Discussion paper: Rethinking funding models to align with population health goals

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EXECUTIVE SUMMARY

The Australian healthcare system is regarded as one of the best in the world, however in recent years its ranking has slipped as it has struggled to adapt to meet the health needs of a changing population.[1]

Australia is now facing several challenges that were not as prominent 50 years ago when many elements of today's health system were established — an ageing population, chronic disease being the most dominant contemporary health issue, inequitable access to healthcare, workforce shortages, and slow adoption of new technologies.[2,3]

Successive governments have sought advice on how to deal with these challenges, and successive reviews have found that the current funding arrangements contribute to creating — or at least fail to address — barriers to coordinated, patient-centred, and effective healthcare that is delivered in the most cost-effective setting.[4]

In particular, the complexity of the healthcare system — with multiple funders of services across a public-private system and shared governance across several levels of government — has made it challenging to address these systemic barriers. These layers of complexity have resulted in a health system that is inefficient with duplication and gaps in service delivery.

It has also created a system where there is **little incentive for governments to collectively prioritise preventive measures** and invest in resources that could potentially reduce hospitalisations and acute episodes of care, which is likely contributing to the increased burden of chronic disease in Australia.

Unfortunately, the impact on the patient journey is significant and results in fragmented, uncoordinated, and sometimes suboptimal care. In response to this, governments and healthcare providers have no choice but to create workarounds to minimise the impact on patients, which ultimately only creates more complexity.

As it stands today, Australia's health system looks less and less like the system needed to care for a growing and ageing population with increased complex and chronic disease.

A significant change in the funding arrangements is needed to ensure the sustainability of our health system. This will require funding models that not only tackle existing health issues, but **incentivise funders to prioritise prevention and early intervention** to reduce acute and more costly care in the long-term, particularly for populations who are at risk of needing acute care. An example of such a funding model is a single-payer funding model, where a single entity, often a government, is responsible for funding the delivery of healthcare for a targeted population.

Transiting the current healthcare system to a single-payer model would require radical health system reform and it is unlikely the benefits from this transition would outweigh the costs and effort to redesign the system. Analysis of single-payer case studies however reveals it may be worthwhile considering single-payer models or other types of innovative funding reform for targeted populations, particularly those that experience increased burden of chronic disease and high potentially preventable hospital admissions.

One population that could benefit from new and innovate funding models is older Australians (65 years and older), as they are estimated to account for almost half (46 per cent)[5] of preventable hospitalisations and have a high burden of chronic disease.[6]

The AMA's analysis reveals new funding models that incentivise the avoidance of preventable hospital admissions and readmissions for older Australians could save up to $31.49 billion over the forward estimates (2024–25 to 2027–28). This type of funding model could also be extended more broadly to populations with chronic and complex diseases, as well as diverse populations, as these cohorts also experience high preventable hospital admissions and readmissions.[7,8] These patients would also benefit from some of the other benefits of single-payer models, such as the delivery of more coordinated, patient-centred, and efficient care.

While a single-payer funding model does not guarantee more cost-effective and coordinated healthcare, it is undeniably an elegant approach to incentivise behaviour that could lead to achieving such outcomes. It is however important to acknowledge there are various mixed funding health systems worldwide that have delivered cost-effective, coordinated and patient-centred care. Single-payer funding models for targeted populations is an example of funding reform that holds promise, as it would incentivise a focus on prevention and early intervention, ultimately promoting improved health outcomes for these populations. There are however other innovative funding models that could achieve these outcomes, and the intent of this discussion paper is to initiate the conversation on funding reform in Australia to ensure the future sustainability of our health system.

TYPES OF HEALTHCARE SYSTEMS: NO ONE SIZE FITS ALL

Healthcare systems vary significantly between countries, however can be largely classified into four basic models: the Beveridge model, the Bismarck model, the national health insurance model, and the out-of-pocket model.

The Beveridge model

Named after William Beveridge — the social reformer who designed Britain's original National Health Service — the Beveridge model is often referred to as the "universal healthcare" model, where government is responsible for both funding and delivering healthcare services, financed through tax payments.[9] In this model, healthcare settings can be owned by the government or privately with government funding, however the majority of healthcare professionals are government employees.

These systems tend to have low costs per capita, because the government — as the sole payer — controls and standardises what healthcare providers can do and what they can charge.[10] A key criticism of this model is the tendency toward long waiting lists as everyone is universally guaranteed access to health services, which can result in over-utilisation. Another criticism of this model is that the patient may not have a choice of medical practitioner, choice of medical device or other treatment, or choice of hospital or other care setting.[11]

The Bismarck model

The Bismarck model, also referred to as a "social heath insurance model", was named for the 19th Century Prussian Chancellor, Otto von Bismarck, who developed a welfare state with compulsory insurance for all working individuals as part of the unification of Germany in 1883.[12] This model of healthcare is funded by employers and employees through payroll deductions. While the model in principle includes all citizens, in practice it tends to only be available to the working population, and so does not provide universal health coverage. Health services are delivered by both public and private providers, which allows more flexible spending on healthcare. Some countries have a single insurer, whereas other may have multiple competing insurers.[13]

The Bismarck Model tends to result in improved access to care compared to the Beveridge model, including shorter waiting times.[14] As a result of competition between healthcare providers, this model may result in higher quality and more consumer-focused care. The primary criticism of the Bismarck model is its failure to provide care for those who are unable to work or can't afford contributions.[15]

The National Health Insurance model

This National Health Insurance model combines elements of both the Beveridge and Bismarck models, with a government-run national health insurance that is publicly funded through taxes, and services are delivered by both private and government-run providers.[16] This model provides universal care (i.e. no claims are denied), does not make a profit, and is often cheaper than for-profit private insurance models and simpler administratively, as there is no requirement for activities such as marketing.

The national health insurer tends to have considerable market power to negotiate for lower prices and can control costs by limiting the number of services paid for, or by making patients wait to be treated, which is the primary criticism of this model as it can result in long waiting lists and delays in treatment.[17]

The out-of-pocket model

The majority of countries, particularly developing countries, have healthcare systems where individuals are required to pay for their own care directly without an insurance system. This type of model is market-driven and predominantly seen in developing countries, isolated communities, and uninsured populations.[18]

Australia: complex healthcare system, complex funding arrangements

Most countries do not adhere strictly to a single healthcare system model, but rather have created their own hybrids that involve features of several models. For example, while the United Kingdom's healthcare system is largely aligned to the Beveridge Model (i.e. the National Health Service), private healthcare has also emerged in recent years, with many employers offering private health insurance (i.e. features of the Bismarck model).[19] Another example is the United States of America's healthcare system, which has elements of the aforementioned four models.[20]

Australia's healthcare system is also a hybrid model, which combines features of the Beveridge model, National Health Insurance Model, and the Bismarck model. A significant proportion of the Commonwealth Government's funding is for Medicare, which is Australia's universal public health insurance program that provides free or subsidised access to public hospital treatment, medical services listed on the Medical Benefits Schedule (MBS), pharmaceuticals through the Pharmaceutical Benefits Scheme (PBS), and diagnostic imaging through the MBS.[21] Medicare can be accessed by Australian citizens, residents with a permanent visa, refugees, and citizens of a group of countries that have a reciprocal healthcare coverage agreement with Australia.[22]

Medicare does not represent an implementation of the full Beveridge model, as many of the healthcare professionals who deliver Medicare services (for example, general practitioners), are private practitioners and are free to charge patients out-of-pocket costs (i.e. features similar to the National Health Insurance Model).

Additionally, while healthcare professionals in public hospitals are employed by the government (i.e. similar to the Beveridge model), funding for public hospital services is shared between the Commonwealth Government and state and territory governments, with the Commonwealth contributing 45 per cent of activity under the 2020–25 National Health Reform Agreement and state and territory governments responsible for managing public hospitals and funding the remaining 55 per cent of activity.[23] This shared funding arrangement is often not a feature of the Beveridge model, where one government is usually responsible for all funding for healthcare services.

In addition to Medicare, the Commonwealth Government also provides funding for aged care through subsidies, capital grants, and programs, with subsidies provided to approved residential aged care providers through the Australian National Aged Care Classification (AN-ACC) residential aged care funding model (which replaced the Aged Care Funding Instrument in October 2022).[24] Together, the Commonwealth and state and territory governments also fund and deliver a range of other services, including population-specific health programs, community health services, health and medical research, Aboriginal and Torres Strait Islander health services, and aged care services. Local governments also provide community-based health and home care services, as well as public health and health promotion activities.[25] The National Disability Insurance Scheme (NDIS) is also funded by the Commonwealth Government and links into the delivery of healthcare services.

Australian's also have access to private healthcare through private health insurance (similar features to the Bismarck model, although in Australia private health insurance premiums are generally paid by the individual rather than by their employer or through salary sacrifice), which provides patients with more choice over who provides their care and where care is provided. The Commonwealth Government supports access to private health insurance through the income tested Private Health Insurance Rebate.[26] Patients are also expected to contribute to the cost of their healthcare through income tested taxation, the Medicare levy (noting that most of the revenue raised by the Medicare levy is not hypothecated and goes into consolidated revenue),[27] the Medicare levy surcharge (for those who do not have private health insurance and earn above a certain income), out-of-pocket costs, and contributions to care (for example, contributions to care received in residential aged care facilities, or out-of-pocket costs in addition to Medicare or private insurance rebates). Table 1 provides a summary of the funding sources for health services in Australia.

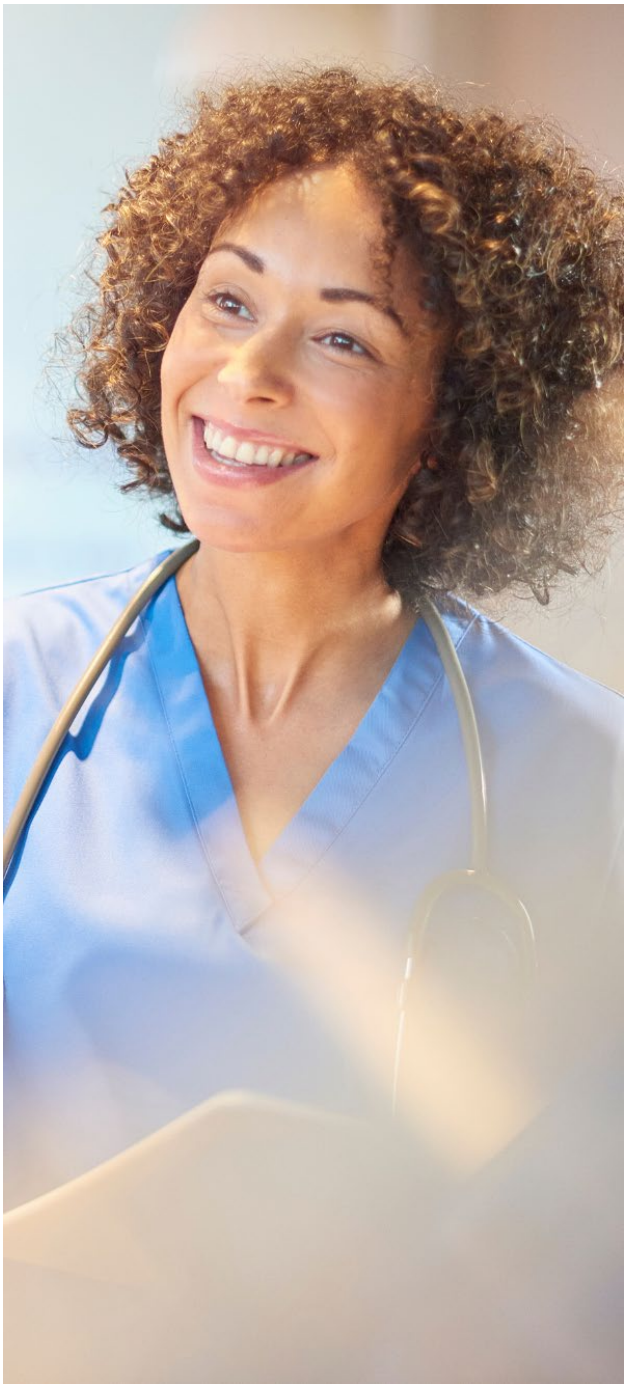


Table 1: Funding sources for health services in Australia[28]

Commonwealth Government	• Medical services through the MBS (both referred and non-referred medical services, as well as some allied health services) • Limited dental services • Pharmaceuticals through the PBS • Community-controlled Aboriginal and Torres Strait Islander primary healthcare • Aged care services (including residential aged care and home care) through the AN-ACC residential aged care funding model, as well as capital grants and programs • Contributions to support access to private health insurance, such as the private health insurance rebate • Health and medical research through the National Health and Medical Research Council • 45 per cent of public hospital activity service delivery (under the National Health Reform Agreement 2020-2025)
State and territory governments	• 55 per cent of public hospital activity service delivery (under the National Health Reform Agreement 2020-2025) • Ambulance services • Limited dental services • Some community and public health services • Some medical research
Local governments	• Public health promotion • Community health services
Non-government organisations	• Charitable healthcare services, such as medical clinics • Health promotion initiatives and educational programs
Private health insurers	• Private health services delivered in public hospitals • Services delivered in private hospitals • Some community services • Some dental services • Medicines • Some referred medical services • Some allied health services • Some medical research
Patients	• Out-of-pocket expenses (medical, dental, diagnostic investigation and allied health services) • Private health insurance premiums, excess payments • Medicine costs • Medicare levy and Medicare levy surcharge

The complexity of multiple funders with shared responsibility

The Australian healthcare system is recognised as one of the best in the world, however increased demand and costs has meant it is looking less and less like the system needed to care for a growing and ageing population and increased complex and chronic disease. One of the key challenges with Australia's health system is its complexity in governance and funding arrangements which leads to inefficiency and waste.[29] Compared with other Organisation for Economic Co-operation and Development (OECD) countries, Australia's healthcare system may be considered complicated for patients to navigate, creating barriers to coordinated, high-quality, and efficient healthcare.[30] Successive reviews have found the current governance and funding arrangements tend to be complex, at times inflexible, often fragmented, and typically focused on activity rather than outcomes.[31,32,33,34]

Complex governance arrangements

Governance for healthcare is shared between the Commonwealth, state and territory, and local governments. In addition to the Australian Government Department of Health and Aged Care, the Commonwealth Government has established several national bodies, boards, councils, and committees, each responsible for various aspects of the health system. Individual states and territories also have departments responsible for healthcare, as well as a range of other governance bodies. Lack of connection between these various bodies at each level of government commonly results in duplication of effort and gaps in service delivery adding to the complexity of, and inefficiency in, the health system.[35,36,37,38] Previous reviews have recommended refinement of agencies and their structures as a way to improve transparency and accountability, reduce inefficiencies, improve coordination, and address gaps in service delivery.[39]

Multiple funders and shared responsibility

The responsibility for healthcare funding and services is shared between all levels of government, as well as non-government organisations, private health insurers, and patients through out-of-pocket costs. Of the $241.3 billion spent on healthcare in 2021–22, 72.9 per cent was publicly funded (43.9 per cent by the Commonwealth Government and 29.1 per cent by state and territory governments).[40] The remaining 27.1 per cent was funded by non-government sources, including patients (14.0 per cent), private health insurance providers (7.3 per cent), and other non-government sources such as accident compensation schemes and workers' compensation schemes (5.9 per cent).[41] Together, this funding delivers healthcare services across a variety of healthcare settings, including, but not limited to:

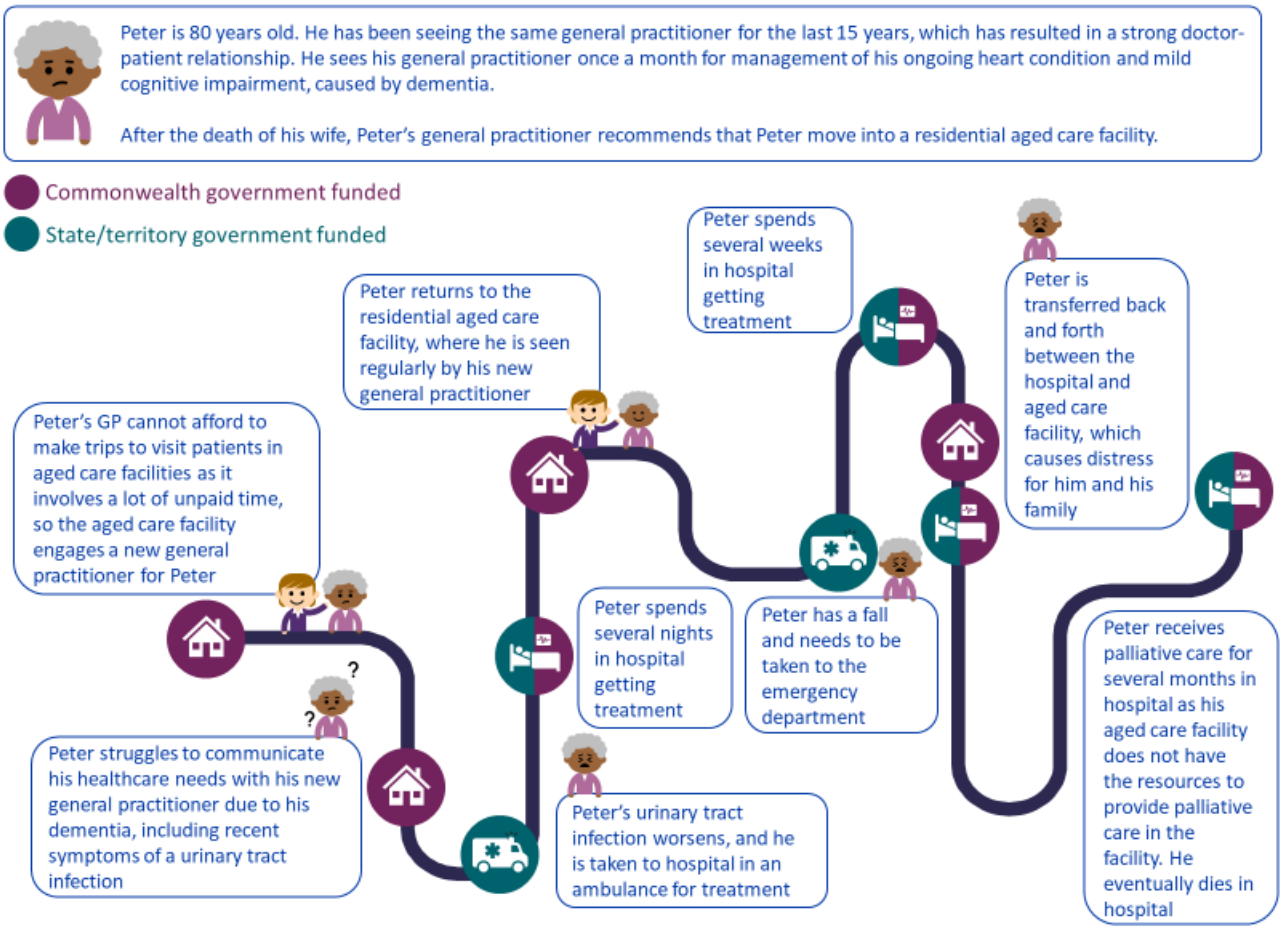
- public hospitals
- private hospitals
- residential aged care facilities
- home care services
- pharmacies
- non-referred medical services (i.e. general practices)
- referred medical services (i.e. non-GP specialist practices)
- community settings.

Under current arrangements there are limited mechanisms in place to integrate this mix of public and private funding and service delivery, posing potential challenges for patients — in particular those with complex and chronic diseases — to navigate an already complex system. Additionally, Australia's significant vertical fiscal imbalance (where the Commonwealth Government raises most of the revenue and the states and territories are responsible for service delivery) limits performance improvement and the ability to achieve better outcomes at more efficient costs.[42] This often results in disagreements and cost-shifting between the different levels of government and the private sector, contributing to system inefficiencies and impacting patient health outcomes. It can also result in healthcare professionals being caught between different levels of governance, which was evident during the COVID-19 pandemic when there was poor clarity in who was responsible for funding.

The impact on patients and the healthcare system

Complex funding arrangements and governance in the healthcare system have a profound impact on patients and healthcare costs, as it results in uncoordinated and fragmented care. As an example, residents in aged care facilities are more susceptible to health complications that may require hospitalisation, however the fragmentation in funding hinders the prevention of hospital admissions for residents. This is because the Commonwealth Government primarily funds the aged care services and primary care delivered in aged care, however the states are responsible for hospital services and ambulance services (with the Commonwealth Government funding 45 per cent of activity, as outlined above). As a result, there is little incentive for the Commonwealth Government to prioritise preventive measures or invest in resources that could potentially reduce hospitalisations among aged care residents. This means conditions that could have been managed effectively in the aged care setting may escalate and require hospitalisation, leading to suboptimal patient journeys (Figure 1), as well as significant costs to the healthcare system (explored further below).

Figure 1: Patient journey (current healthcare system)



THE OPPORTUNITY FOR REFORM

What is single-payer healthcare?

A significant change in the funding arrangements is needed to ensure the sustainability of our health system.

This will require funding models that not only tackle existing health issues, but incentivise funders to prioritise prevention and early intervention to reduce acute and more costly care in the long-term, particularly for populations who are at risk of needing acute care. An example of such a funding model is a single-payer funding model.

In healthcare, the term 'single-payer' refers to health systems where a single entity, often a government, is responsible for funding the delivery of healthcare for a defined population. This term originally gained prominence as a way to describe the Canadian national health insurance system,[43] but it is also used to encompass other models such as Beveridge models, universal coverage, and various European healthcare systems.[44]

Understanding what is meant by a single-payer system is important for policymakers, as single-payer systems vary significantly in design. In most circumstances, the single-payer will collect funds and then distributes these funds to cover the costs of healthcare services for the defined population. How services are coordinated and delivered, the types of services delivered, and the sources of revenue used to finance the system can differ between systems.[45] While a single-payer healthcare system has a single entity responsible for financing, it does not necessarily mean that the same entity is responsible for managing service delivery or employing healthcare professionals. For example, the care provided by the Department of Veterans' Affairs (DVA) is funded by the Commonwealth Government (i.e. single-payer), however the services are delivered by a range of providers that are not necessarily employed by the Commonwealth Government.[46]

In contrast, the United Kingdom's National Health Service is a system whereby the government finances, directly operates healthcare facilities, and employs healthcare professionals.[47]

Advantages of single-payer healthcare

Analysis of the national and international single-payer models (*Appendix A: National and international case studies*) reveals several key advantages of these models, particularly when they are implemented for a defined population.

Note: unless otherwise specified, references for this section are outlined in *Appendix A: Single-payer case studies.*

Improved access to care

In most of the case studies analysed, the single-payer funding model improved patient access to the appropriate care and resources at the appropriate time, as the single-payer was able to allocate resources according to where they are most needed. Additionally, many of these single-payer systems prioritised prevention and early intervention as it is often cheaper than funding more costly acute care in the future.

Increased affordability

In several of the case studies analysed, the single-payer system resulted in reduced operational and administrative costs through sharing of staff, infrastructure, and governance, as well as centralisation of functions. It also enabled bulk negotiation and purchasing of medicines and supplies, which can result in cost reductions.

Improved efficiency and integration of care

Case study analysis revealed single-payer systems can offer improved efficiency compared to multi-payer systems for a variety of reasons. A single entity with oversight over the entire patient journey is more easily able to identify health service and funding duplication, as well as gaps in service delivery. Additionally, where a single-payer is also responsible for managing the delivery of healthcare services (such as in the Canterbury District Health Board model), this can facilitate digital integration of patient records, which enhances coordination and continuity of care across different health settings, supports collaboration between different healthcare providers, reduces duplication of treatment and diagnostics (for example, duplication of diagnostic testing when a patient is moved between primary care (i.e. the general practitioner) and secondary care (i.e. a non-GP medical specialist)), improves medicine management, and enables faster access to appropriate treatment. Additionally, single-payer systems can offer improved flexibility in service delivery, as funding, staff, and resources can be shared and directed to meet the needs to community and patients (as demonstrated by the Aged Care Multi-Purpose Services Program).

Improved health outcomes

In the case studies analysed, many of the single-payer systems were linked with improved health outcomes, including reduced emergency department presentations, reduced avoidable hospital admissions, reduced length of stay, and reduced chance of readmission. This is largely because the single-payer has an incentive to invest in prevention and early intervention, resulting in a proactive approach to the delivery of care as patients are seen prior to adverse episodes.

While a single-payer funding model does not guarantee more cost-effective and coordinated healthcare, it is undeniably an elegant approach to incentivise behaviour that could lead to achieving such outcomes. It is however important to acknowledge there are various mixed funding health systems worldwide that have delivered cost-effective, coordinated and patient-centred care.

Single-payer funding models for targeted populations

Single-payer models can be implemented for an entire country, defined regions (for example, the Canterbury District Health Board in New Zealand), or for programs targeted to specific cohorts of patients (for example, the Aged Care Multi-Purpose Services Program). Transiting the current healthcare system to a single-payer model would require radical health system reform and it is unlikely the benefits from this transition would outweigh the costs and effort to redesign the system. Additionally, measuring the economic benefits of a single-payer model in an Australian context would be challenging due to the lack of cost data for each patient across all the clinical treatment pathways,[48] and the case studies analysed do not provide enough evidence that a single-payer model for the entire system would be economically beneficial at this time. However, it is worthwhile considering single-payer models for targeted populations given the increased demand and costs associated with an ageing population and increased burden on chronic disease.

Single-payer funding models for older Australians

In 2021–22, there was a total of 660,071 potentially preventable hospital separations (5.7 per cent of all separations), 493,295 from public hospitals and 166,776 from private hospitals.[49] It is estimated that older Australians aged 65 years and older account for almost half (46 per cent)[50] of preventable hospitalisations. Many of these avoidable episodes of care are for issues that could potentially be better managed in general practice.[51] One study found that the most common reasons for potentially avoidable admissions from residential aged care facilities were non-emergent symptoms suitable for assessment and management in the facility (48 per cent), wounds where assessment and management, including suturing, could be undertaken in the facility (23 per cent), and minor injury with time-critical radiology not needed (22 per cent).[52] This study found 45 per cent of residents were returned to the residential aged care facility without admission to hospital, and the services most frequently identified as being able to potentially prevent the transfer were a general practice or assessment team, radiology, and acute wound care. A separate study found hospital transfers from residential aged care facilities were reduced by 15 per cent when enhanced primary care services were provided by experienced nurses under the governance of general practitioners.[53]

Despite the evidence, general practitioners are not supported to deliver healthcare in residential aged care facilities, largely due to the significant time associated with delivering this care. Further detailed in the AMA report *Putting health care back into aged care*, general practitioners provide a substantial amount of non-remunerated, non-contact time with patients in residential aged care facilities, including travel time, paperwork, and discussing treatment plans with relatives and residential aged care facility staff. Many general practices are therefore subsidising the cost of healthcare for these patients.[54]

The significant number of avoidable admissions for older Australians in residential aged care facilities makes this population an ideal candidate for a funding model that incentivises investment in prevention and early intervention, such as single-payer model. This is because there would be an incentive for the single-payer to:

- prioritise continuity of care by supporting a patient's usual general practitioner to continue providing care to that patient when they transition to a residential aged care facility
- prioritise prevention and early intervention to prevent escalation of conditions and the need for an emergency department presentation and/or hospitalisation and the associated high costs of hospital transfer and care
- fund residential aged care services to provide more care, such as end-of-life care, to prevent patients being transferred to hospital to receive this care.

In addition to better supporting general practice teams to provide care in aged care, there are other services that could also be delivered in aged care under a single-payer funding model, such as oral health and mental health services. There may also be an opportunity to explore the benefits of a single-payer funding model for older Australians in the community who receive aged care services through Home Care Packages.

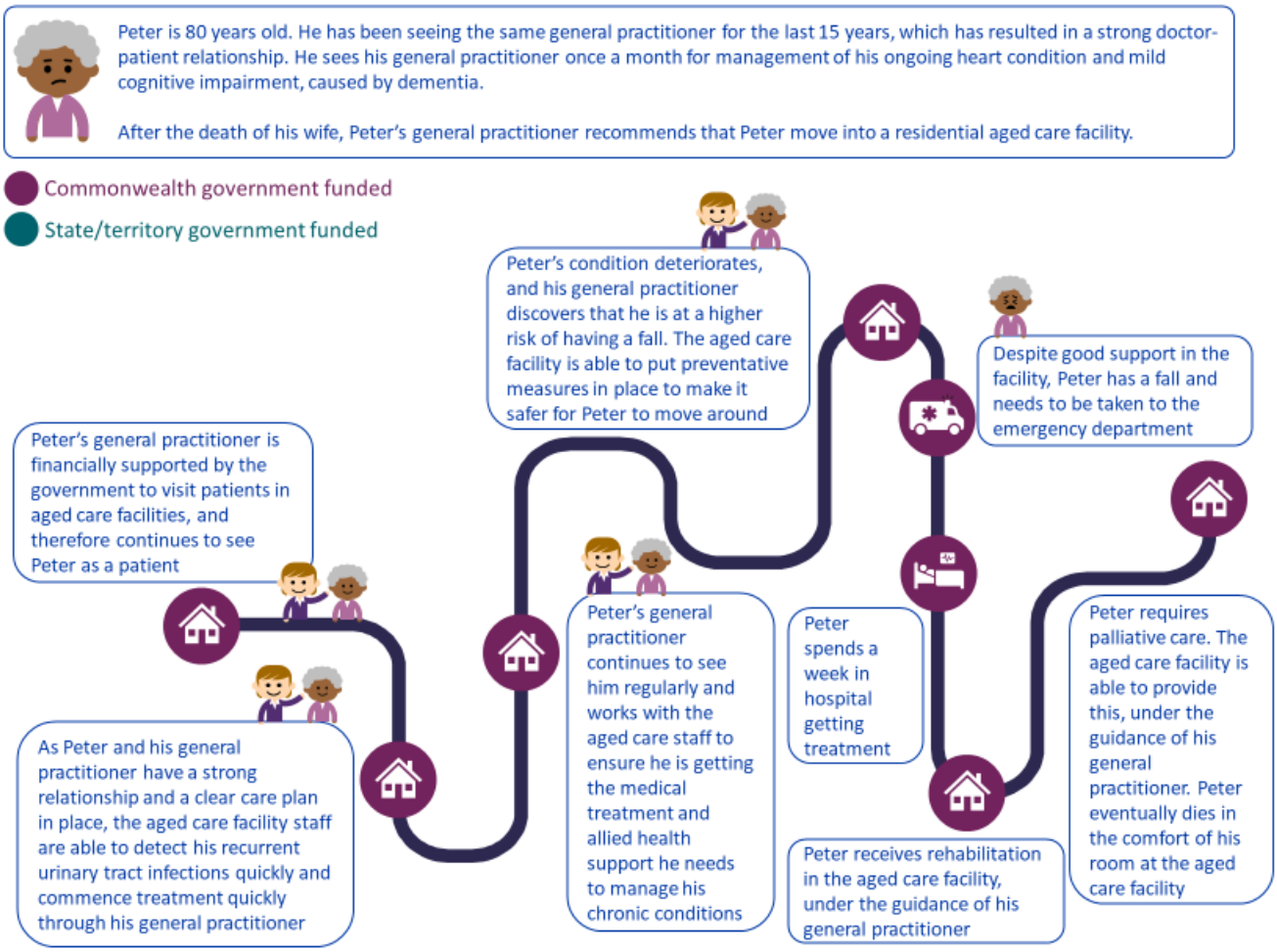
In the patient journey outlined previously, implementation of a funding model that incentivises investment in prevention and early intervention could significantly improve the patient journey (Figure 2), with the patient receiving care that is coordinated, patient-centred, and efficient. This could lead to the reduction of potentially preventable hospital admissions and readmissions for older Australians, which the AMA estimates could save up to $31.49 billion over the forward estimates (2024–25 to 2027–28) (Table 2).

Table 2: Summary of preventable episodes of care and costs from avoidable public and private emergency department presentations and hospital admissions[55]

		2021–22	2024–25 to 2027–28
Potentially preventable hospitalisations from residential aged care facilities	Number of patients	26,822.07	126,331.79
	Patient days	170,537.29	803,229.73
	Cost per patient day ($)	1,953.10	2,277.73
	Potential savings ($m)	**333.08**	**1,831.64**
Non-admitted emergency department presentations from residential aged care facilities	Presentations	59,169.37	326,758.57
	Cost per attendance	2,292.36	2,562.74
	Re-presentations*	22,563.57	124,605.70
	Potential savings ($m)	**143.40**	**887.24**
People waiting in hospital for a place in a residential aged care facility	Patient days	302,342.73	1,211,107.41
	Cost per day	3,924.84	4,387.78
	Cost per aged care night	446.17	446.17
	Potential savings ($m)	**1,051.75**	**4,773.77**
Potentially preventable hospitalisations from the community (people aged 65 year and over)	Million patient days	1.52	5.80
	Cost per day	3,767.85	4,135.36
	Potential savings ($m)	**5,720.21**	**23,999.19**
Grand Total ($m)		**7,248.43**	**31,491.84**

*Only transport costs of re-presentations have been included in the analysis of potential savings due to the lack of detail available on the nature of re-presentations. The potential savings associated with re-presentations is therefore a conservative estimate of the cost of re-presentations.

Figure 2: Patient journey (single-payer for aged care)



By reducing preventable hospital admissions from residential aged care facilities, these hospital and ambulance services can be used by other patients whose conditions could not have been prevented in the community. For example, an ambulance transporting a patient to the emergency department for a preventable condition is unable to respond to a critical car accident that could not have been prevented.

In an attempt to reduce preventable hospitalisations from residential aged care facilities, the Federal Budget 2023–24 included $112.0 million over four years from to introduce a new 'general practice in aged care incentive payment' to improve general practitioner attendance and continuity of care in residential aged care facilities.[56] This incentive payment will provide a general practitioner with an additional $300 annually for patients enrolled through MyMedicare on top of the consultation item ($41.20 for a Level B consultation),[57] bulk-billing incentives (incentive depends on the provider's location using the Modified Monash Model (MMM), for eligible patients), and the call-out fee ($55.00).[58] This new model addresses one of the disadvantages of the current funding model, where the incentive is capped at a certain number of services.[59]

If this new incentive model is to reduce preventable hospitalisations from residential aged care facilities, it will need to ensure general practitioners are supported for the non-renumerated and non-contact time they spend with their patients. It will also need to ensure the incentive supports a general practitioner to see a single patient in an aged care facility (as opposed to needing to see multiple patients in one visit in order for it to be financially viable), as this will be key to preventing avoidable admissions.

Single-payer funding models for patients with chronic disease

Patients with chronic diseases experience high avoidable hospitalisations.[60] A single-payer funding model could incentivise the prioritisation of measures that aim to reduce avoidable hospitalisations, including prevention and early intervention in general practice and the community, as well as public health campaigns. It could also support information sharing and collaboration between healthcare providers to deliver coordinated and patient-centred care. There is therefore an opportunity for single-payer funding models to be explored to support the current fee-for-service funding models for patients with chronic conditions.

Single-payer models for diverse groups

Health outcomes are not uniform across the Australian population, with many diverse groups — including lower socioeconomic groups,[61] Aboriginal and Torres Strait Islander peoples,[62] culturally and linguistically diverse groups,[63] LGBTQIASB+,[64] and Australians living in rural and remote locations[65] — experiencing significant health inequities. As such, many of these diverse groups experience high potentially preventable hospitalisations.[66] A significant amount of funding has been directed towards addressing these health inequities, which has resulted in a complex funding landscape with gaps and duplication in funding. A single-payer funding model could facilitate a coordinated approach to healthcare investment for these diverse groups that addresses these health inequities, with a focus on preventive and health promotion, as well as broader social determinants of health (see the *AMA Position Statement of Social Determinants of Health*). It could also empower these diverse groups to identify tailored solutions that address their specific health needs and reduce the existing health disparities.

Implementation considerations for single-payer models

Analysis of the national and international single-payer models (*Appendix A: National and international case studies*) reveals several factors which should be considered prior to implementation.

Note: unless otherwise specified, references for this section are outlined in *Appendix A: Single-payer case studies.*

Mechanisms to achieve a single-payer funding model

Achieving a single-payer system for a defined population can be approached through various models and funding arrangements. One potential approach could be the "healthcare card" approach, whereby patients in this population present a specific card when they receive healthcare services, and the services are paid for by one entity. While this approach can be successful (for example, healthcare services provided to veterans and their families by DVA), it could be administratively challenging to transition the current funding arrangements — where the health services a patient will access on their care journey are funded by multiple levels of governments — to this type of funding model. Another potential approach is a reimbursement model, where the Commonwealth Government reimburses state and territory governments for the health services provided. In this scenario, the Commonwealth government would reimburse state and territory governments to cover the total cost of the patient's hospital admission. The final mechanism to achieve a single-payer system is a pooled funding arrangement, where the various funders pool the funding for the health services provided for a defined population (for example, the Aged Care Multi-Purpose Services Program).

The Commonwealth Government and state and territory governments would pool funding for all the health services provided to aged care residents (i.e. primary health care, allied health, residential aged care services, and hospital services), and then collectively determine how this funding should be spent in order to better meet the health needs of aged care residents.

Expectation management

In some cases, patients may have unrealistic expectations of the level of care that should be provided, which can lead to an increase in services delivered, particularly when services are delivered as a 'package'. Additionally, where single-payer models rely on block funding for preventive health services, including general practice (for example, the Canterbury District Health Board model), there is an incentive to over-utilise this segment of the healthcare system in an attempt to reduce hospital costs.

The risk of underfunding healthcare

Healthcare systems will struggle when they are underfunded, regardless of whether it is a single-payer model or not. While a single-payer model can provide a framework, it must be adequately funded to ensure the health needs of the population are met. This includes adequately indexing services to ensure they reflect the growing costs of providing healthcare.

The risk of capitation funding models

Capitation funding models pay a set amount per patient, regardless of the number of services provided or the specific needs of the patient. Capitation funding models are heavily criticised, as they can result in disparities in access to care due to the disincentive for healthcare practitioners to provide care to those with complex conditions and can undermine the motivation to invest in advanced treatments, technology, or specialised care.[67]

Since 2004, capitation has been the primary funding method for general practice in the United Kingdom. This funding model has been criticised for not adequately protecting the remuneration of general practitioners, resulting in recruitment and retention issues, with many UK GPs now moving to Australia to work in the fee-for-service framework.[68] Australia also trialled a capitation funding model in the form of Health Care Homes from October 2017 to June 2021 as a way to better manage and coordinate care for patients with complex and chronic conditions. The final evaluation of the trial demonstrated that uptake was poor, and many practices withdrew during the course of the trial. This was for a variety of reasons, including workforce challenges, lack of value proposition, and inadequacy of the capitated payment.[69] It is for this reason the OECD recommends blended and balanced funding models that combine fee-for-service with other funding mechanisms such as bundled payments, as this allows flexibility to adjust for demographic changes and ensures adequate remuneration.[70]

The risk of underfunding a single-payer model

Healthcare systems will struggle when they are underfunded, regardless of whether it is a single-payer model or not. While a single-payer model can provide a framework, it must be adequately funded to ensure the health needs of the population are met. This includes adequately indexing services to ensure they reflect the growing costs of providing healthcare. Additionally, healthcare professions should not be required to bulk-bill patients under a single-payer model, particularly as the MBS rebate no longer bears any relationship to the cost of providing high-quality services to patients (see the AMA report *Why Medicare indexation matters*). Fee-for-service should also remain the primary payment model for health services.

The National Health Service in the United Kingdom has faced significant challenges in recent years due to chronic underfunding. While its single-payer model has enabled the system to perform relatively well on some measures of efficiency, underfunding has resulted in significant workforce shortages and fewer resources (such as diagnostic imaging and hospital beds). This has led to long waiting times for care, and poorer health outcomes when compared to similar countries.[71] It has also resulted in many healthcare professionals leaving the system. The Canadian health system, which is also mostly single-payer, also struggles with long waiting times for care.[72] There is an opportunity to use the learnings from these systems to inform implementation of a single-payer funding model for targeted populations in Australia.

Adequate funding for training and research, particularly for speciality areas where healthcare professionals may require additional training and upskilling, must also be included.

The impact of confounding factors

It is important to consider the other confounding factors which may limit the effectiveness of a single-payer model. For example, some of the analysed case studies noted that workforce shortages and poor system interoperability were significant limitations that impacted the success of the programs. Additionally, the current care silos largely exist because tight resource constraints incentivise cost shifting, and these resource constraints are not necessarily removed under a single-payer model.

Target population

Many of the models analysed encountered significant challenges by either being too selective or not selective enough with the patient cohort, with the allowance for people to join the trial after its commencement being a common failing amongst trials. If a participant is removed from a trial (either because they choose to or because they no longer fit the intended criteria of the trial), data on future health expenditure should be collected where possible. Additionally, being able to track expenditure for participants who receive care outside the trial is essential, as demonstrated by the DVA Coordinated Care Program.

Upfront costs associated with implementation

There are likely to be some upfront costs required to integrate existing and develop new infrastructure and operational systems, as well as develop new expertise and capacity, to support a single-payer system. Ensuring the appropriate systems are in place to capture all health spending and that there is system interoperability between all providers will require significant upfront investment, however this investment is critical to the success of a single-payer model. Governments in Australia have significantly invested in initiatives such as the National Electronic Health Transition Authority and the Australian Digital Health Agency in an attempt to connect the silos through systems such as the My Health Record.[73]

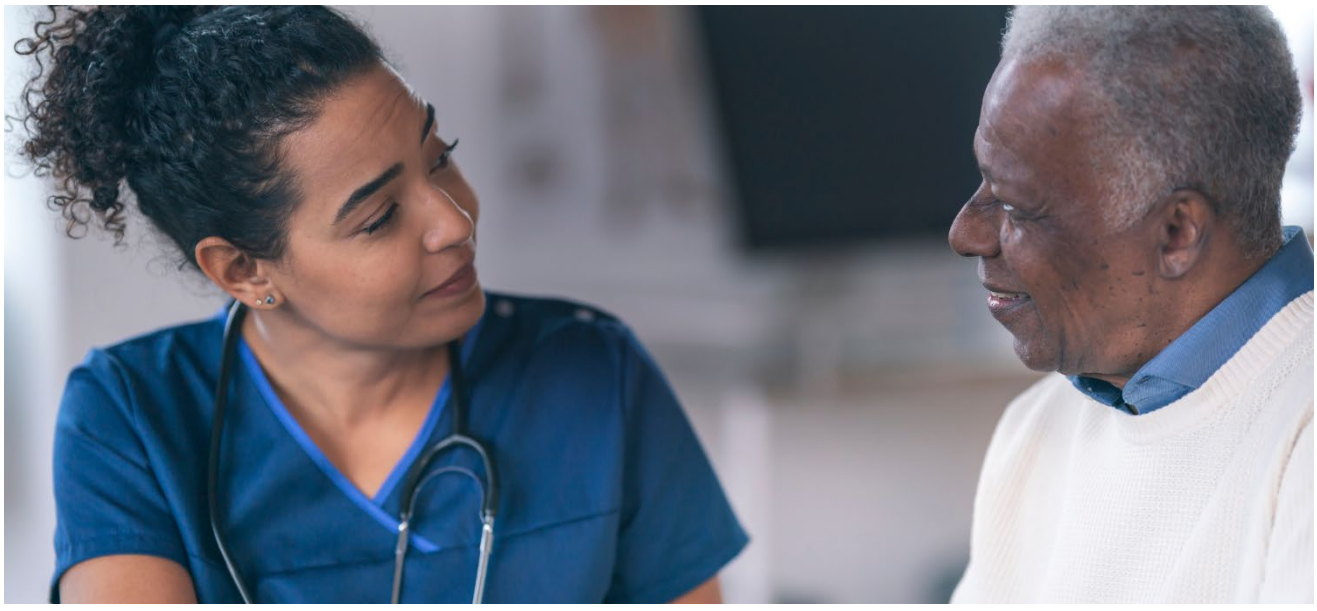
Many of the analysed case studies required the development of new infrastructure and new expertise and capacity to support the single-payer model. Furthermore, there are significant administrative challenges and costs associated with moving services into a new program, such as communicating the difference between single-payer and other pre-existing or related programs. The scale of the upfront investment will therefore influence the time it takes to achieve overall savings from implementing a single-payer model. Additionally, there will also likely be upfront costs associated with the initial increase in service utilisation from patients who were previously unable to access care due to inadequate provision of allied health care or long waiting periods for outpatient specialists (and not being able to afford private specialist care).

Monitoring and evaluation

As demonstrated by the DVA Coordinated Veterans' Care Program, a control population or mechanism for comparison is required to determine effectiveness of a single-payer funding model. Due to the ethical challenges associated with defining specific control and treatment groups, another way to measure the effectiveness of the single-payer model would be to measure the difference between the costs of the current system and the new system. This would require an estimation of the number of episodes of care a patient receives under the existing system across the relevant care settings[i] which could include:

- general practitioner services
- private healthcare
- diagnostic treatments
- emergency department and hospital treatment
- allied health services
- medication management services
- 'hospital in the home' or alternative care settings
- out-patient services
- mental health services
- non-medical support programs
- aged care services.

Measuring the impact of specific programs or initiatives under a single-payer model may be challenging, as it is difficult to attribute specific programs to broader health outcomes. Likewise, it can be challenging to identify inefficiencies or potential inefficiencies (e.g. misallocation of funding/care pathways). There may also be some confusion between programs under the single-payer model and other pre-existing or related programs, particularly when a single-payer system is implemented for a specific population, which can make it challenging to measure impact. A monitoring and evaluation plan would need to be developed prior to implementation of the single-payer model that addresses these challenges.



[i]It is important to note that this estimate should not be used to influence the care provided for the treatment group (i.e. it shouldn't be used to limit the number of services the treatment group is able to access.

CONCLUSION

As it stands today, Australia's health system looks less and less like the system needed to care for a growing and ageing population with increased complex and chronic disease. A significant change in the funding arrangements is therefore needed to ensure the sustainability of our health system. This will require funding models that not only tackle existing health issues, but incentivise funders to prioritise prevention and early intervention to reduce acute and more costly care in the long-term, particularly for populations who are at risk of needing acute care.

While a single-payer funding model does not guarantee more cost-effective and coordinated healthcare, it is undeniably an elegant approach to incentivise behaviour that could lead to achieving such outcomes for targeted populations. There are however other innovative funding models that could achieve these outcomes, and the intent of this discussion paper is to initiate the conversation on funding reform in Australia to ensure the future sustainability of our health system.

APPENDIX A: SINGLE-PAYER CASE STUDIES

Aged Care Multi-Purpose Services Program

Overview

The Multi-Purpose Services (MPS) Program was established by the Commonwealth and State and Territory Governments in 1993 as a collaborative effort to address gaps in acute care and aged care services in regional, rural, and remote areas. The primary objective of the MPS Program is to provide flexible and integrated health and aged care services in these communities using pooled funding.[74]

Each MPS is funded through an agreement between State and Commonwealth governments and can also include third-party service providers such as a private residential aged care facility. Under the Agreement, a Service Delivery Plan guides the allocation of resources from the pooled funding to meet the needs of the community. Services delivered in accordance with the Service Delivery Plan can include aged care (residential, respite and home care), acute care, 24/7 emergency care, sub-acute care, primary care, allied health care, community care, and other health services (including maternity and surgery in some States). MPS models of operation are largely driven by local contexts such as population size and presence of other health services, with many working closely with other community health and social support services to meet the needs of the community.

As at June 2021 there were 179 operational MPS across Australia, located in all states and territories (excluding the Australian Capital Territory (ACT)) and including one in Norfolk Island.[75] The Program reviewed in October 2019 by the University of Technology Sydney,[76] and was also reviewed and supported for expansion by the Royal Commission into Aged Care Quality and Safety. It was recommended that a funding model for MPS be developed which reflects the changing number and acuity of people receiving care over time, while maintaining certainty of funding over the course of a financial year.[77]

Strengths and benefits

The benefits of the MPS program identified in the 2019 review include:[78]

- flexibility in service delivery, with funds, staff, and resources able to be easily redirected to meet the needs of the community and patients
- the ability for multi-skilled staff to work flexibly across health and aged care (where co-located), resulting in 'economies of scope' and improved quality and integration of care
- the ability for residents of aged care facilities to be 'admitted' for acute care within their own room where the health and aged care facilities were co-located, which resulted in improved quality and integration of care
- gained efficiencies through reduction in operational costs, sharing of governance, and sharing of staff and infrastructure across the boundaries of acute care, aged care, primary health, and community care
- prevention of fragmentation, gaps, and duplication in service delivery.

Limitations and barriers

The cost-effectiveness of the MPS Program was unable to be assessed as complete Service Provider data on inputs, outputs and outcomes was not available (despite being required under the MPS Agreement). Specifically, the pooling of funds has resulted in a lack of clarity in how the funding is being spent, as a comparison on the Commonwealth's funding inputs and the MPS outputs could not be made. It was noted by the reviewer that, to determine efficiency, the following data would be required:

- details of the activities of the services provided by the MPS and reported progress on the activities specified in the Service Delivery Plan
- details of the income and expenditure managed by the MPS from the pooled funding
- reporting on all matters, such as complaints and customer feedback.[79]

It was noted in the 2019 review a range of external factors are impacting the effectiveness of the MPS. This included:

- challenges attracting and retaining the highly skilled workforce required to deliver effective, safe, and high-quality healthcare in regional, rural and remote communities (in particular medical practitioners and allied health professionals)
- challenges delivering culturally appropriate health and aged care to Aboriginal and Torres Strait Islander peoples
- limitations delivering integrated health services where facilities are not co-located and / or the health workforce is not able to be used flexibly across the different services.[80]

Healthcare services provided by the Department of Veterans' Affairs

Australia has a comprehensive system of support for veterans and their families, which includes income support, compensation, healthcare, rehabilitation, and other services. These services are funded by the Commonwealth Government through DVA under a single-payer funding model. Under this model, eligible veterans and their families (i.e. those with a DVA-issued health card) that entitle holders to a range of health service benefits, including mental health services, medical and allied health services rehabilitation support (including adaptive equipment, aids and appliances, and support to return to work), and benefit-paid pharmaceuticals through the Repatriation Pharmaceutical Benefits Scheme. DVA also funds hospital care for eligible veterans and their families. DVA also funds travel to and from healthcare providers, a range of mental health services, and services provided in hospitals. Additionally, DVA funds a variety of healthcare programs for veterans and their families, such as the Community Nursing Program, the Veterans' Home Care (VHC) Program and the Coordinated Veterans' Care (CVC) Program.

Overview

The DVA Coordinated Veterans' Care (CVC) Program was a 2010–11 Federal Budget initiative that commenced 1 May 2011. The purpose of the Program is to improve care and reduce unplanned hospital admissions and re-admissions through a coordinated model of care, targeted at Gold Card holders with chronic conditions and complex care needs who are most at risk of unplanned hospitalisation.

The program targets five conditions where coordinated care has the potential to reduce unplanned hospitalisation:

- congestive heart failure
- coronary artery disease
- pneumonia
- chronic obstructive pulmonary disease
- diabetes.[81]

The CVC Program is a good example of a real-world comparison of care alternatives supported by a single-payer funding model. This is due to the almost perfectly controlled nature of the client cohort, or as close is possible when using real world populations. The eligibility criteria to receive a DVA Gold Card meant that almost all clients, particularly the male clients, were of similar ages (60– 70 years of age for Vietnam War veterans, and 86–95 years of age for WWII veterans). Additionally, the size of the specific target population pool is large (approximately 225,000 clients that are very heavy users of health), which is larger than the target population in state of Tasmania, Northern Territory (NT) and the ACT combined. Furthermore, all clients enrolled had access to the same medical treatments and standard of care, and clients not enrolled in the CVC Program (the control group) also had access to a similar standard of care available to all DVA Gold Card holders.[82]

The CVC Program was established as an initial trial and ran for three years before reviews of progress were undertaken. The CVC Program was originally expected to deliver savings in health care expenditure to DVA through the reduction of unplanned hospital admissions for enrolled Gold Card holders. The original aim of the Program was to target heavy users of the hospital system, with four or more overnight hospital stays.

Strengths and benefits

DVA commissioned several reviews and evaluations of CVC Program in 2015, with the following identified as key benefits of the program:

- the design of the Program promoted collaborative teamwork within general practices (e.g. between nurses and GPs) and also with other healthcare providers outside the general practice
- involvement in the program enhanced the capability and capacity of general practices to deliver coordinated care (through improved knowledge of care coordination, the effectiveness of a nurse coordinator/practice nurse etc.)
- the involvement of a general practitioner in the health assessment and care planning improved the delivery of coordinated care
- the increased capacity of general practices (through employment of additional nurses or extending the hours of existing nurses) to develop a holistic understanding of patient needs and deliver coordinated care
- CVC participants noted an improvement in health status, quality of life, health literacy, ability to self-manage, social connectedness, and ability to navigate the healthcare system.[83,84,85]

Overall, CVC participants were less likely to require acute services, with a reduction in overnight admissions (3 times), costs associated with overnight admissions (3.5 times), length of stay (4 times) and same day admissions (36 per cent) in CVC participants compared with non-enrolled veterans following 24 months of enrolment. This represents a strong future savings potential.

Limitations and barriers

One of the key challenges with evaluating the effectiveness of the CVC Program is that many ineligible veterans were enrolled in the program, making it challenging to determine the impact of the program on the veterans that the program was originally intended for. This flexibility in the eligibility criteria has likely diluted the overall effectiveness of the CVC, with evaluations of the entire program demonstrating that it takes three (female) to eight (male) years after enrolment for an enrolled veteran and a veteran not enrolled in the program to equalise, with further years required to offset additional costs incurred prior to equalisation. The Bupa evaluation in 2015 looked at the benefits of the program on eligible veterans versus ineligible veterans and found that the benefits realised through the program were larger for eligible veterans. This indicates that enrolment in such programs should be targeted to individuals with the strongest evidence of potential savings.[86,87,88]

Western Sydney Integrated Care Program

Overview

The Western Sydney Integrated Care Program (WSICP) is a partnership between Western Sydney Local Health District (WSLHD) and Western Sydney Primary Health Network (WSPHN or WentWest) that was run as a pilot in Western Sydney in 2014–2017 (patient enrolment dates July 2015 to July 2017). As part of this program, WSICP and WentWest pool funds and work together to deliver integrated care to patients with one or more of four chronic conditions – congestive cardiac failure, coronary artery disease, chronic obstructive pulmonary disease (COPD), and diabetes. The purpose of the program was to integrate care between local primary and secondary health care sectors, with the aim of:

- improving the health of patients
- enhancing the patient experience
- reducing healthcare costs
- better supporting health providers.[89]

These aims would be achieved by building capacity in primary care for better management of chronic conditions in the community, establishing better partnerships and integration between service providers, and developing new shared care programs.

Key to the WSICP is the Patient-Centred Medical Home (PCMH), which is a virtual home emphasising an ongoing relationship between a patient and general practitioner who leads a multidisciplinary practice need to deliver comprehensive care. The program also featured a care facilitator role (registered nurses employed by the Western Sydney Local Health District), responsible for supporting patients to navigate services across primary and hospital settings.

As the central coordination point, care facilitators would support general practitioners and assist with patient identification, enrolment, management, and monitoring to ensure the delivery of integrated care.

As at July 30 2017, 1,510 patients were enrolled in the program, with 60 general practices and 208 general practitioners engaged in the program. Under these pooled funding arrangements, general practitioners and nurses would receive incentive payments to identify patients and enrol them in the program. Patient eligibility was determined following comprehensive assessment conducted by a general practitioner, hospital specialist or care facilitator, which considered the physical, mental and social needs of the patient. The program was highly selective – only patients with frequent overnight stays in hospital or at a high risk of deterioration requiring hospitalisation were enrolled.[90]

Strengths and benefits

As part of the programs, several initiatives were implemented which represent key strengths of the program, each of which were evaluated as part of the 2017 Western Sydney University qualitative evaluation.[91] These strategies include:

- **Care facilitators:** as mentioned above, the use of WSLHD care facilitators to support the integration of primary and hospital care. The evaluation revealed that patients, carers and health care professionals were overwhelmingly positive and viewed the role as a vital link between hospitals and care in the community.
- **IT systems:** system linkage to enable communication between hospital services (Cerner, which is the hospital electronic medical record) and primary care (LinkedEHR, which is a shared care planning tool), as well as integration with My Health Record. Note that this project was not implemented during the pilot as it took longer than expected.

- **Shared care plan:** a care plan was developed for each patient which is accessible to patients and their care providers, designed to engage the patient, their carers and family about treatment pathways. The evaluation revealed that the shared care plans were valued by general practitioners as improving efficiency and enhancing communication.
- **Specialist Action Plans:** The Specialist Action Plans provided general practitioners with guidance for more complex patient management following hospital discharge. The evaluation noted that patients and general practitioners found these plans valuable, particularly where treatment was changing frequently.
- **General practitioner support line:** over-the-phone support for general practitioners, providing immediate advice regarding the management of patients and a pathway for referral to the RAAS clinics. The evaluation revealed that those general practitioners who used the support line reported it as helpful.
- **Rapid Access and Stabilisation Services (RASS):** speciality services located at Westmead, Blacktown and Mount Druitt, offering immediate telephone support and access to rapid access clinics (RACs) to treat conditions outside the hospital settings. The aim of these services was to reduce waiting times for patients, unnecessary hospital admissions, avoidable presentations to the emergency departments, and readmission rates. The evaluation demonstrated that patients valued speed of access and avoidance of admission, and hospital staff valued the ongoing team-based care. It also revealed that the post admission care in stabilisation clinics was valued as a means for preventing readmission.
- **Patient hotline:** The patient hotline provided a means for patients to contact their hospital-based care team in the clinics. As a single point of contact with someone they knew, this service was highly valued by patients, and was also appreciated by hospital staff and general practitioners as it assisted in patient self-care.
- **HealthPathways:** HealthPathways was an online clinical decision support tool which contains integrated care protocols and referral pathways for primary healthcare providers. General practitioners who used it noted that it was useful in accessing hospital services.
- **General practice support payments:** a one-off payment to support general practitioners in enrolment and care planning, with general practitioners noting that the payment was appreciated.
- **PCMH:** As mentioned above, a virtual home designed to support those with chronic and complex care needs. General practitioners reported that they valued the holistic, community-based team care.
- **Communication with non-WSICP services:** linkages with other health services, such as community-based and private services, was noted by patients and general practitioners as useful and for the most part effective.

The RASS service was used on 15,085 occasions, or approximately 5 times per enrolled patient per year. Given the chronic conditions suffered by the patients, this is a modest figure. Results from a preliminary return on investment (ROI) analysis suggest that the program has saved 10,752 bed days and has resulted in 3,218 fewer emergency department presentations. As part of this, 1,175 preventable hospital admissions were avoided. The total reduction in cost based on National Weighted Activity Unit (NWAU) for the avoided admissions and emergency department presentations was estimated to be $22.8 million over two years. This is a substantial reduction in hospital costs per individual (approximately $7,500 per enrolled person per year).[92]

In terms of intangible (non-monetary) benefits, with health professionals noting increased job satisfaction as well as improved collaboration and communication between hospitals and community-based care providers. Patients noted that participation in their own healthcare resulted in increased ability to self-manage, which are likely to have flow-on benefits to the patients and family members.[93]

Limitations and barriers

Several challenges related to the implementation and delivery of the program were highlighted as part of the 2017 Western Sydney University qualitative evaluation,[94] including:

- Poor integration of the hospital and community IT systems, resulting in the use of traditional communications in place of a shared electronic record which are time-intensive and do not enhance integration of care. This made it challenging for hospital staff to access the shared care plan. General practitioners also noted the significant time and training required to establish the IT systems.
- Poor promotion of the program as a whole and some of the specific initiatives to health care providers and patients (e.g. general practitioners and hospital staff were not aware of the general practitioner support line initially, or confusion on the role of the care coordinator)
- The time and effort involved in establishing WSICP which was compounded by delays due to LDH bureaucracy and engagement of general practitioners
- Confusion between newly introduced WSICP initiatives and pre-existing or related programs
- The GP support payment not compensating for the time required to participate in WSICP, particularly for patient follow-up.

It should also be noted that the selective nature of the program has likely resulted in the program being a success, it does mean that the program is hard to replicate. The results may be biased, as patients that are unable to benefit from the program are excluded from the results (resume more expensive hospital-based treatment). Under IHACPA pooled funding arrangements, these higher cost patients would need to be included in the cost of the program.

Primary Health Network flexible primary mental health care funding pool

Overview

In response to the National Mental Health Commission's (NMHC) 2014 Review of Mental Health Programs and Services, the Australian Government committed to transfer funding for several federally funded mental health programs to a flexible mental health funding pool from which PHNs commission services based on regional need. Known as the Primary Health Network (PHN) Primary Mental Health Care Flexible Funding Pool, the objective of this initiative is to deliver primary mental health care services in a more efficient, integrated, and sustainable way to improve outcomes for consumers.

As part of this initiative, ten PHNs (known as the Lead Sites) have been selected to act as mental health improvement leaders in five focus areas:

- regional planning and service integration
- stepped care
- low intensity services
- services for youth, with or at risk of severe mental illness
- clinical care coordination for adults with severe and complex mental illness

The University of Melbourne has been funded to conduct an evaluation of the approaches taken by the Lead Sites to address the five focus areas. Whist the evaluation is still underway, early findings have been published.

Strengths and benefits

Evaluation findings[95] suggest that the initiative overall is meetings its objectives, improving access and integration of mental health care services and leading to positive outcomes for consumers. Key strengths of the initiative include:

- the use of service mapping by the Lead Sites to identify gaps and reduce duplication and inefficiencies in service delivery. For example, following establishment of the Flexible Funding Pool, COORDINARE – the South Eastern NSW PHN – commissioned a range of non-NDIS psychological support services which was previously a service gap for that region
- the ability to meet with mental health needs of the community without rigid program funding boundaries
- the use of the Primary Mental Health Care Minimum Data Set (PMHC MDS) for monitoring and reporting on the quantity and quality of service delivery
- mental health networks and partnerships, including cross-sectoral networks, to meet the complex needs of patients and address service gaps
- co-location service providers to become a 'one-stop-shop' for clinical and often non-clinical services, which has improved the quality of services delivered
- the development of innovative outreach programs targeting underserviced patients (e.g. young males and Aboriginal and Torres Strait Islander peoples), which has resulted in increased uptake in mental health services
- a phased approach to transition and the provision of service planning and commissioning tools to support PHNs to undertake the needs assessments, identify service gaps, and target resources to respond to identified needs.

Limitations and barriers

Evaluation findings[96] indicate that many of the challenges the Lead Sites have encountered during implementation of this initiative are largely outside of their control, including:

- challenges attracting and retaining the specialised workforce required to deliver the required mental health services, which delayed implementation of the initiative for some Lead sites
- challenges commissioning the services required due to gaps in service provision or demand being greater than supply (e.g. psychiatric services)
- whilst the pooled funding enabled the funding to be used more flexibly, many Lead Sites noted that the funding on a whole was insufficient, and that they lacked clear guidance on how to use the funding
- poor sharing of patient data and information between service providers (largely due to poor interoperability), resulting in challenges delivering integrated care and duplication of services (e.g. duplication in assessments due to providers not knowing about and / or not trusting assessments performed by another provider)
- challenges obtaining meaningful data from service providers to support monitoring and evaluation activities.

Gold Coast Integrated Care Model

Overview

The Gold Coast Integrated Care Model was designed over an 18-month period from September 2013 to March 2015 with the aim to improve services to the local population with chronic and complex conditions. Funding was provided and pooled for an initial three-year period by Queensland Health, the Gold Coast HHS Board, and the Gold Coast Primary Health Network, with the program also delivered partnership with Griffith University (who is responsible for evaluating the program).

The model functions as a collaborative partnership between patients, general practitioners, hospitals, and local health and community service organisations. Enrolment in the program was facilitated by general practices, with 15 general practices involved in the program (total of 112 general practitioners) and 1500+ patients enrolled. The program has initially focused on patients with diabetes, chronic respiratory disease, heart disease and renal disease.[97]

The centrepiece of the model is a Coordination Centre — a designated clinic off-site from the hospital and other health services, staffed by two medical directors, medical specialists who visit on a rotating basis, and 9-12 nurses and allied health practitioners (two occupational therapists, a pharmacist, social worker, psychologist, and physiotherapist). The purpose of the Coordination Centre is to coordinate the provision of rapid access to a multidisciplinary primary and specialist health care team as well as referral to specialist and social services. Integral to the activities of the Coordination Centre are the eight Nurse Navigators, who work with the general practices to provide liaison between patients, families, health care providers, and community services, bridging the gap between primary and secondary care.

The goal of the model is to proactively manage patients with chronic and complex conditions, in close collaboration with GPs, to reduce presentations to emergency departments, improve the capacity of specialist hospital outpatient departments, and decrease planned and unplanned hospital admission, all of which are cost effective for the Gold Coast Hospital and Health Service.

Strengths and benefits

The Gold Coast Integrated Care Model is one of the few Australian models that spent a significant time (18 months) in the design phase and also considered learnings from various international models of integrated care, including the Trafford health model. Whilst the evaluation report has not been publicly released, there have been several publications[98,99,100,101] which highlight the strengths and benefits of the model, including:

- The inclusion of a control group of patients with complex and chronic conditions from the community, matched on clinical, demographic and historical hospitalisation patterns, which allowed for a comprehensive evaluation of the program to be performed.
- The focus on a collaborative approach between health care providers (largely driven by the general practitioners), which supported the delivery of holistic integrated care. Specifically, participants reported improved care coordination, closer engagement with their practitioners, improved ability to navigate the system, and improved timeliness, efficiency and effectiveness of the services they accessed. General practitioners also noted that they developed stronger relationships with their patients, and that the program had improved service delivery and reduced service duplication.
- The role of the Nurse Navigator to act as the conduit between primary and secondary care, supporting the patient to navigate the healthcare system and promoting communication and continuity between service providers
- The use of a holistic assessment (including a medication review) to inform care planning, which patients reported as useful for the management of their conditions
- The telephone support provided by the multidisciplinary clinicians, which allowed participants to access timely specialist support and was regarded by patients as a lifeline to easing the burden of chronic illness
- Direct admission to the hospital Medical Admission Unit or inpatient wards where admission was required
- A shared case record which could be accessed by healthcare providers and patients through a portal, containing longitudinal clinical history, appointment bookings, medication reports, risk assessments etc. This data could also be viewed and interacted with at a cohort level, and could be compared against the data of non-cohort patients.
- An automated data matching process between general practice and hospital service data, which enabled the provision of timely data throughout the program.

Limitations and barriers

A key limitation of this model was the challenges which the general practitioners and other healthcare staff had with the Shared Case Record.[102] Whilst the platform was developed specifically for this program, staff found the platform challenging and burdensome to navigate, largely because it was an additional system to use. Over the course of the program, very few general practices chose to access patient data using the Shared Case Record. Staff also noted that gathering the initial data from patients was a lengthy process, which delayed recruitment and assessment of patients, and it was sometimes challenging to balance patient care and data management. It was for this reason the evaluators noted that the introduction of new communication technologies should be accompanied by adequate systems training, and where possible, existing platforms should be modified as opposed to implementing new, costly innovations. Whilst most patients were overwhelmingly positive about the program, some participants were initially confused about the role of the Shared Care Record and how their information would flow between the program, hospital, and general practitioner.[103]

The Gold Coast Integrated Care Model appears to have not achieved its economic goals. In fact, even excluding the costs of the program, healthcare utilisation was greater than for the control group:

> "We found no difference in quality of life between groups, but a greater decrease in capability, social support and satisfaction with care scores and higher hospital service use for the intervention group, leading to a greater cost to the healthcare system of AUD$6,400 per person per year. In addition, the per person per year cost of being in the GCIC programme was AUD$8,700 equating to total healthcare expenditures of AUD$15,100 more for the intervention group than the control group."[104]

Canterbury District Health Board

Overview

The Canterbury District Health Board (CDHB) is the second largest District Health Board in New Zealand, responsible for the health of over 500,000 people living in the Canterbury region. Whilst the CDHB works within a framework set by the Minister of Health in Wellington, the CDHB is responsible for planning, managing, providing, and funding health services in Canterbury.

In the early 2000's, the CDHB began focusing on developing a 'one system, one budget' approach to care, whereby all parts of the system would work together to deliver integrated care. This rescoping was largely driven by the need to reduce demand for hospital care, to ease the clinical and resource pressures on the hospital system. This resulted in a commitment to strengthen primary care and invest in services which would reduce hospital admissions and readmissions and facilitate early discharge.

It should be noted that much of the foundation for this reform occurred prior to the 2011 Christchurch earthquake, however the earthquake did provide an opportunity for CDHB to accelerate its transformational changes and implement new initiatives to cope with the effects of it.

Strengths and benefits

The key strength of the CDHB model is the focus on building community-based capacity and capability so more healthcare can be delivered in the community, making best use of specialised and scarce resources. The mantra that there is 'one system, one budget' is firmly held and articulated, creating a shared view amongst everyone in the system that all services need to work together. At its core, the CDHB looks to identify what is best for the patient and what is best for the system. This is achieved through several programs and activities, including:

Programs

- The Acute Demand Management System (ADMS), which is a program delivered by general practitioners, designed to provide acute care to those who can be safely managed in the community. This includes a 24-hour surgery staffed by general practitioners and nurses (known as Pegasus Health). This program aims to prevent acute admissions by providing patients with the care they require without needing to go to hospital (e.g. requiring GPs to perform more procedures), and allowing hospitals to discharge patients from the Emergency Department to prevent hospital admission.[105] Admission rates are reportedly lower as a result of this program, with studies showing that approximately 676 of 4035 (16.8 per cent) of projected hospitals admissions were avoided in December 2014.[106,107] Admissions are also increasing at a slower rate than the rest of New Zealand.[108] Whilst the cost-benefit of this has not been published, it is likely that it has resulted in cost savings.
- The Community Rehabilitation Enablement and Support Team (CREST) which provides rehabilitation support to patients in their homes with the aim of reducing the length of stay in hospital, reducing the chances of readmission, as well as delaying admission into residential aged care facilities. This program has reduced the number of beds occupied by patients over 75 years, as well as a greater proportion of people over 75 years of age remaining in their homes as opposed to residential care.[109]

Workforce

- Sustained investment in training staff in innovation, quality and service improvement skills and techniques, as well as developing leadership capability.
- The transition from contracting distinct services through fee-for-service and competitive contracts to alliancing contracting, where all partners have a mutual interest in success for both the sustainability of the system and the needs of patients.

Process Redesign

- Engagement of process engineers to support the redesign of pathways and workflows.
- The transition from a price/volume schedule (i.e. pay per procedures) to individual budgets for each of the hospital departments, which shifted the focus from increasing activity (and therefore revenue) to delivering efficient and high-quality services.
- The development of local agreements by general practitioners and hospital specialists which articulate the patient pathways for particular conditions (i.e. what treatment can be managed in the community, what tests a general practitioner can perform prior to referral etc.). These guidelines are published on a website (HealthPathways) and can be accessed by all clinicians across the system. HealthPathways has resulted in a 43 per cent increase in population access to elective surgery and has been reported to have saved millions of days in waiting time.[110]

Information Communication Technology Enhancements

- The use of HealthOne, a fully integrated platform for sharing electronic health records, which can be accessed by most healthcare providers, including general practices, public hospitals, emergency services, private hospitals, community nursing providers, and pharmacies. A key benefit of this platform is that it has been built on existing systems (as opposed to replacing them), allowing for seamless integration.
- The Electronic Request Management System (ERMS) which is an electronic referral system which operates across the various other components of the system.

The reduced strain on the hospital system generated through these initiatives has resulted in an increase in elective procedures, fewer cancelled admissions, and has also reduced waiting times. It has also reduced the spend on residential care, which has released funds for further investment in other programs.[111]

Relevant limitations and barriers

Whilst CDHB is largely a high-performing and successful single-payer model, there are a few limitations which are relevant, including:

- Some general practitioners expressing concerns about working beyond the limits of their expertise, as they are handling mode complex cases in the community. These concerns were addressed through the delivery of additional training.[112]
- The inability to measure the impact of specific programs and initiatives, as there is limited cost/benefit information available for the programs, and measures of changed performance or activity within the hospital cannot be attributed to a specific program.
- As NZ operates a co-payment service delivery model, even for patients with concession cards, pushing more services into primary care also pushes cost onto patients. This will lower the cost to government without necessarily lowering total cost.
- The authorisation of staff to initiate change has resulted in some evidence of duplication in services. For example, ADMS and CREST share many characteristics, which has made it challenging for some general practitioners to know which program a patient should be referred to.[113]
- CDHB has had ongoing challenges with a significant financial deficit, which has impacted its ability to develop innovative models of care and has created tensions between senior management.[114]

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