Service—Daylesford campus.

The Victorian Budget 2017/18 also provides for the development of a Ballarat prevention and recovery care service (providing short-term residential care for mental health patients), and additional drug treatment residential rehabilitation services.

Wimmera Southern Mallee

The Wimmera Southern Mallee area in central-western Victoria extends along the transport corridor linking Melbourne to Adelaide, stretching from the countryside east of Stawell to the border of Victoria and South Australia. The area is a major wheat and cereal growing region comprising many small, rural communities. The major regional centre is Horsham, which is home to approximately 20,000 people. Around 47,000 people live in the Wimmera Southern Mallee area.

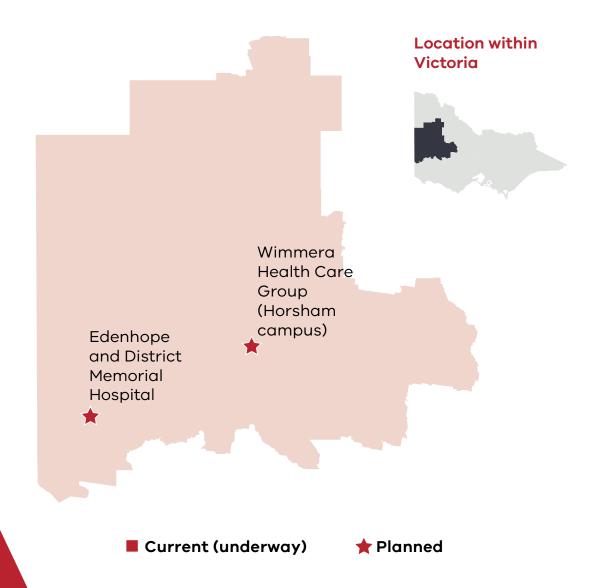
The area is home to some of Victoria's most iconic natural attractions including the Grampians
National Park, the Wimmera River, major wetlands and lakes and the popular rock-climbing destination of Mount Arapiles.

Opportunities and issues for the area include expanding high-value agricultural production and developing innovative agricultural products, attracting new residents and providing services for ageing residents. Another focus for the area is diversifying the economy including expanding tourism to further capitalise on the area's natural assets.

Figure 16 shows the locations of current and planned health infrastructure investment.

Recent investments announced under the Regional Health Infrastructure Fund include \$6.3 million for master planning ahead of a redevelopment of the Edenhope and District Memorial Hospital and \$2.2 million for plant and equipment works for the Wimmera Health Care Group—Horsham campus.

Figure 16: Wimmera Southern Mallee area—current and planned infrastructure investment



Loddon Campaspe

The Loddon Campaspe area in central Victoria has a diverse population and a local economy based on agriculture, retail, health, property and manufacturing. It is home to more than 233,000 people, with around half of the population living in and around the major centre of Bendigo. While the local economy is generally strong, there are also pockets of socioeconomic disadvantage, particularly around Maryborough and in the Loddon Shire.

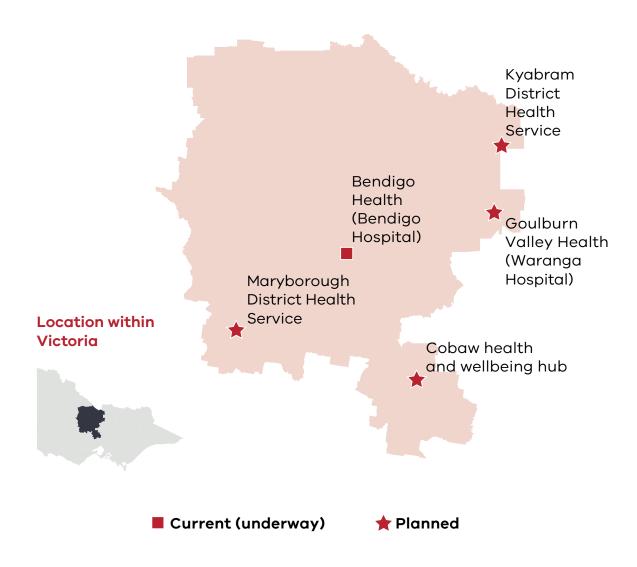
Bendigo, one of Victoria's largest and fastest growing regional cities, lies in the heart of the region and is a hub of cultural and economic activity. Many migrant and refugee communities have settled nearby. Priorities for the area include improving productivity and job creation, supporting farmers dealing with the impact of climate change and boosting health and education outcomes.

Figure 17 shows the locations of current and planned health infrastructure investment.

Construction of stage 1 of the \$630 million Bendigo Hospital Project was completed in December 2016. The new facility features 372 inpatient beds, 72 same-day beds, 11 new operating theatres, an integrated cancer centre and an 80-bed psychiatry services facility including a parent-infant unit. Stage 2 is expected to be completed by mid-2018. It will include a helipad, elevated link and a multideck carpark.

Recently announced investment under the Regional Health Infrastructure Fund includes: \$9.96 million for redevelopment of Goulburn Valley Health's Waranga Hospital; \$9.8 million for a health and wellbeing hub in Cobaw; \$823,000 to remodel urgent care and acute care services at Kyabram District Health Service; and \$900,000 for medical imaging services at Maryborough District Health Service.

Figure 17: Loddon Campaspe area—current and planned infrastructure investment



Mallee

Following the Murray River along the northern border of Victoria, the Mallee area extends from Leitchville up to Mildura and beyond to the northwest corner of Victoria. The area is home to more than 90,000 people.

Agriculture—broadacre cropping and irrigated—drives the Mallee's economy. The area surrounding Mildura, Robinvale and Swan Hill is one of Victoria's most productive horticultural regions. The area is culturally diverse, with strong Aboriginal heritage and a large Aboriginal population, and a growing number of skilled migrants and people holding humanitarian visas. With the Murray River running along the northern border, the area has good access to irrigation. It also lures tourists and people seeking a lifestyle change.

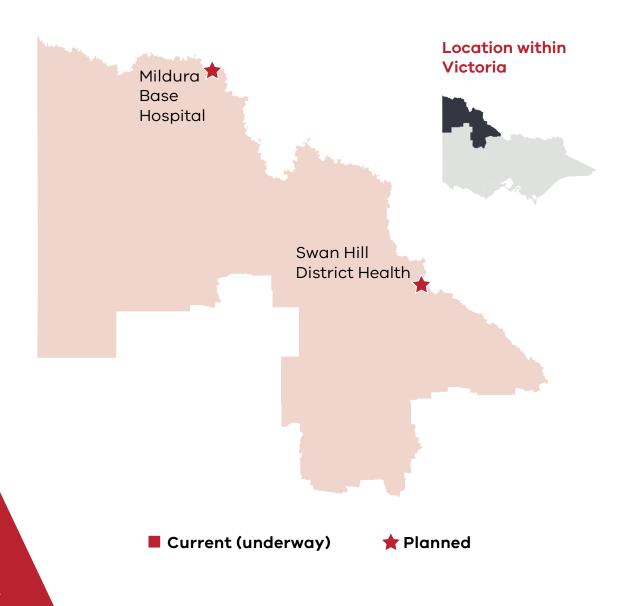
Priorities for the area include population retention (particularly in Buloke and Gannawarra Shires,

which are forecast to see smaller populations over time) and improving the liveability of small towns. Economic priorities are to boost growth in agriculture, food processing and other significant local industries and to modernise the area's irrigation infrastructure. Health priorities include developing a culturally responsive health program for Aboriginal people and working to understand the health impacts on people who need to travel outside of the Mallee to access health services.

Addressing serious health concerns is another priority, particularly in Buloke Shire, which has some of the state's highest rates of people with high blood pressure, cancer and poor health behaviours including poor diet, high smoking rates and harmful alcohol consumption.

Figure 18 shows the locations of current and planned health infrastructure investment.

Figure 18: Mallee area—current and planned infrastructure investment



Recent investment announced under the Regional Health Infrastructure Fund includes \$2.6 million for subacute services at Swan Hill District Health and \$4.46 million to increase intensive care services at Mildura Base Hospital and to redesign the acute mental health unit.

Goulburn

Stretching from beyond Melbourne's northern growth corridor up to the Murray River, the Goulburn area is a fertile agricultural region with a mild climate and good water resources. More than 157,000 people live in the area.

Shepparton, the largest city in the area, is home to around 50,000 people and is the primary location for health, cultural and higher education services. Along with other towns including Mooroopna and

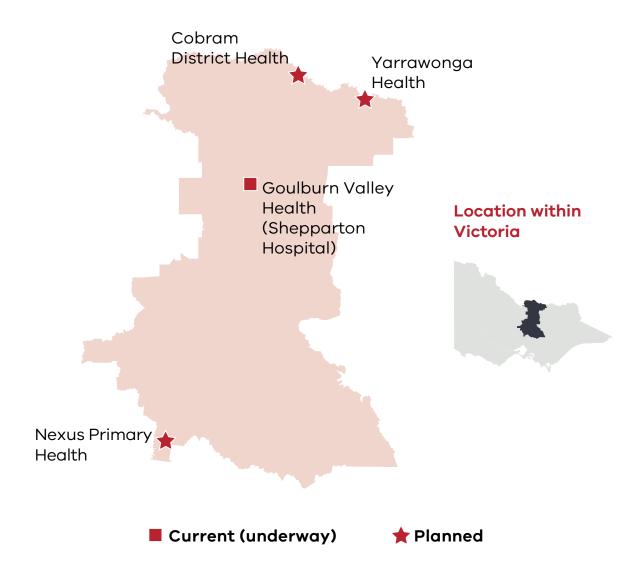
Yarrawonga, Shepparton has a culturally diverse population including a large Aboriginal population.

Priorities for the area include: capitalising on the region's significant food industry capabilities; improving education and employment opportunities for young people and Aboriginal people; ongoing support for communities recovering from the 2009 Black Saturday bushfires; and managing the impact of industries in transition.

Figure 19 shows the locations of current and planned health infrastructure investment.

Construction of the \$168.5 million redevelopment of Goulburn Valley Health's Shepparton Hospital will begin at the end of 2017 and be completed in late 2020. It includes a new four-storey tower, theatres and wards, a refurbishment of the existing theatres, an expansion of the emergency department and an upgrade to the maternity ward.

Figure 19: Goulburn area—current and planned infrastructure investment



Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Healthcare infrastructure investment announced under the Regional Health Infrastructure Fund includes \$413,000 to refurbish Yarrawonga Health's Warrina Hostel, \$616,000 to remodel Nexus Primary Health at Wallan and \$460,000 for plant works at Cobram District Health.

Ovens Murray

Bordering New South Wales to the north and the Victorian Alps region in the south and east, the Ovens Murray area has a thriving tourism sector based on major attractions including the Alpine National Park, ski fields, Lake Hume, the Murray River and Lake Eildon. The area is home to around 124,000 people, with Wangaratta and Wodonga being the largest centres of population.

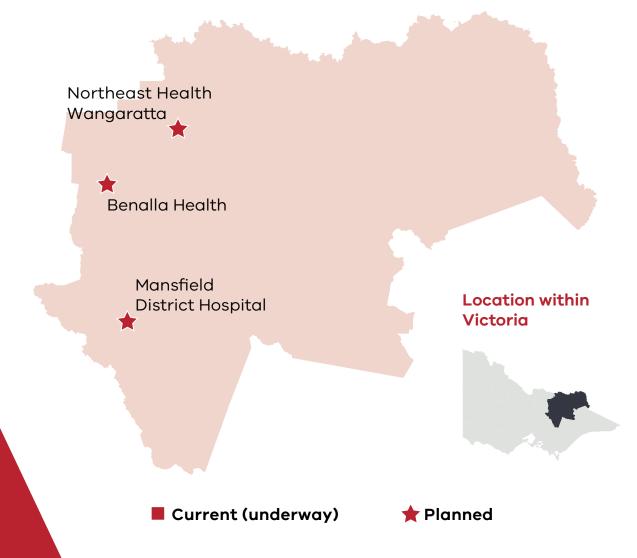
The area is located on national freight and transport routes servicing Australia's east coast and has good access to water to support local food and wine production. Tourism assets include

heritage towns and iconic tracks and trails. Wodonga, Wangaratta and Benalla are also strong manufacturing centres.

A focus for the area is ensuring a balanced approach to growth, embracing economic, social and environmental initiatives. The area is also tackling the challenges of expanding the local higher education sector, attracting and retaining skilled workers, delivering services for ageing residents, providing support for business district revitalisation and the development of year-round alpine tourism. In health, a particular priority is to increase the capacity for disadvantaged and vulnerable families to access mental health services and resilience-building programs in the area.

Figure 20 shows the locations of current and planned health infrastructure investment. Recent investment announced under the Regional Health Infrastructure Fund includes: \$15.18 million for

Figure 20: Ovens Murray area—current and planned infrastructure investment



master planning at Northeast Health Wangaratta; \$4.4 million for ward refurbishment and hospital systems and equipment at Benalla Health; and \$475,000 to refurbish Buckland House at Mansfield District Hospital.

Gippsland

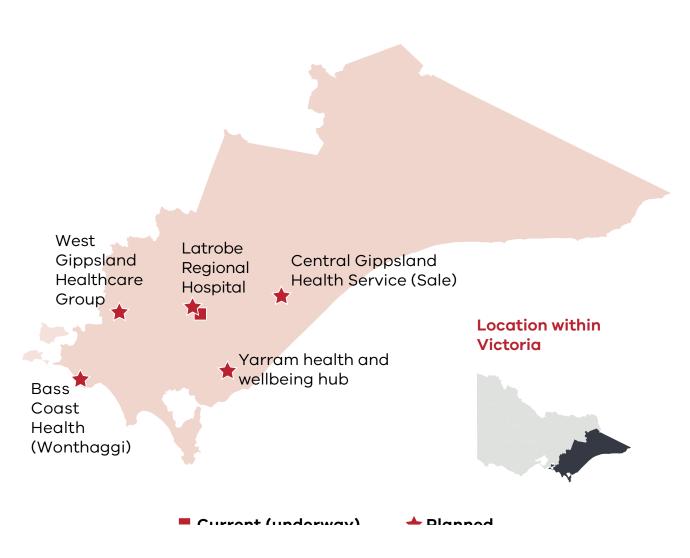
The Gippsland area stretches along the southeastern coast of Victoria from the dairy country in its south-west extent, to the Alps and heavily forested areas along the northern border with New South Wales. More than 270,000 people live in the Gippsland area. The main population centre is in Traralgon, though Sale, Bairnsdale and Warragul are also large towns.

Gippsland's growth has traditionally come from manufacturing and industries based on natural resources including energy generation, agriculture, forestry and tourism. The area produces around 90 per cent of Victoria's electricity and 97 per cent of the state's natural gas, but a global shift towards a low-carbon economy has created challenges for the energy sector and the region's economy.

Challenges and opportunities for the area include diversifying the region's economy, tackling localised high-level unemployment, improving health in the Latrobe Valley and supporting nature-based tourism. A key priority is the work of the Latrobe Valley Authority to support the local community and build a stronger Latrobe Valley.

Figure 21 shows the locations of current and planned health infrastructure investment.

Figure 21: Gippsland area—current and planned infrastructure investment



Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

When completed in late 2017, the \$73 million redevelopment of Latrobe Regional Hospital will feature a larger emergency department and ward capacity, endoscopy facilities and the region's first cardiac catheterisation laboratory, which will be used by specialists to diagnose and treat serious heart health conditions.

Investment announced under the Regional Health Infrastructure Fund includes: \$10.3 million for an additional operating theatre and a new short stay unit at West Gippsland Healthcare Group in Warragul and planning for the redevelopment of the hospital; \$4.13 million for expanded theatre capacity at Central Gippsland Health Service—Sale; \$4 million to construct a new health and wellbeing hub in Yarram; \$2.62 million for a special care nursery and maternity ward works at Latrobe Regional Hospital; and \$3 million for various essential plant and systems works at Bass Coast Health.

South Gippsland subregional clinical service plan

The South Gippsland subregion has three separate health services that provide care to the local residents. Bass Coast Health, South Gippsland Hospital and Gippsland Southern Health Service currently meet approximately 40 per cent of the needs of the subregion, with large numbers of people needing to travel into metropolitan Melbourne to receive healthcare.

All three health services are reliant on a local, private general practitioner workforce, which limits the capacity of the health services to provide financially efficient services and have a measure of oversight and control over the clinical capability of the workforce. Independently, the three health services are not meeting the needs of their local population.

Recognising this situation, the Minister for Health provided Bass Coast Health with funding in late 2016 to undertake a clinical services plan for the Bass Coast area. Following discussion with Gippsland Southern Health Service and South Gippsland Hospital, this was expanded into a subregional clinical services plan, exploring the health needs of the south Gippsland and Bass Coast areas and recommending actions to be implemented over time in response to these identified needs.

The three organisations have committed to working together as a single clinical service network to pool resources, workforce and service demand in order to create clinically safe and financially viable health services. By working collaboratively they will be able to provide an increased range of clinical services, meeting clinical capability framework requirements and increasing self-sufficiency of the South Gippsland subregion. Now nearing completion, this subregional clinical services plan will outline the tasks and actions required to transition, over time, to a subregional network of the three entities.

This subregional plan has demonstrated the potential of subregions to meet a larger component of local healthcare needs, increasing self-sufficiency in a clinically safe and financially viable manner while preserving the historical connection townships have with their local hospital. The methodology underpinning this plan will be considered for use in locality planning in other rural areas.

Table 5: Our infrastructure pipeline for regional and rural Victoria

Dominum				
Regional Partnership	Our five year priorities—ongoing and new commitments in 2017–181			
Barwon	 Facility upgrades and expansion at University Hospital Geelong. Barwon Health North facility, including urgent care services, as part of the Northern ARC (Arts, Recreation and Community) Health and Wellbeing Hub. Safety and clinical systems upgrades at Barwon Health and Colac Area Health. Upgrade to urgent care centre at Otway Health. 			
Great South Coast	 Improvements to elective surgery capacity and progress planning for stage two development of Warrnambool Base Hospital. New urgent care centre at Port Fairy. Upgrade to communications at Lyndoch Living. 			
Central Highlands	 Service and master planning for Ballarat Health Services. New mental health prevention and recovery care service and additional drug treatment residential rehabilitation services for the Ballarat community. Facility redesign and plant and equipment works at Ballarat Hospital and the Queen Elizabeth Centre. Health and wellbeing hub to be operated by the Ballarat and District Aboriginal Cooperative Limited. Extension to East Grampians Health Service community health centre at Ararat. Upgrades for the Djerriwarrh Health Service maternity unit at Bacchus Marsh and construction of a new operating theatre suite. Nursing home redevelopment and information and communications equipment for Daylesford Hospital. A new cardiac catheterisation laboratory for Ballarat Health Services. 			
Wimmera Southern Mallee	 Master planning for a redevelopment of the Edenhope and District Memorial Hospital Plant and equipment works for the Wimmera Health Care Group. 			
Loddon Campaspe	 Stage 2 Bendigo Hospital project. New Cobaw health and wellbeing hub, located in Kyneton. Remodel of urgent care and acute care services at Kyabram District Health Service. Medical imaging services at Maryborough District Health Service. Redevelopment of Waranga Hospital, including aged care. Surgical services and equipment upgrades for Rochester and Elmore District Health Service. 			
Mallee	 New subacute services at Swan Hill District Health. More intensive care services at Mildura Base Hospital and redesign of the acute mental health unit. 			
Goulburn	 Redevelopment of Goulburn Valley Health's Shepparton Hospital. Refurbishment of the Warrina Hostel at Yarrawonga Health. Plant works at Cobram District Health. Remodel of Nexus Primary Health at Wallan. Upgrades to safety systems and strengthening maternity services at Kilmore and District Hospital. 			
Ovens Murray	 Upgrades of facilities and equipment at Albury Wodonga Health. New critical care unit and expansion of the emergency department and clinics at Northeast Health Wangaratta. Ward refurbishment and hospital systems and equipment at Benalla Health. Refurbishment of Buckland House at Mansfield District Hospital. 			
Gippsland	 Latrobe Regional Hospital special care nursery and maternity ward works. Central Gippsland Health Service theatre expansion. Additional operating room and a new short stay unit at West Gippsland Healthcare Group in Warragul and planning for the redevelopment of the hospital. Essential services upgrades and neonatal resuscitation cots at Bass Coast Health. New health and wellbeing hub for Yarram. 			

¹ Future infrastructure investment priorities will be driven by the five priorities under this plan, and be determined through more detailed service and locality planning.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Next steps



The Statewide design, service and infrastructure plan for Victoria's health system 2017–2037 sets out a clear pathway for making the changes and investments needed to build our health system of the future. This pathway is illustrated in Appendix 2 and shows how the priorities and actions in the plan link to short, medium and longer term outcomes that contribute to the desired features of our future health system.

The priorities and actions build on existing foundations while creating a much sharper focus on what, where and how our valuable resources will be maximised to respond to our changing population and environment.

While some change is hard to predict, we are already facing clear shifts in demand, community expectations, knowledge and practice that are opening new doors of opportunity for how we shape and achieve our desired future system—together.

Each of us has a part to play in ensuring the priorities and actions set out in this plan are implemented and make a real difference to the wellbeing of all Victorians. This will require strong leadership and partnerships across government, industry sectors and local communities.

For this reason, we have ensured our plan complements and builds on *Plan Melbourne* 2017–2050 and Infrastructure Victoria's 30-year strategy, as well as allowing for much greater codesign and place-based planning in collaboration with all tiers of government, industry and the wider community through Metropolitan and Regional Partnerships.



This plan also supports the delivery of our vision under *Health 2040* and *Better, safer care,* with the department having a key role in partnership with Safer Care Victoria, the Victorian Clinical Council and the Victorian Agency for Health Information in driving a system-wide approach to optimum design and delivery of prevention and care.

A series of underlying design, service and infrastructure plans for major service streams and geographic areas will directly support the plan itself and initial steps. This will ensure we are purposeful, resourceful and sustain momentum to achieve the lasting changes required to deliver better outcomes for all Victorians.

Glossary of key terms

Advanced practice roles are clinical roles in which health professionals use their skills at an advanced level to expand the options for health service provision.

Bundled payments take separate sources of funding that would normally be used to pay for specific types of care and group—or bundle—them together so they can be used more flexibly to meet the healthcare needs of individuals, carers and families. This means funding that may have been intended, for example, to provide hospital care, can be used proactively to provide care and support to keep people healthy and reduce the risk of being admitted to hospital.

Capability frameworks define different levels of complexity across the spectrum of care in a particular service or clinical stream (such as maternity care, cardiac care or cancer care). For each level of complexity, the capability framework sets out: the required skills, experience and capacity of the workforce; the infrastructure and equipment requirements; and the formal relationships needed between services to make sure people have access to the full range of care within that clinical or service stream.

Chronic disease is a long-term illness or condition, such as diabetes, that may not have a cure but requires ongoing care and treatment including to stop or slow its progression.

Commissioning is the process of assessing needs, setting priorities, planning services, allocating resources, monitoring service performance, and evaluating the outcomes of healthcare provision.

Five-year plans for jobs, services and infrastructure will consider the employment, services and infrastructure needs for Melbourne's six metropolitan regions. The plans will be guided by inputs received through the Metropolitan Partnerships and will be used to coordinate and focus investment.

Health and wellbeing hubs are locations providing integrated health and social services to meet the needs of local communities. They can be existing sites that are developed to extend the range of services offered and provide them in an integrated way. Health and wellbeing hubs can also be established in new facilities to meet the needs of growing communities and new residential developments.

Health Care Homes are an initiative of the Commonwealth Government to improve care for patients with chronic and complex conditions. Under this model, eligible patients will voluntarily enrol with a participating medical practice known as their Health Care Home. This practice will provide a patient with a 'home base' for the ongoing coordination, management and support of their condition(s) (Department of Health 2017).

Metropolitan assemblies will be conducted by Metropolitan Partnerships (see below) to bring together people from the community, industry and government to discuss and debate the top priorities of metropolitan areas.

Metropolitan Partnerships are being established across metropolitan Melbourne to enable communities to have a greater say about the issues that matter to them and ensure their needs are heard by government. They will bring together community and business members as well as representatives from local government, the state government and the Commonwealth government to identify and address the most important challenges and opportunities in each region.

Place-based initiatives seek to improve the social, cultural, economic and physical environment within a defined boundary, in order to improve overall health and reduce the differences in health among the people living within that area (Baum et al. 2007).

Primary Health Networks are administrative health regions established by the Commonwealth government to work directly with general practitioners, other primary healthcare providers, secondary care providers, hospitals and the broader community to improve primary healthcare services for communities and ensure improved outcomes for patients (Australian Government 2017).

Regional assemblies are conducted regularly by Regional Partnerships (see below) to bring together people from the community, industry and government to discuss and debate the top priorities of regional areas.

Regional Partnerships have been established by the Victorian Government to bring together representatives from local business, education, social services and community groups with the three tiers of government (federal, state and local). They give regional communities more say in planning and decisions affecting them and build stronger connections with government.

Role delineation clearly designates the roles of service providers and standardises protocols and referral networks around them to ensure patients can access the level of care they require in a timely way regardless of where they enter the system.

Specialist clinics provide planned, non-admitted services for assessment, diagnosis and treatment including access to diagnostic services such as pathology and imaging (Department of Health 2013).

Specialists are medical practitioners with recognised skills or qualifications that allow them to treat specific conditions (Australian Institute of Health and Welfare 2017b).

Supercare Pharmacies are a Victorian Government initiative that provide local communities with access to pharmacy services 24 hours a day, seven days a week.

Telehealth is "the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities" (World Health Organization 2010).

Urgent care centres are generally found in rural health services in Victoria, often supported by general practitioners and increasingly advanced practice nurses. Urgent care centres undertake initial assessment, provide care that may be definitive or onward referral. In an emergency they can provide initial resuscitation and limited life support before a patient is transferred to a definitive point of care. Where necessary ambulances with critically ill patients will bypass an urgent care centre and go directly to a larger health service that manages higher complexity patients. An urgent care centre does not provide an emergency department level of care.

Appendix 1: Membership of the Ministerial Advisory Council



Chair:

• Ms Patricia Faulkner, AO

Members (in alphabetical order):

- Mr Jim Birch AM, Independent consultant and Deputy Chair of the Independent Hospital Pricing Authority
- Associate Professor Alex Cockram, Chief Executive Officer, Western Health
- Mr Andrew Currie, Healthscope State Manager, Victoria
- Dr Sherene Devanesen, Board Chair, Royal Victorian Eye and Ear Hospital
- Dr Stephen Duckett, Health Program Director, Grattan Institute
- Mr Dale Fraser, Chief Executive Officer, Ballarat Health Services
- Associate Professor Richard King AM, Medical Director, Monash Health

- Ms Caroline Mulcahy, Chief Executive Officer, Carers Victoria
- Dr Ines Rio, Chair, North Western Melbourne Primary Health Network
- Dr Ranjana Srivastava, Medical Oncologist, Monash Health
- Mr Terry Symonds, Deputy Secretary, Health Policy and Commissioning, Department of Health and Human Services
- Associate Professor Jan Tennent, Chief Executive Officer, Biomedical Research Victoria
- Associate Professor Ruth Vine, Executive Director, North Western Mental Health, Melbourne Health
- Professor Andrew Way, Chief Executive Officer, Alfred Health
- Dr Sharon Willcox, Director, Health Policy Solutions
- Ms Jennifer Williams, Board Chair, Northern Health

Appendix 2: Our priorities for action—implementation plan

The following pages set out the implementation plan based on the priorities for action described in Section 2 of this document.

Priority areas	Focus	Actions	Our five-year goals
	Increasing prevention and early intervention capacity	Action 1 Integrating prevention and early intervention	 Join up planning between Commonwealth and State-funded agencies for local populations Boost the role of community health as a key delivery platform for prevention and care
		Action 2 Commission healthcare in a way that encourages integration centred on people's needs	 Work with the Commonwealth to support stage one Health Care Homes roll out Establish a local commissioning approach with provider alliances and hub delivery models to better target vulnerable and chronic disease cohorts Support family violence reforms and links to Support and Safety Hubs
		Action 3 Better information and navigation tools	 Improve data, information and online tools Strengthen systems of self-management and participatory care models
	Accelerating alternatives to hospital-based care	Action 4 Expanding primary care service options	 Roll out Supercare Pharmacies and promote colocation/shared arrangements for after-hours GP, pharmacy, diagnostic and other health and wellbeing services (through commissioning) Develop clear thresholds and pathways for referral
Priority area 1 Building a		Action 5 Redesigning specialist clinics	to specialist services • Develop models for rapid care and outreach (using technology and collaboration) to support the ongoing role of primary care— beyond the hospital walls
proactive system that promotes health and	Targeted investment to address priority needs	Action 6 Meeting the needs of a growing population	
anticipates demand		Action 7 Closing critical gaps in mental health services	 Invest in services and infrastructure to address unprecedented population growth and close service gaps
		Action 8 Expanding access to alcohol and other drug treatment services	Undertake planning for localities and service types—to understand what is needed where and how best to deliver those services
		Action 9 Improving access to first responders	
	Active collaboration with the private sector	Action 10 Working with the private sector to maximise benefits for all Victorians	Maximise the use of capacity and promote innovation through joint planning and financing arrangements
	Targeted investment to drive innovative new service models	Action 11 Identifying, scaling and embedding innovative practice across the Victorian healthcare system	Invest through Better Care Victoria in promoting and scaling sector-led improvement and innovations

- Joined-up planning with a prevention focus is embedded in system-wide and locality-based planning
- Flexible funding enables care to be tailored to the needs of individuals and families
- Commissioning approach and supporting reforms enable truly integrated delivery systems

- There is greater community/ home-based capacity
- Referral thresholds/pathways are established
- Innovative models of service provision are established

- Infrastructure investments maximise local capacity
- All but the most complex care is provided close to home
- Services better meet demand

- Better use of workforce, technology and infrastructure
- Proven innovations deliver better performance and outcomes system-wide

- ✓ Our health system will be geared towards prevention first, with treatment as needed
- ✓ Our services and facilities will be sensitive to gender, cultural, age and sexual diversity through access to specific and responsive services, including welcoming, safe environments
- ✓ The digital age will mean self-care and active participation in care become the norm
- ✓ Government funding support will be more strongly tied to the outcomes delivered for people and communities and less about how many times a service was provided. Most care will be delivered in the community, better supporting vulnerable people including those with chronic disease
- Most primary and social care services will be delivered through, or in partnership with, a local health and wellbeing hub, making it easier for people to access services and navigate the system
- ✓ Integrated, place-based planning will address the social, physical and environmental factors that affect health and will build meaningful local ways to improve health and wellbeing
- New technologies, drugs and changes to the workforce will mean more life-saving treatment can be delivered prior to hospital care

Priority areas	Focus	Actions	Five-year goals
Priority area 2 Creating a safety and quality-led system	System role delineation	Action 12 Clearly defining roles and referral networks	
		Action 13 Setting minimum volume thresholds	 Clearly defined roles, capability and relationships between services promote the right care in the right place Create mechanisms to ensure high-complexity, low-volume procedures are undertaken only in centres where they can be performed safely Use capability frameworks as a planning and safety and quality tool
		Action 14 Defining clinical service capability	

- A clearly delineated system, where access to safe, high-quality services for a population is assured, either locally or in conjunction with a wider network of providers, regardless of where people live
- Investment in service and infrastructure capacity, including high-cost medical equipment, aligns with service roles and capability

- ✓ Clearly delineated health service roles will underpin coordination and integration of services across the system, ensuring the right types and levels of care are available where they are needed
- ✓ A highly networked system will enable patients to move seamlessly and quickly through the system, regardless of where they live
- All public and private services will operate safely within their capability with a high degree of transparency and accountability
- ✓ Advances in practice and technology will make complex procedures routine and may make some obsolete as better alternatives become available
- ✓ The community will know who delivers what level of care and the outcomes of that care, guiding individual choices and simplifying navigation of the system
- ✓ As long as it can be delivered safely and with good-quality outcomes, most care will be delivered locally, with the exception of more complex treatment, which will be readily available in larger regional centres or in Melbourne
- ✓ New workforce models, roles and skills, shaped by role delineation, will help meet demand and deliver safe, highquality care
- Workforce development, education and training will foster leadership, collaboration, clinical excellence and a strong safety culture

Priority areas	Focus	Actions	Five-year goals
Priority area 3 Integrating care across the health and social service system	Responding to vulnerable and complex needs groups	Action 15 Establishing health and wellbeing hubs	
		Action 16 Safeguarding our children and families	Deliver flexible funding to provider alliances to promote integrated prevention and care systems early in life and early in disease
		Action 17 Building integrated whole-of-life clinical mental health services	 Establish health and wellbeing hubs to make it easier for people to access wraparound health and social care and support in the community— in one location Support reform initiatives under Victoria's 10 year mental health plan and the Ice action plan
		Action 18 Strengthening alcohol and drug treatment services	mental nealth plan and the ice action plan
	Seamless service transitions for Victorians with a disability	Action 19 Supporting the NDIS rollout	Support the NDIS rollout including development of pathways across health and NDIS-funded services
	Addressing the needs of older people	Action 20 Supporting older people	 Work with the Commonwealth to increase Health Care Homes enrolment and funded Community Support Packages Fund approaches to support targets such as reducing avoidable admissions Develop a dual investment approach to modernising PSRACS
	Improving health outcomes for Aboriginal people	Action 21 Supporting Aboriginal health and wellbeing	• Implement initiatives under the Aboriginal health, wellbeing and safety strategic plan 2017–2027 including funding reforms that support self-determination

- More care is delivered in the community when this leads to better outcomes
- Stronger integration of prevention and care systems in the community reduces avoidable emergency presentations and hospital admissions

- People who are eligible are able to fully benefit from the NDIS
- PSRACs increasingly care for people with more intensive support needs
- More older people can access integrated supports in the community, to help them live independently for as long as possible
- Services for Aboriginal people support selfdetermination in health, wellbeing and safety

- ✓ Children and families will be safe, with ready access to supports for their collective health and wellbeing to help them thrive
- ✓ People will have genuine choice and control over the supports available to meet their holistic needs
- ✓ More integrated prevention and early intervention will
 impact on the social determinants of health and wellbeing,
 in turn reducing inequity, protecting our most vulnerable and
 minimising the burden of disease
- ✓ Integration of prevention and care will achieve even greater benefits for people with multiple or complex needs and their families or carers
- ✓ The way practitioners work together, the way services are run
 and the way they are funded will all be aligned to improve the
 integration of systems of care
- ✓ Better use of data and technology will help create services driven by people's needs, location and preferences
- People will be supported in their communities by wraparound services that promote prevention and early management, and can scale up or down to meet changing medical and social needs
- ✓ Integrated health and wellbeing hubs will provide a full range of services from a single location in the community
- ✓ Older people will be able to live as well as possible in the community for as long as possible
- ✓ Co-design and partnerships involving consumers, their families and carers, local communities and workers will be common practice and shape what services are being delivered

Priority areas	Focus	Actions	Five-year goals	
	Workforce development	Action 22 Strengthening our rural workforce through collaboration and innovation	Implement strategies that attract, retain and support the right workforce and skill mix in rural Victoria	
	Developing a partnership approach	Action 23 Defining rural and regional health partnerships	Formalise service partnerships and create a stronger role for outer regional health services enabling more services to be delivered locally	
		Action 24 Defining referral networks	Reduce delays through defined referral networks	
Priority area 4 Strengthening regional and rural health services	Adjusting the service mix for an older local population	Action 25 Supporting older people in the community	 Progressively redevelop facilities and develop flexible, cross-disciplinary service models that support people in the community and in their homes 	
	Strengthening access to core services in rural Victoria	Action 26 Strengthening rural urgent care services	Use technology, advanced practice roles and	
		Action 27 Strengthening rural maternity and newborn services	 innovative workforce models to a greater extent Support future investment in line with projected demand and changing health needs including social circumstances for women, babies and families 	
		Action 28 Improving rural and regional access to elective surgery	 Develop a regional approach to wait list management with the sector, underpinned by formal referral and service networks Strengthen rural urgent care centres through formal referral networks and improved links to 	
		Action 29 Accessing emergency care	 specialist services through digital health technology Finalise the VPTAS review to meet changes in health care treatment and enable access to safe, 	
		Action 30 Improving patient transport assistance	high-quality health care for rural Victorians	

- A more flexible, innovative workforce promotes the best use of capability in the system
- Regional and sub-regional self-sufficiency is increased
- Service delivery is less infrastructure dependent, with more community-based options

- There is greater ability to attract and retain a highly-skilled workforce
- Technology and innovative solutions are more effectively used
- People are able to access the range of services they need as close to home as is safe and appropriate to do so
- Most health and social care is community and home-based making it more accessible for rural Victorians

- ✓ A highly networked, technology-enabled system will give people in rural areas access to the range of services they need as close to home as is safe and appropriate
- ✓ More complex treatment will be readily available in larger centres, with only the most complex of procedures or services requiring travel to a tertiary or specialist facility. Clearly defined roles and networks will mean no avoidable delays in patient transfers
- ✓ There will be a highly talented, skilled and supported rural workforce, with rewarding careers
- ✓ There will be new types of workers and new ways of working in rural areas—particularly in urgent care centres—supported by targeted recruitment programs and incentives for skilled workers to stay in rural communities
- The majority of health and social care will be community- and home-based, making it more accessible for rural Victorians on a day-to-day basis
- There will be greater access to transport and accommodation subsidies for those people who do need to travel long distances to access larger regional and metropolitan-based services

Priority areas	Focus	Actions	Five-year goals	
	Investing in medical technology and industry development	Action 31 Investing in industry development	Better target investment in the medical	
Priority area 5		Action 32 Providing stronger governance and coordination to invest wisely	technologies and pharmaceuticals sector • Develop new ways of bringing together medical technology and medical research to drive innovation	
Investing in the future— the next generation of healthcare	Capturing new and evolving fields of world-class medical research	Action 33 Developing system- wide translational research capacity	Further build Victoria's network of world-leading research agencies and collaborations through specialty services (including the Victorian Heart Hospital and the Victorian Comprehensive Cancer Centre)	
	Harnessing the power of genetics and genomics	Action 34 Developing personalised medicine	Strengthen genetics and genomics services to drive more personalised care and improve clinical outcomes	

- There are advances in medical technology and pharmaceuticals
- The promise of today's technology is extended in new ways
- There are increased opportunities for new major breakthroughs in practice due to stronger linkages between genomics; research and informatics; and health technology
- Genomic information is routinely used in clinical practice

- ✓ Victorians will live even longer, with improved quality of life and reduced mortality
- ✓ More treatments will be minimally invasive, with greater precision and efficacy
- ✓ What care is provided and how it is delivered will be much more personalised. Patients will know their risk factors for disease. They will also be able to choose the treatments or interventions most likely to prevent disease or reduce its impact on their health
- ✓ There will be cures for some of our biggest killers, including cancer. This will change the very nature of some specialties, allowing greater investment in the next generation of prevention and more capacity for early intervention
- ✓ The promise of today's technology will be extended in new ways including wider use of patient devices (such as instruments that allow for remote monitoring), medical robotics, cell therapies, artificial organs and treatments that rely on the use of diagnostic imaging (such as CT scanners) to see inside the body while a procedure is being carried out
- ✓ Proven technologies, and their effective adoption and diffusion, will be the infrastructure backbone of healthcare not buildings

References

Australian Bureau of Statistics 2011, Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2011, ABS, Canberra, cat no. 2033.0.55.001.

Australian Bureau of Statistics 2016a, *Australian demographic statistics, June 2016 Quarter*, ABS, Canberra, cat no. 3101.0.

Australian Bureau of Statistics 2016b, *Life table: States, territories and Australia, 2013–2015*, ABS, Canberra, cat no. 3302.0.55.001.

Australian Bureau of Statistics 2017, *Quickstats* 2016, ABS, Canberra, viewed 10 July 2017, http://www.abs.gov.au/websitedbs/censushome.nsf/ home/quickstats?opendocument&navpos=220>.

Australian Government 2017, 'Primary Health Network: Identifying and definitional attributes', Commonwealth Government, viewed 3 April 2017, http://meteor.aihw.gov.au/content/index.phtml/ itemId/611074>.

Australian Institute of Health and Welfare 2016a, Australian Burden of Disease Study: Impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2011, Australian Burden of Disease Study series no. 6, cat no. BOD 7, AIHW, Canberra.

Australian Institute of Health and Welfare 2016b, Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011, Australian Burden of Disease Study series no. 3, cat no. BOD 4, AIHW, Canberra.

Australian Institute of Health and Welfare 2016c, *Australian's health 2016*, Australia's health series no. 15, cat no. AUS 199, AIHW, Canberra.

Australian Institute of Health and Welfare 2017a, Alcohol and Other Drug Treatment Services National Minimum Data Set, 2015-16, AIHW, Canberra.

Australian Institute of Health and Welfare 2017b, 'Medical practitioner-related definitions', AIHW, Canberra, viewed 3 April 2017, http://203.2.121.30/medical-practitioner-related-definitions/>.

Barnett, K, et al 2012, 'Epidemiology of multimorbidity and implications for health care, research, and medical education: A cross-sectional study', *The Lancet*, Vol. 380, July.

Baum F, Ziersch A, Zhang G, Putland C, Palmer C, MacDougall C, O'Dwyer L, Coveney J 2007, People and places: Urban location, social capital and health, Australian Health Inequities Program, Flinders University, Adelaide.

Brown L, Hansnata E, Hai A 2017, *Economic costs of dementia in Australia 2015–2056*, National Centre for Social and Economic Modelling , Institute for Governance and Policy Analysis, University of Canberra.7

Coroners Court of Victoria 2017, Submission to the Inquiry into Drug Law Reform, Coroners Court of Victoria, viewed 10 July 2017, http://www.coronerscourt.vic.gov.au/find/publications/submission+to+the+inquiry+into+drug+law+reform.

Davern M, Warr D, Higgs C, Dickinson H, Phillimore J 2015, *Superdiversity in Melbourne*, McCaughey VicHealth Community Wellbeing Unit, School of Government at the University of Melbourne and Institute for Research into Superdiversity at the University of Birmingham.

Deloitte Access Economics 2015, *The Economic Value of Informal Care in Australia in 2015*, Carers Australia.

Department of Economic Development, Jobs, Transport and Resources 2016, *Medical technologies and pharmaceuticals sector strategy*, State of Victoria, Melbourne.

Department of Environment, Land, Water and Planning 2016, *Victoria in Future 2016: Population and Household Projections to 2015*, State of Victoria, Melbourne.

Department of Environment, Land, Water and Planning 2017a, *Plan Melbourne 2017–2050*, State of Victoria, Melbourne.

Department of Environment, Land, Water and Planning 2017b, *Suburban development statement*, State of Victoria, Melbourne.

Department of Health 2012, Koolin Balit: Victorian Government strategic directions for Aboriginal health 2012–2022, State of Victoria, Melbourne.

Department of Health 2013, *Specialist clinics* in *Victorian public hospitals*, State of Victoria, Melbourne.

Department of Health 2015, *National Health Workforce Data Set 2015*, Commonwealth Government, Canberra.

Department of Health 2017, 'Health Care Homes: reform of the primary healthcare system',
Commonwealth Government, Canberra, viewed
3 April 2017, http://www.health.gov.au/internet/main/publishing.nsf/Content/health-care-homes>.

Department of Health and Human Services 2015a, Travis Review: Increasing the capacity of the Victorian public hospital system for better patient outcomes, State of Victoria, Melbourne. Department of Health and Human Services 2015b, *Victorian public health and wellbeing plan 2015-2019*, State of Victoria, Melbourne.

Department of Health and Human Services 2015c, *Victoria's 10-year mental health plan*, State of Victoria, Melbourne.

Department of Health and Human Services 2016a, Better, safer care: Delivering a world-leading health system, State of Victoria, Melbourne.

Department of Health and Human Services 2016b, *Design, service and infrastructure plan for Victoria's cardiac system*, State of Victoria, Melbourne.

Department of Health and Human Services 2016c, Health 2040: Advancing health, access and care, State of Victoria, Melbourne.

Department of Health and Human Services 2016d, Healthier lives, stronger economy: Victoria's health and medical research strategy 2016–2020, State of Victoria, Melbourne.

Department of Health and Human Services 2016e, Roadmap for reform: strong families, safe children, State of Victoria, Melbourne.

Department of Health and Human Services 2016f, Victorian cancer plan 2016–2020, State of Victoria, Melbourne.

Department of Health and Human Services 2017a, 'Refugee and asylum seeker health and wellbeing', State of Victoria, viewed 10 July 2017, https://www2.health.vic.gov.au/about/populations/refugee-asylum-seeker-health>.

Department of Health and Human Services 2017b, Korin Korin Balit-Djak: Aboriginal health, wellbeing and safety strategic plan 2017-2027, State of Victoria, Melbourne.

Department of Premier and Cabinet 2016a, *Ending* family violence: Victoria's plan for change, State of Victoria, Melbourne.

Department of Premier and Cabinet 2016b, Victorian Government Aboriginal affairs report 2016, State of Victoria, Melbourne.

de Savigny D, Taghreed A (eds) 2009, *Systems* thinking for health systems strengthening, Alliance for Health Policy and Systems Research, World Health Organization, Geneva.

Statewide design, service and infrastructure plan for Victoria's health system 2017–2037

Duckett S, Cuddihy M, Newnham H 2016, *Targeting zero: Supporting the Victorian hospital system to eliminate harm and strengthen quality of care—Report of the Review of Hospital Safety and Quality Assurance in Victoria*, viewed 3 April 2017, https://www.dhhs.vic.gov.au/publications/targeting-zero-review-hospital-safety-and-quality-assurance-victoria.

Infrastructure Victoria 2016, Victoria's 30-year infrastructure strategy, Infrastructure Victoria, Melbourne.

Jessica Killian J, Matthews S, Baksheev G, Lloyd B 2016, *Ambo Project: Alcohol and Drug Related Ambulance Attendances 2014-15 Summary Bulletin*, Turning Point, Melbourne.

Phillimore J, Bradby H, Knecht M, Padilla B, Brand T, Cheung S, Pemberton S, Zeeb H 2015, 'Understanding healthcare practice in super diverse neighbourhoods and developing the concept of welfare bricolage: protocol of a crossnational mixed methods study', BMC International Health and Human Rights, vol. 15, no. 16, pp. 1–8.

Productivity Commission 2011, *Disability care and support: The report of the inquiry into disability care and support*, Australian Government, Canberra.

Rouse J, cited in Hopson C, 2013, 'Health and social care integration: how do we make it work?', *The Guardian*, 18 September, viewed 24 January 2017 https://www.theguardian.com/healthcare-network/2013/sep/18/health-social-care-integration-success>.

Safer Care Victoria 2017, *Victorian perinatal* services performance indicators 2015–16, State of Victoria SCV, Melbourne.

Victorian Government 2015, *Ice action plan*, State of Victoria, Melbourne.

Victorian Government 2016, *Absolutely everyone:* State disability plan 2017–2020, State of Victoria, Melbourne.

Victorian Government 2017, Free from violence: Victoria's strategy to prevent family violence and all forms of violence against women, State of Victoria, Melbourne, viewed 23 August 2017 http://www.vic.gov.au/familyviolence/prevention-strategy.html>.

World Health Organization 2010, Telemedicine: Opportunities and developments in Member States: report on the second global survey on eHealth 2010, WHO, Geneva.

