

There's no place like home: reforming out-of-hospital care

PRIVATE HEALTHCARE AUSTRALIA

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Private Healthcare Australia
Better Cover. Better Access. Better Care.

Table of Contents

- 1 Executive Summary 3**
 - 1.1 Executive Summary 3
 - 1.2 Summary of recommendations 6
 - 1.3 Note on definitions 8
- 2 Australia has a significant opportunity to adopt out-of-hospital care 9**
- 3 Potential impact of out-of-hospital care on health system sustainability 16**
 - 3.1 \$11.1bn baseline expenditure on conditions that could be managed in the out-of-hospital setting 16
 - 3.2 Value at stake for out-of-hospital care 17
- 4 Why Australia has lower uptake of out-of-hospital care 23**
 - 4.1 Funding challenges 25
 - 4.2 Regulatory barriers 26
 - 4.3 Supply challenges 26
 - 4.4 Demand challenges 28
- 5 Summary of reform options to increase uptake of out-of-hospital care 29**
- 6 Detail of reform options to increase uptake of out-of-hospital care 36**
 - 6.1 Funds can continue to expand strategies that incentivise a shift to out-of-hospital care 36
 - 6.2 Address the misalignment of incentives in existing funding models 38
 - 6.3 Enabling growth of OOH care providers 40
 - 6.4 Improve data-sharing and use of technology 41
 - 6.5 Standardise quality and safety of OOH care models 43
- 7 Potential path forward 45**
 - 7.1 Key activities 46
 - 7.2 Risks for consideration 48
- 8 Conclusion 51**
- 9 Appendix 52**
 - 9.1 Definition inclusions and exclusions 52
 - 9.2 Out-of-hospital care landscape 54
 - 9.2.1 Primary prevention/coordination 54
 - 9.2.2 Chronic disease management and monitoring 56
 - 9.2.3 Triage and emergency management 58
 - 9.2.4 Mental health and substance misuse management 60
 - 9.2.5 Peri-operative management 62
 - 9.2.6 Acute care/single intervention 64

9.2.7	<i>Step down services and rehab</i>	66
9.2.8	<i>End-of-life-care</i>	68
9.3	<i>Notes on financial impact modelling methodology</i>	69
9.3.1	<i>Momentum case</i>	69
9.3.2	<i>Value at stake</i>	70
9.3.3	<i>First-order effects</i>	71
9.3.4	<i>Second-order effects</i>	71
9.3.5	<i>Third-order effects</i>	72

1 Executive Summary

1.1 EXECUTIVE SUMMARY

Australia is falling behind global best practice because of the limited accessibility of out of hospital care. Australian patients are not receiving the healthcare supported by the best available evidence. Doctors are unable to support the most effective and innovative models of care because our system will not support them to provide best practice.

Our health financing system was designed in the 20th Century, yet we are dealing with 21st Century problems. Demand for Australia's healthcare system is growing at an unsustainable rate, driven by the dual burdens of a rapidly ageing population and the growing prevalence of chronic disease. This unsustainable growth is placing pressure on access to care and healthcare costs, for both patients bearing out-of-pocket costs and taxpayers more broadly.

We are not rising to the challenge. Australia's private healthcare system is leaving \$1.3bn of potential efficiency on the table by lagging well behind other countries in the uptake of out-of-hospital care models. For many patients, out of hospital care is not just safe, quality and clinically proven – it is the best possible care.

We have not developed these alternatives to cost-intensive inpatient care due to incentive structures and regulation that impede their growth. Increasing adoption of these models of care will provide better care with less burden of treatment, reduce the load upon 'bricks and mortar' hospitals, and reduce wait times and care bottlenecks. Adopting best practice care, including out-of-hospital options, will also reduce growth in private health insurance premiums and out-of-pocket costs, supporting overall access and affordability of care for patients.

In Australia out-of-hospital services account for ~1-10% of total activity across different models of care, despite there being strong evidence of the benefits of out-of-hospital models of care in terms of efficiency, quality and patient experience. Patient outcomes in out-of-hospital care are typically equivalent or improved compared to traditional inpatient models with reduced risk of hospital admission of up to 80%¹ and reduced readmission risk of up to 40%.² There is evidence of improved efficiency of healthcare delivery with reduced average cost of treatment and reduced average length-of-stay (ALOS) resulting in cost savings ranging from 18-45% depending on the type of program.^{3 4}

¹ Rastogi A. et al., "Virtual triage and outcomes of diabetic foot complications during Covid-19 pandemic: A retrospective, observational cohort study," *PLoS ONE*, 16(5), May 2021.

² Caplan G. A. "Systematic reviews - a meta-analysis of 'hospital in the home'," *The Medical Journal of Australia*, 197(9):512-9, Nov 2012.

³ Levine, et al. "Hospital-Level Care at Home for Acutely Ill Adults," *ACP Journals*, 172(2):77-88, January 2020; Paulson M. et al. "Implementation of a virtual and in-person hybrid hospital-at-home model in two geographically separate regions utilizing a single command center: a descriptive cohort study," *BMC Health Services Research*, 10(1093), Nov 2009; Hernandez C. "Home hospitalisation of exacerbated chronic obstructive pulmonary disease patients," *European Respiratory Journal*, 21(58-67), 2003.

⁴ Luta, X. et al. "Evidence on the economic value of end-of-life and palliative care interventions: a narrative review of reviews," *BMC Palliat Care*, 20(89), June 2021.

Patients do better out of hospital, with good health outcomes across many conditions. Patient experience is also significantly improved compared to inpatient models, with higher patient satisfaction and convenience.⁵ Finally, out-of-hospital care models also help avoid the risk of several hospital-acquired complications, including falls, infection, delirium and venous thromboembolism.⁶

Australia lags other countries in uptake of out-of-hospital care because these other countries have more successfully aligned consumer demand for these models of care with funding incentives, a dynamic regulatory environment, and support in building the supply of providers. The private sector is also well behind the public sector in many key clinical areas across Australia, as the public sector does not face the same constraints.

Consumers in Australia deserve more options, but:

- **Funding is limited:** there is a lack of effective reimbursement models and insufficient incentives to shift inpatient care to out-of-hospital. Doctors are the drivers of clinical decision-making, including the setting of care, and must be partners in the process of change. They must be appropriately compensated for changes in their practice, the need to adopt more modern clinical techniques, and the need to build new teams and workflows.
- **Regulatory barriers prevent best practice care:** for example, the *Private Health Insurance Act 2007* restricts certain types of care from being funded or conducted out-of-hospital, and restricts existing programs to only certain professional groups, limiting the scope of these programs.⁷ It is particularly disappointing health funds are not allowed to cover the services of mental health peer support workers, even though their efficacy is now well established. The current second-tier default benefits system for inpatient care means poor practice is supported, as the second-tier default funding level is too high to incentivise movement towards alternative out-of-hospital options.
- **Supply limitations are significant:** including limitations due to insufficient workforce, access to appropriate technology and availability of shared data to enable transition between inpatient and out-of-hospital care models.

Funds have been taking action to grow out-of-hospital models of care and will continue to do so. These actions include 1) changes to funding models to better align the incentives of stakeholders to promote best practice, 2) expanding access to out-of-hospital care models by increasing funding or provision of care in line with global levels, and 3) increasing consumer awareness and education for out-of-hospital models of care. Specifically, funds intend to reconfigure financial incentives where it is in their ability: for example by scaling up voluntary financial incentives for clinicians involved in out-of-hospital care models, reducing or removing gap payments where associated with out-of-hospital care, moving away from per diem payment structures that incentivise length-of-stay and moving towards outcome-based funding models.

Funds, however, can only achieve a limited portion of the total potential value-at-stake for the system, given the restrictions imposed by current funding and regulation regimes. Funds, clinicians,

⁵ Linzer et al. "Reducing the Burden of Treatment: Addressing How Our Patients Feel About What We Ask of Them," *Mayo Clinic Proceedings*, 97(5):826-829, April 2022.

⁶ Australian Commission on Safety and Quality in Healthcare: Hospital-acquired complications (HACs)

⁷ *Private Health Insurance Act 2007* (Cth)

consumers, providers and governments need to do more to ensure consumers are presented with the best care possible, not just the best care available.

The options available lie within four categories:

- **Addressing misalignment of incentives in existing funding models** – action is needed to address structural challenges in the current system by implementing independent benchmarking of both price and the proportion of patients treated out of hospital. This benchmarking should be conducted for selected DRGs based on international benchmarks on uptake of out-of-hospital care. These benchmarks could then be inputs into fund and provider-level contracting negotiations. In addition, the Federal Government could expand MBS item coverage for out-of-hospital equivalents to inpatient services, and enable non-specialist delivery of care (e.g., by GPs, nurse-practitioners) where clinically appropriate.
- **Enabling sufficient supply of OOH care providers to improve consumer access at scale** – removing restrictions around prescribed practitioners for Chronic Disease Management Programs and funding of outpatient care would help expand the scope of funded out-of-hospital care provision and allow providers to offer their highest quality services. Alongside this, a significant increase in training on skills required for out-of-hospital models is needed, alongside strategies to increase the volume of the community care workforce.
- **Enabling increased OOH uptake through the better use of data and technology** – a key data-related enabler could include information sharing guidelines to better identify eligible patients for out-of-hospital care programs. Additionally, there should be an increasing focus on building evidence for cost-effectiveness of technologies such as remote patient monitoring and telehealth in order to facilitate robust Health Technology Assessment. Technologies that are proven to enhance quality of care and cost-effectiveness then need support through increased investment and training. Use of technology and delivery of programs should be underpinned by implementation of a standard minimum dataset across providers to monitor program outcomes (including patient-reported outcome measures, or PROMs) and drive continuous improvement.
- **Standardising quality and safety of OOH care models** – implementing a standard set of accreditation processes and clinical guidelines will help increase confidence in the system for providers and referrers, and ensure a consistent level of high-quality care and patient safety. Additionally, benchmarking of the proportion of patients admitted to inpatient vs out-of-hospital programs for selected DRGs could be implemented at a hospital-level to create a stronger awareness of the potential for change, while also enhancing competitive tension in the system.

Minimum default benefits for out-of-hospital care are favoured by providers, but this is a bad option for consumers. Experience with second-tier default benefits for inpatient care has proven such approaches are cost inflationary, stifle innovation and promote low-value care. In the out-of-hospital setting, application of blanket minimum default benefits would also reduce the scope for funds and other stakeholders to effectively monitor the quality of such services. The experience of minimum benefits in the National Disability Insurance Scheme has seen the proliferation of poor quality care, fraud and mismanagement.

In comparison, the outlined reform options seek to increase uptake of out-of-hospital care while maintaining the ability of individual funds and providers to improve quality of care through their

normal market-based interactions. The options also aim to avoid the potential pitfalls of creating inflationary headwinds to private health affordability and growth in low value care.

Full implementation of these reforms could deliver up to \$1.5bn of value to PHI members by 2027, reducing expected growth in private health expenditure expected over the same timeframe driven by population growth and ageing.

While cost-efficiency is important, quality of care is more important. As standards of care change, consumer demands change, technologies change and the costs of care change, the private health system must adapt. Paying over the odds for lower quality care with a high burden of treatment is not acceptable – we need to be able to provide the best quality care. More and more, the best quality care is supporting patients at home.

1.2 SUMMARY OF RECOMMENDATIONS

#	Category	Lever	Description
A1	Funds	Financial incentives while preserving clinical autonomy	Scale up financial incentives for clinicians who choose to adopt out-of-hospital care models (e.g., through gap cover schemes or block payments), with incentives linked to outcomes where possible
A2	Funds	Removing gap payments	Continue to implement programs that reduce patient out-of-pocket costs when receiving appropriate quality out-of-hospital care
A3	Funds	Moving away from incentivising LOS	Transition away from per diem payment structures that directly incentivize increased length-of-stay
A4	Funds	Outcome-based funding models	Move towards outcome-based or ‘blended funding models’ to incentivise achievement of improved clinical outcomes
A5	Funds	Transparency for providers	Increase transparency for providers on how and where funding will be available for out-of-hospital care models (e.g., through a standard offer, or expression of interest)
A6	Funds	Access to cover	Expand cover for out-of-hospital programs across different tiers of cover, within the bounds of regulation
A7	Funds	Consumer awareness and education	Deploy consumer awareness campaigns on availability and benefits of different models of care, as well as on eligibility and accessibility of these models of care
B1	Funding model incentives	Independent benchmarking of average length of stay	Enable IHACPA to administer independent benchmarking of selected surgical DRGs, to act as a catalyst for more rapid shifts in the cost-weight of these DRGs where there is good evidence for short-stay models

B2	Funding model incentives	Independent benchmarking of price or trim points	Enable IHACPA to administer independent benchmarking of length-of-stay trim points for non-surgical DRGs, to help support operational improvement in hospitals
B3	Funding model incentives	Outpatient palliative care MBS items	Expand MBS coverage for out-of-hospital care delivery by specialists, GPs and nurse practitioners in palliative care
C1	Care provider supply	Regulation on prescribed practitioners for CDMPs	Remove the list of prescribed practitioners for CDMPs, to allow for an increased number of high quality programs to be delivered
C2	Care provider supply	Regulation for funding of outpatient care	Amend regulation to allow PHI funding of GPs and specialists for select hospital avoidance and substitution programs, separate to the scope of MBS funding
C3	Care provider supply	Training for out-of-hospital care	Co-develop and deploy training strategies, working with educational institutions, professional bodies and specialist colleges to ensure improved training in the required skills for delivery of out-of-hospital care
C4	Care provider supply	Support for informal carers	Expand and improve access to programs available for informal carers, including respite care, peer support and counselling
D1	Data and technology	Information sharing channels and guidelines	Establish channels to enable information flow between providers and payors to help ensure continuity of care
D2	Data and technology	Minimum data collection guidelines	Establish a standardised minimum dataset for hospital substitution services, to provide transparency on out-of-hospital provider quality and outcomes
D3	Data and technology	Uptake and maturity of Remote Patient Monitoring (RPM)	Elevate RPM as a priority in the National Digital Health Strategy to help improve research into clinical effectiveness, and then facilitate investment into cost-effective models of deploying RPM
E1	Quality and safety	Standard clinical guidelines for assessment of suitability for out-of-hospital care	Co-develop, alongside clinical groups, standardised clinical guidelines for risk-stratification and patient selection for out-of-hospital care
E2	Quality and safety	Standard requirements for provider accreditation	Establish national accreditation standards for out-of-hospital care models
E3	Quality and safety	Guidelines for CDMP programs	Establish specific standards for CDMP programs to be provided by, or referred into by, GPs

		that could be referred into by GPs	
E4	Quality and safety	Independent benchmarking for proportion of patients admitted to out-of-hospital care	Enable the Australian Commission for Safety and Quality in Healthcare to implement benchmarking on the proportion of patients admitted into inpatient programs, vs out-of-hospital programs, for selected DRGs where there is substantial evidence for out-of-hospital models

1.3 NOTE ON DEFINITIONS

Out-of-hospital (OOH) care is defined as models of care designed to achieve hospital avoidance or hospital substitution.

Hospital avoidance models are aimed at reducing admissions or readmissions to acute care facilities. These are typically provided in an ambulatory setting and targeted towards higher risk cohorts, including those with chronic conditions. Hospital substitution refers to services in the home, via telehealth, or in some cases other community-based facilities, that would otherwise only be provided in hospital.

There are eight overarching archetypes or models of out-of-hospital care which can be privately delivered:

1. **Primary prevention and coordination** (e.g., coordination of cancer screening)
2. **Chronic disease management and monitoring** (e.g., chronic disease management, including secondary and tertiary prevention programs)
3. **Triage and emergency management** (e.g., telehealth triage or virtual emergency departments)
4. **Mental health and substance misuse management** (e.g., mental health hospital-in-the-home and rehab-in-the-home)
5. **Peri-operative management** (e.g., short-stay surgical models)
6. **Acute care/single intervention** (e.g., direct admission into hospital-in-the-home or chemotherapy at home)
7. **Step down services and rehab** (e.g., typical step-down hospital-in-the-home and rehab in the home)
8. **End-of-life care** (e.g., palliative care at home)

These eight archetypes of out-of-hospital care are the focus of this report, and further detail on their definition is included in the appendix. Note that general primary care and primary prevention for low-moderate risk patients (e.g., standard general practice visits, Medicare funded primary care items, immunisations, care provided by nurses, dentists, pharmacists, and allied health) are excluded from this definition.

For clarity, a table has been included at Appendix 9.1 which defines inclusions and exclusions within each of these models of care.

2 Australia has a significant opportunity to adopt out-of-hospital care

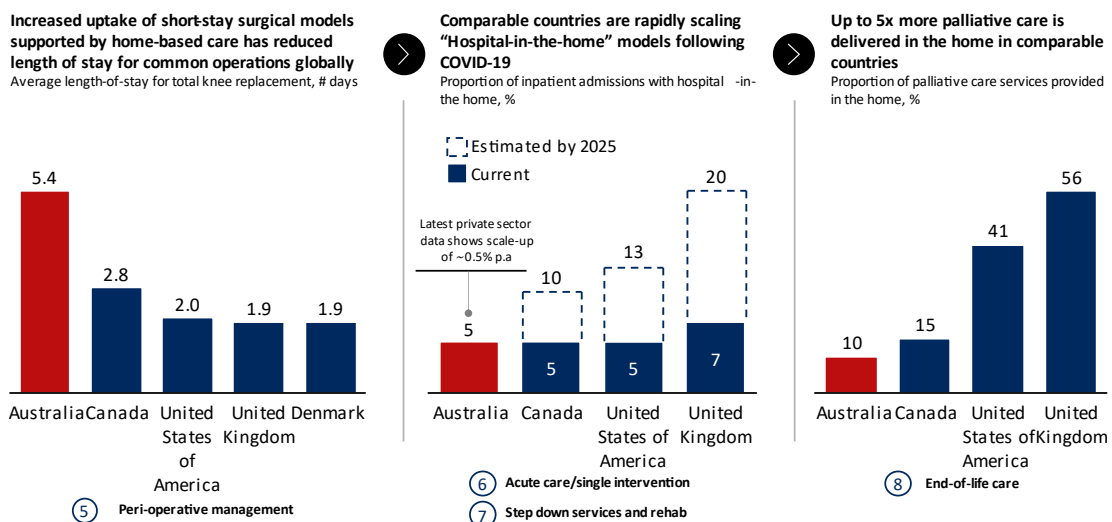
When comparing to models being deployed at scale globally, Australia has low uptake of out-of-hospital care in the private health system.

Australia lags global trends in the uptake of out-of-hospital models across a range of conditions. For example, Australia has had limited uptake of short-stay surgical models compared to other health systems. Uptake across Canada, the United States (US), the United Kingdom (UK) and Scandinavia have seen a reduction in average length of stay for elective joint replacements to 1.9-2.8 days, compared to 5.4 days in the Australian private system⁸.

Australia has also had limited uptake of end-of-life care at home offerings: only 10% of such care is provided in the home in Australia whereas up to 5x the amount is delivered across Canada, the US and the UK at 15%, 41% and 56% respectively⁹. Comparative health systems are also increasing commitments to shift more care out of hospitals with the UK committing to 10,000 virtual ward beds in 2023, equivalent to 20% of total bed capacity and some regions in Canada committing to providing 10% of hospital services at home¹⁰. Comparatively, Australia only delivers 5% of hospital services at home in the private system and 6% in the public system¹¹.

EXHIBIT 1

Australia is behind global trends in uptake of out-of-hospital models across a range of conditions



⁸ OECD Average Length of Stay benchmarks; Denmark "Fast Track" Surgery protocol

⁹ Health Canada. Framework on Palliative Care in Canada. December 2018; QualityNet Acute Hospital at Home Waiver; London Economics. Modelling demand costs for palliative care services in England report. February 2021.

¹⁰ NHS England. Delivery plan for recovering urgent and emergency care services. January 2023; Island Health Canada.

¹¹ Australian Prudential Regulation Authority. Quarterly Private Health Insurance Benefits. March 2023.

Low uptake of out-of-hospital care has implications for patients by limiting access to high quality care with equivalent or improved outcomes and restricting choice of where they can receive services. It also has implications for the broader health system – closing this gap in out-of-hospital care provision will become increasingly critical to the sustainability of healthcare in Australia. The number of Australians above the age of 75 is expected to reach 3 million by 2031-32, or 10% of Australia’s population¹². At current rates of hospital treatment cover and utilisation of private hospitals for the age group, this is expected to drive demand for an extra 1.0 million patient days in overnight private hospitals¹³ – a ~17% increase in total private patient days relative to 2021-22¹⁴. Similarly, in the public system, this same trend is expected to drive demand for approximately 3.1 million additional patient days relative to current levels, or a 15% increase in total public hospital patient days¹⁵. Without intervention, this additional demand will be placed almost entirely upon ‘bricks and mortar’ hospitals, which threatens further exacerbations of wait times and existing bottlenecks, in addition to cost inflation for public and private payors.

Costs are also increasing for consumers with out-of-pocket costs for specialist attendances increasing by 9.4% in the past year.¹⁶ This is in the context of lower Medicare spending overall with MBS benefits paid for specialist attendances decreasing by 3.7% over the same period.⁸ Similar patterns are being seen in primary care with out-of-pocket costs for allied health services covered by Medicare increasing by 8.9% and the rate of bulk-billed general practice visits decreasing by 7.1% over the past year.⁸ In the private system, out-of-pocket costs for hospital care have increased 15% over the same period.¹⁷ This is in addition to costs that patients incur as a consequence of repeated hospital admissions, including carparking fees, travel, lost workdays and accommodation for relatives.¹⁸ As costs for consumers increase, there are more financial barriers to accessing health care and a reduced use of preventative services. New models of care that can offer similar quality care at a lower price are needed to combat the increases on costs to consumers and increased utilisation of preventative health programs. Out-of-hospital care is therefore an essential lever to maintain the sustainability of the Australian health system and improve access to care.

The private health system is uniquely positioned to unlock the out-of-hospital opportunity in Australia. By offering or funding a range of OOH care service, private health funds can improve healthcare access, reduce the burden on hospitals and relieve pressure off the public health system. The Productivity Commission’s 5-year Productivity Inquiry report notably highlighted the Government’s need to reform sectors where regulations unnecessarily impede new entrants such as in private health insurance.¹⁹ In particular, the Commission indicated that PHIs are well positioned to play an active role in facilitating models of care to improve prevention and long-term outcomes, including in out-of-hospital services.²⁰

¹² Centre for Population, Population Statement

¹³ Department of Health and Aged Care, Hospital Casemix Protocol annual report; APRA quarterly private health insurance membership coverage

¹⁴ Ibid

¹⁵ Australian Institute of Health and Welfare. Admitted Patient Care.

¹⁶ Medicare statistics (July to December 2022-23)

¹⁷ APRA. Quarterly private health insurance statistics. Mar 2023

¹⁸ Premier of Victoria. Hospitals Ordered to Develop Fairer Car Parking Policies. 2015

¹⁹ Productivity Commission. 5-year Productivity Inquiry Report. March 2023.

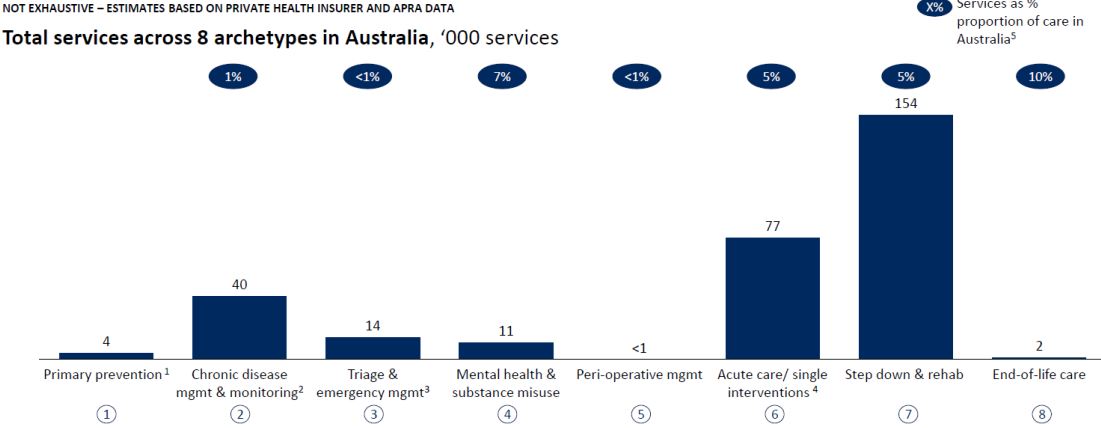
²⁰ Ibid

While Australia shows some evidence of experimentation in out-of-hospital care, this has been limited to small pockets of activity

There is low penetration of privately provided out-of-hospital care in Australia. Based on analysis across the eight models of care identified previously, it is estimated that out-of-hospital activity accounts for between <1 to 10% of services delivered. Triangulation of private health insurer reports and publicly available data from Quarterly Private Health Insurance Benefit trends from the Australian Prudential Regulation Authority and provider websites²¹ found that there are at least 120 private providers of OOH care services which service at least 300,000 consumers nationwide, well below what could be expected within Australia’s population. The number of providers is generally low across models of care with only 1 private provider identified for triage and emergency management, and the highest number of providers (35) for step down services and rehab.

EXHIBIT 2

The Australian market has low penetration with at least 120 private providers of out-of-hospital services reaching at least 300k consumers



1. For (1),(4) & (8) market share data used to extrapolate gaps in PHI data for missing health funds
 2. No. of CDMP programs cited in APRA Quarterly Private Health Insurance data
 3. Website figures extrapolated to yearly basis
 4. For (6) & (7), assumed total is APRA total no. of insured hospital substitutes episodes
 5. No proportion estimate for (1) due to incomplete sizing data
 Source: AIHW; private health insurance data; private health insurance websites; Private Hospital Database Australia, OECD Average Length of Stay benchmarks, Denmark "Fast Track" Surgery protocol, Island Health Canada, NHS Virtual Wards, QualityNet Acute Hospital at Home Waiver; ERAS program; expert interviews

There are some examples of providers in Australia who are rethinking cost-effectiveness and using different measures to treat the same condition. For example, one hospital in Australia has introduced a proof-of-concept lifestyle centre which will focus on evidence-based non-invasive methods for the treatment and prevention of Type 2 diabetes and obesity. This hospital-avoidance initiative will include diet, exercise and pharmaceutical options as an alternative to bariatric surgery. Such models represent encouraging pockets of innovation in Australia, which need to be further enabled.

²¹ Australian Prudential Regulation Authority. Quarterly Private Health Insurance Benefits. March 2023.

Case study: Medibank short stay pilot program^{22 23 24}

Medibank initiated its no gap joint replacement program in 2019, working closely with hospitals and clinicians to ensure clinically appropriate patients receive modern peri-operative care, enabling early discharge and rehabilitation in the home. Hospital partners typically have implemented the program through effective patient coordination, detailed pre-operative assessment to ensure eligibility, early mobilisation through physiotherapy and home-based allied health support.

The program has been able to achieve typical lengths-of-stay between 1-3 days, in line with global benchmarks, but much lower than the typical 5 day length-of-stay observed in Australia. In 2022, Medibank further reported that 78% of surveyed participants were favourable towards a short stay model of care. Analysis also suggested no difference in the probability of clinical complications for participants in the program versus pre-existing models of care. Through its structure as a 'no gap' offering, the implementation of the program has also successfully delivered lower out-of-pocket costs to patients.

Case study: MIND Australia^{25 26}

MIND Australia offers a broad range of mental health support programmes, with a focus on providing alternatives to hospitalisation. Leading support options include its peer-led therapeutic support services, and its sub-acute recovery care services:

- Peer-led therapeutic support: Connect South Australia is a peer-led suicide prevention program designed to avoid and reduce hospitalisation, first piloted in 2021. Support is offered through face-to-face, online or telephone interactions for up to 12 weeks, and includes access to a range of innovative psychosocial supports and psychoeducation courses. Outcomes analysis using the Warwick-Edinburgh Mental Wellbeing Scale suggest improvements in management of mental health, physical health, daily problems and development of life skills through the program. Evaluation also identified that 88% of participants felt their progress in managing their own mental health was related to support provided in the peer-led model of Connect South Australia.
- Sub-acute recovery services are designed to support transition out of hospital admission, or avoidance of hospital admission. MIND offers a multidisciplinary team including family engagement workers and community health workers. Outcomes analysis suggests meaningful reductions in signs of psychological distress through the Kessler 6 Distress scale.

²² Medibank. Latest report reveals a solution to stretched healthcare system [media release]. 10 August 2022

²³ Medibank. Medibank expands no-gap joint replacement pilot program [media release]. 19 July 2021

²⁴ Nexus Hospitals. Vermont Private Hospital: No-Gap joint replacement surgery – getting you back on your feet faster [online]

²⁵ MIND Australia. Mind Australia's new peer-led mental health service to ease burden on Emergency Departments in South Australia. 9 February 2023

²⁶ MIND Australia. 2021-2022 Annual Report. 2022.

There is strong evidence of benefits across all out-of-hospital care in efficiency, quality and experience

Patient outcomes are improved or equivalent to traditional inpatient models of care across each archetype. For example, there is particularly strong evidence of improved clinical outcomes in the reduction of hospital admission risk, including by over 80% in chronic disease management and monitoring²⁷, ~60% in mental health and substance misuse management²⁸, and ~15% in triage and emergency management.²⁹ Similarly, there is strong evidence of reduction in readmission risk including a ~26% improvement in chronic disease management and monitoring³⁰ and up to 40% in mental health and substance misuse management³¹.

Out-of-hospital models have also been shown to improve efficiency of healthcare delivery with reduced average cost of treatment and reduced average length of stay (ALOS). For example, cost savings for all models of care range from 18-45%³². On the lower end, the range of cost savings for end-of-life care extends from 18-35%³³, while acute care/single intervention savings has the most potential with 35-45% cost savings.³⁴

Patient experience is also improved compared to inpatient models of care in terms of patient satisfaction and consumer convenience as the burden of treatment is reduced as per the Mayo Clinic's measure³⁵. For example, strong evidence indicates that the emotional and physical costs of healthcare for patients are reduced, especially when there is a shorter ALOS in models of care such as peri-operative management, acute care with a single intervention, and end-of-life care.

²⁷ Rastogi A. et al., "Virtual triage and outcomes of diabetic foot complications during Covid-19 pandemic: A retrospective, observational cohort study," *PLoS ONE*, 16(5), May 2021.

²⁸ Caplan G. A. "Systematic reviews - a meta-analysis of 'hospital in the home'," *The Medical Journal of Australia*, 197(9):512-9, Nov 2012.

²⁹ Hurley et al. "Virtual triaging in an eye emergency department during the COVID-19 pandemic," *Irish Journal of Medical Science*, Sept 2022.

³⁰ Rastogi A. et al., "Virtual triage and outcomes of diabetic foot complications during Covid-19 pandemic: A retrospective, observational cohort study," *PLoS ONE*, 16(5), May 2021.

³¹ Caplan G. A. "Systematic reviews - a meta-analysis of 'hospital in the home'," *The Medical Journal of Australia*, 197(9):512-9, Nov 2012.

³² Except primary prevention where it can be challenging to isolate the long-term cost effects of such programs

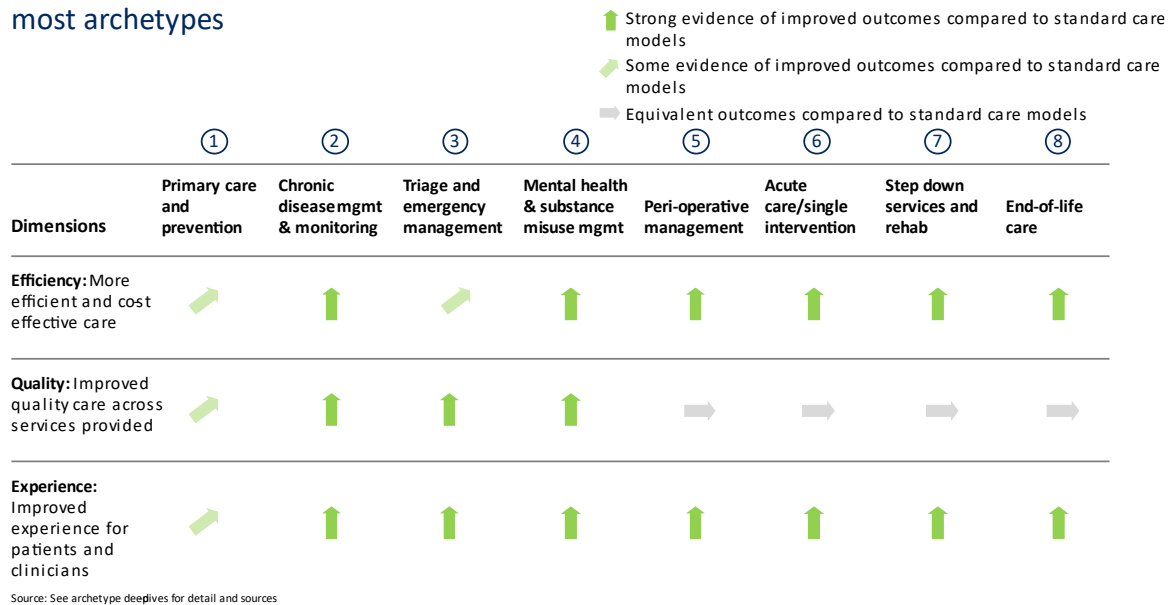
³³ Luta, X. et al. "Evidence on the economic value of end-of-life and palliative care interventions: a narrative review of reviews," *BMC Palliat Care*, 20(89), June 2021.

³⁴ Levine, et al. "Hospital-Level Care at Home for Acutely Ill Adults," *ACP Journals*, 172(2):77-88, January 2020; Paulson M. et al. "Implementation of a virtual and in-person hybrid hospital-at-home model in two geographically separate regions utilizing a single command center: a descriptive cohort study," *BMC Health Services Research*, 10(1093), Nov 2009; Hernandez C. "Home hospitalisation of exacerbated chronic obstructive pulmonary disease patients," *European Respiratory Journal*, 21(58-67), 2003.

³⁵ Linzer et al. "Reducing the Burden of Treatment: Addressing How Our Patients Feel About What We Ask of Them," *Mayo Clinic Proceedings*, 97(5):826-829, April 2022.

EXHIBIT 3

There is strong evidence of benefits for out-of-hospital care models across most archetypes



There is a real opportunity to rapidly expand out-of-hospital care provision in Australia

More established archetypes of OOH care can be rapidly scaled to match penetration seen in comparative health systems. For example:

- **Peri-operative management** – Significant opportunity to provide same-day or short-stay surgery for elective joint surgery, in addition to other surgical procedures (e.g., spinal procedures, bariatric interventions, other gastrointestinal and hepatic procedures) in a very nascent market
- **Acute care and single intervention** – Opportunity to increase scale to 10-20% of all bed capacity in line with global benchmarks of uptake, including increasing proportion of selected single intervention services (e.g., chemotherapy and dialysis) at home³⁶
- **Step down services and rehab** – Opportunities to increase scale to 10-20% of all bed capacity in line with global benchmarks of uptake, shift ~30% of inpatient rehab to OOH care, rapidly scale models, and provide more sub-specialised HiTH/rehab models³⁷
- **End of life care** – Opportunity to aspire towards delivering 40-56% of palliative care in the home in line with upper global benchmarks, in a market with low uptake but significantly high demand³⁸
- **Chronic disease management and monitoring** (including secondary and tertiary prevention programs)– Potential to increase improve access, utilisation and private funding for a broader range of chronic disease management services

³⁶ Private Hospital Database Australia, Island Health Canada, NHS Virtual Wards, QualityNet Acute Hospital at Home Waiver

³⁷ Ibid

³⁸ Private Hospital Database Australia, Island Health Canada

Archetypes with currently low uptake should focus on expansion to deliver a broader range of service offerings for more patients

- **Mental health and substance misuse management** – Opportunity to increase delivery of specialised Mental Health Hospital-in-the-Home models and Rehab-at-Home models, including to rural regions ³⁹

There is further material impact for primary prevention/coordination and triage/emergency management

- **Primary prevention/coordination** – Evidence suggests that these models of care can reduce the burden of disease, improve population health, and generate long-term healthcare cost savings. However, quantifying their impact is challenging due to the complex nature of health outcomes and the long-term effects of these programs. It can be difficult to isolate the impact of primary prevention programs from other factors contributing to disease occurrence, and as such their impact has not been measured in this report.
- **Triage and emergency management** – Out-of-hospital triage and emergency management models can significantly reduce the burden on physical EDs, save costs by diverting non-urgent cases, and is associated with high patient satisfaction and convenience.⁴⁰ However, given the private emergency departments only contribute a small proportion (approx. 10%) to overall emergency activity in Australia and are not funded by private health insurers, impact has not been measured in this report.

³⁹ Enhanced Recovery After Surgery (ERAS) Society Guidelines

⁴⁰ Khairat S. et al. "Evaluation of Patient Experience During Virtual and In-Person Urgent Care Visits: Time and Cost Analysis," *Sage Journals*, January 2021.

3 Potential impact of out-of-hospital care on health system sustainability

3.1 \$11.1BN BASELINE EXPENDITURE ON CONDITIONS THAT COULD BE MANAGED IN THE OUT-OF-HOSPITAL SETTING

It is critical to maintain the sustainability of Australia's healthcare system, particularly in the face of a rapidly ageing population and the increasing burden of chronic disease. Based on ABS projections, peak net growth of the 85+ cohort in Australia is expected to steadily grow over the next decade, reaching a peak in 2032⁴¹.

In 2021-22 private hospital baseline spend was \$21.2bn. In the context of population growth and ageing, this total baseline expenditure across the health system is projected to expand substantially with Australia's ageing population to reach \$23.3 bn in 5 years' time⁴². This expansion in demand will represent a strain on existing infrastructure and potentially pose issues for access – out-of-hospital care models which support provision of quality care in settings outside of inpatient hospitals will therefore be critical.

Based on an analysis of individual DRGs potentially eligible for OOH care models, ~\$11.1bn of the current ~\$21.2bn total expenditure is potentially addressable for such models today⁴³. The exhibit below demonstrates this baseline, and further details how the addressable component splits between addressable OOH care archetypes⁴⁴.

Detailed methodology, including mapping of DRGs to archetypes and value-at-stake drivers, can be found in the Appendix.

⁴¹ ABS Population Projections, 2017 (base)-2066

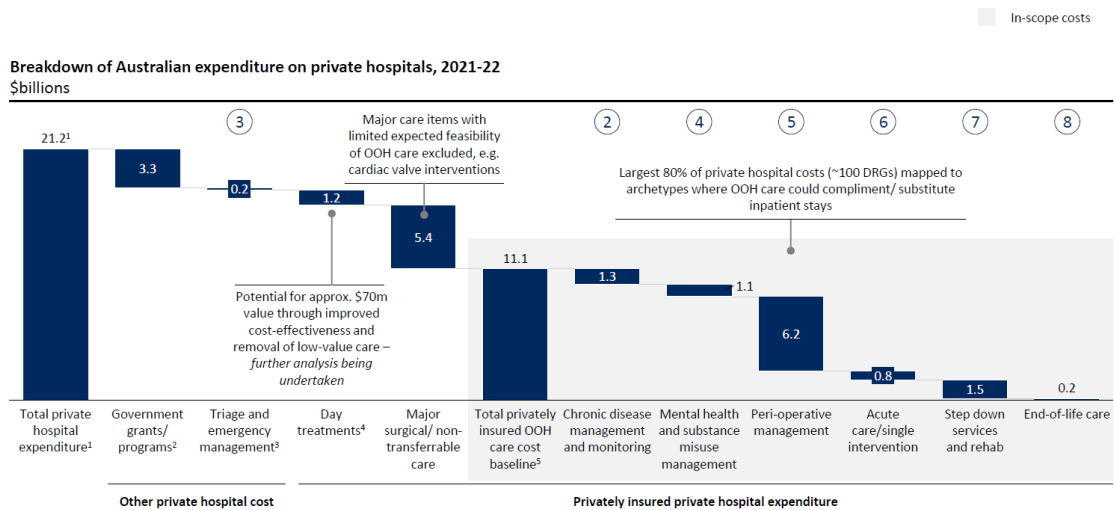
⁴² Assuming steady participation rates

⁴³ Total private hospital expenditure for 2021-22 estimated by applying 2020-21 health expenditure as a proportion of GDP to 2021-22 GDP actuals

⁴⁴ As discussed in Section 2, primary care/prevention not sized for impact due to the difficulty attributing long-term impacts to specific programs. Triage and emergency management also not measured private emergency departments contribute a small proportion (approx. 10%) to overall emergency activity in Australia and are not funded by private health insurers.

EXHIBIT 4

~\$11.1bn in applicable expenditure for out-of-hospital (OOH) care models, of
 ~\$21.2bn in total private hospital spend



1. 2021-22 expenditure estimated by applying 2020-21 health expenditure as a proportion of GDP to 2021-22 GDP actuals; 2. Includes expenditure by DVA, DoH, other Australian Government agencies and State/Local Governments; 3. Patient out-of-pocket spend on emergency department (ED) presentations in private hospitals, estimated based on ED presentation data and average presentation fees across analysed private hospitals. Excluded from scope due to regulatory restrictions on private insurance funding of EDs; 4. Opportunities may exist to address low value care, pending regulatory challenges; 5. Primary care and prevention excluded from quantitative modelling due to regulatory restrictions on funding.
 Source: AIHW; ABS; IHPA; Hospital Casemix Protocol annual report; Private hospital websites

3.2 VALUE AT STAKE FOR OUT-OF-HOSPITAL CARE

Moving penetration of out-of-hospital care models to a level more aligned with international and Australian public hospital benchmarks, could offset a material part of the unsustainable growth in the healthcare system.

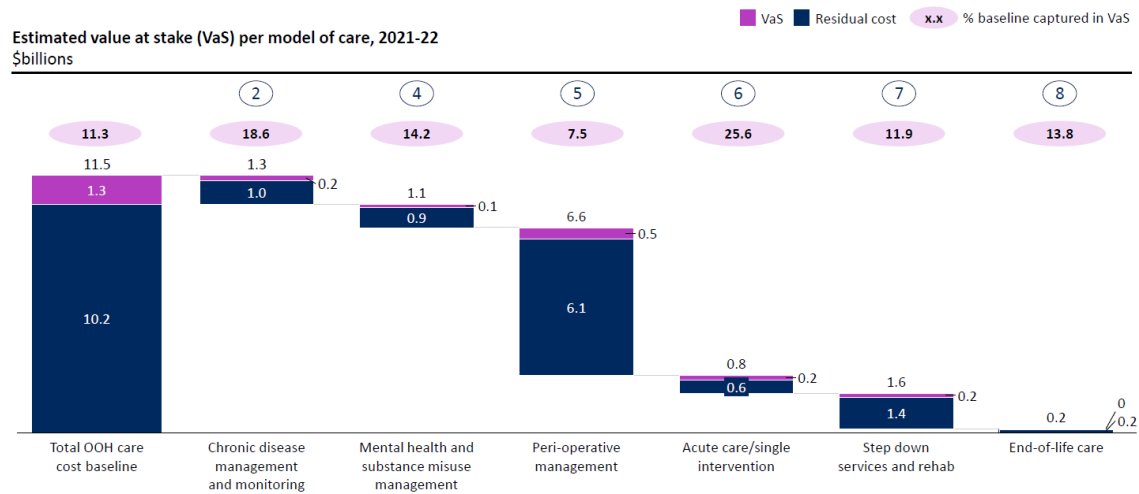
DRG-level analysis suggests \$1.3bn of current cost (11% of baseline spend) could be saved by shifting healthcare out of the hospital while providing the same or improved access to quality and safe care. This value could be captured by moving towards Australian public sector and international benchmarks on uptake of out-of-hospital care for comparable countries. Australia's public system proves that such benchmarks are feasible in Australia. For most DRGs, achieving Australian public sector benchmarks would contribute part of value captured under international benchmarks. For some DRGs (e.g., major affective disorders, non-surgical spinal disorders) achieving Australian public sector benchmarks would in fact exceed value derived from international comparators alone.

Certain archetypes of out-of-hospital care more meaningfully contribute to this ~\$1.3bn opportunity for system sustainability. Chronic disease management, acute care and select peri-operative management represent \$0.9bn out of this \$1.3bn total. Select opportunities in step down services and mental health collectively represent \$0.4bn in system savings, where care settings are majority substituted for home-based alternatives e.g., cellulitis, or ALOS is reduced, e.g., personality disorders.

As noted previously, on current momentum private hospital baseline spend is expected to grow from \$21.2bn to \$23.3bn in 5 years. Alongside this growth, the estimated value at stake for out-of-hospital care is projected to grow to ~\$1.5bn by 2027.

EXHIBIT 5

Conservative estimates suggest ~\$1.3bn in value at stake – ~11% of baseline spend – through substitution of inpatient stays with home care and/ or hospital avoidance



Source: AIHW; IHPA; Hospital Casemix Protocol annual report; academic research; OECD; international hospital activity data

The remainder of this section provides an overview of the estimated value-at-stake for each archetype.

Peri-operative management

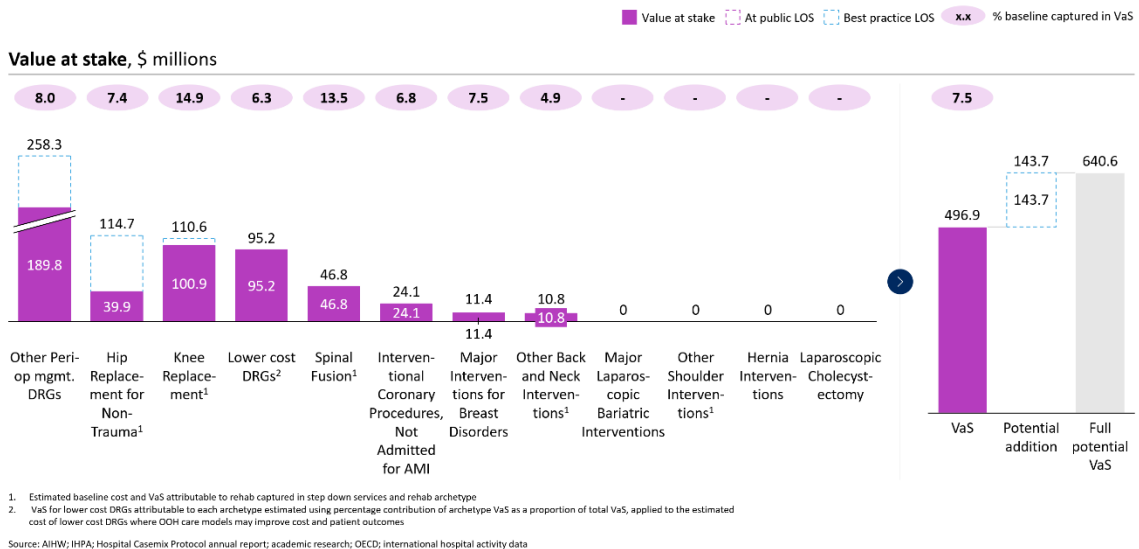
Australian hospitals retain patients over significantly longer lengths of stay for peri-operative management relative to international comparators. Joint replacements and spinal fusions contribute substantially towards ~\$500m in system savings for peri-operative management. Knee and hip replacements represent the largest cost items, with ~\$230m in value at stake driven by reduced length of stay from 5.4 and 5.5 days respectively to 2.2 and 3.9 days. There is a further potential to reduce ALOS to 1.9 days in line with overseas examples in Denmark and the UK. These benchmark figures account for necessary variation in length of stay between patients with different comorbidities, or of different acuity, but represent an average point Australia could target while maintaining quality and safety.

Further value may be realised through full adoption of best practice clinical guidelines for DRGs beyond orthopaedic conditions (as outlined in the ERAS guidelines), such as for laparoscopic bariatric interventions, spinal fusions, coronary interventions and other conditions beyond joint replacements.

EXHIBIT 6

5 Knee/ hip replacements and spinal fusion contribute substantially towards the ~\$500m in value at stake for peri-operative management

Deep dive: Peri-operative management



Case study: 'Fast-Track' surgical program in Denmark^{45 46 47}

Effective peri-operative management of surgical care has been a feature of Denmark's healthcare system since 2004, triggered by the establishment of the Unit of Perioperative Nursing, responsible for development of guidelines to improve peri-operative management.

The 'Fast-Track' surgical program incorporates five key activities to support timely discharge of patients following procedures such a total hip replacement or total knee replacement. These five features are: pre-operative counselling, surgical stress reduction, improved management of pain relief, rapid mobilisation and sufficient nutrition. Through these relatively achievable changes, improved surgical outcomes and reduced length-of-stay have been achievable across a range of procedures.

Successive evaluations have found the program achieves equivalent outcomes to inpatient stay, and offers high patient satisfaction. Examples of outcomes achieved in total knee replacement, for example, suggested there was no difference in 7-day readmission risk, 90-day readmission risk or 90-day mortality following outpatient surgery versus inpatient surgery.

⁴⁵ Jakobsen et al. "Standardising fast-track surgical nursing care in Denmark", British Journal of Nursing, May 2014

⁴⁶ Arndt et al. "Readmissions and mortality after outpatient vs inpatient unicompartmental knee arthroplasty in Denmark – A propensity score matched study of 5,384 procedures", The Knee, October 2022

⁴⁷ Hansen et al. "Fast track in hip arthroplasty", EFFORT Open Reviews, May 2017

Chronic disease management and monitoring

In chronic disease management and monitoring, increased uptake of out-of-hospital care could result in potential system savings of ~\$240m, or ~18% of baseline cost, compared to international clinical benchmarks. Bone diseases and arthropathies, and heart failure and shock account for almost half the system savings at ~125m. International benchmarks suggest that up to 70% of low-to-moderate admissions could be avoided through chronic disease management and hospital avoidance programs. Similarly, there is evidence that up to 80% of heart failure admissions could be avoided by effective use of at-home models.⁴⁸

Case study: Sophia Diabetes in France^{49 50}

The Sophia programme for diabetes in France was first established in 2008, designed to support patients with management of diabetes through nurse-led intervention. The programme had expanded to 62,000 patients by 2010 and was rolled out nationwide in 2013. Services offered include patient counselling and development of a patient information website, regular need-based telephone interventions (typically required every six weeks) led by a nurse with GP input where required, and decision-support based on evidence-based guidelines

Evaluation of the programme in 2013 suggested improvement in overall diabetes management, including regularity of ophthalmological check-ups and HbA1C measurement, as well as improvement in HbA1C as an outcome for patients with poor glycaemic control. Subsequent evaluation also identified decreases in emergency visits and decreased hospitalisations for major cardiovascular events.

Step down services and rehab

Step-down services contribute significantly to system savings, with potential to realise ~\$190 million (~12% of the baseline cost) while providing quality step-down care outside of the hospital following acute admissions. Almost one quarter of these savings (~\$45m) could be realised by out-of-hospital models reducing the proportion of inpatient rehabilitation admissions. For example, the rate of inpatient rehabilitation for elective joint surgery rehabilitation is on average 40% for private hospitals in Australia, compared to 17% in the Australian public system and approximately 10% in the US and Canada. Reducing low-value inpatient rehabilitation and substituting with at-home rehab models where appropriate could act to capture some of these savings.

⁴⁸ Arsenault-Lapierre, et.al. "Hospital-at-Home interventions vs In-Hospital Stay for Patients with Chronic Disease Who Present to the Emergency Department", JAMA, June 2021

⁴⁹ Chevreur, et al. "Assessing Chronic Disease Management in European Health Systems: Country reports: France", European Observatory on Health Systems and Policies, 2015

⁵⁰ Cash, et al. "Evaluation of "Sophia Diabetes", a diabetic patient support programme, 8 years after its initiation", The European Journal of Public Health, November 2019

Acute care/single intervention

Hospital avoidance and select cost reductions can drive ~\$180m in cost savings from acute care interventions in Australia. This is a significant opportunity for selected treatments like chemotherapy and haemodialysis, where shifting ~80% of admission through home-based providers such as Chemo@Home or Dialysis Australia can result in systems savings of ~\$71m, by reducing costs by 30-40%.⁵¹

Other areas to drive value are in minor non-surgical spinal disorders, where public hospital benchmarks show the potential to reduce baseline cost per separation by up to 30%.

Case study: Virtual Wards in the UK^{52 53 54}

There have been successive innovations in the NHS to support home-based care as an alternative to acute admission. Examples of these innovations include:

Virtual Frailty Ward in Leeds: this ward opened in 2019, as a joint service coordinated between the local NHS Trusts for hospitals and community healthcare, and local health organisations. The focus of the service is providing 24/7 co-ordinated care to people aged over 70, including for presentations such as mild delirium, mild acute kidney injury and cellulitis. The service includes initial assessment within 2 hours of referral, daily review in the home and consultant geriatrician oversight in a multidisciplinary meeting format. The ward saved over 10,000 bed days in the first year since launching, and helped enable reduced incidence of hospital-acquired infections, falls and complications.

Kent Enhanced Rapid Response Service: this service, first piloted in 2013, similarly includes a multidisciplinary team of geriatricians, specialists, advanced clinical practitioners and healthcare assistants. It is designed to prevent acute hospital admission through early review (typically within two hours of referral) and regular outreach. The service applies to conditions including cellulitis, COPD, acute heart failure, urinary tract infections and delirium. Evaluation has found that 94.4% of patients referred into the service were able to avoid an admission successfully, and patient satisfaction levels with the service are high.

Mental health and substance abuse management

International benchmarks suggest there is an opportunity to provide up to ~60% of mental health and substance abuse management-related care in community settings, which would result in ~\$150m in system savings (~14% of baseline cost). This value arises from avoided hospital admissions and decreasing length of stay for both mental health and substance abuse cases through at-home

⁵¹ Vanlint A, et al. "COVID-19 prompts rapid and safe transition of chemotherapy into homes", Australian Health Review 45: 782-783, October 2021

⁵² Woodward M, Proctor N. "Avoiding A&E through Rapid Response teams and See and Treat Models", NHS, October 2016

⁵³ Gregson A. "Providing rapid care to people in their own home rather than going to hospital, through a frailty virtual ward in Leeds", NHS

⁵⁴ Local UK Government. "Kent Pioneer Programme – Profile" [online]

services such as mental health in the home. For major affective disorders and personality disorders, Australia's ALOS is 21.8 and 18.7 days, compared to 13 and 11.6 days respectively for the US. This is further reduced in the UK where ALOS for personality disorders is 9 days. Almost all inpatient substance abuse-related admissions for patients without specific contraindications (e.g., history of withdrawal seizures) or risks could be delivered in home settings safely with international benchmarks indicating up to 20% reduction in cost, driving ~\$41m in system savings.⁵⁵

Other models of care

- **Palliative care** – given lower baseline cost of palliative care driven by the low proportion of total admissions (16%) serviced by the private sector, system savings for palliative care are smaller than other models at \$30m.⁵⁶ However, there is significant consumer demand for these services and well-documented patient benefits, including increased independence and better quality of life. Given this, these models should still be prioritised for increased uptake.
- **Triage / emergency management** – increased uptake of out-of-hospital care models could enable consumer benefits by reducing out-of-pocket expenses from visiting emergency departments. Based on average presentation fees across private hospitals with emergency departments and estimated number of presentations in low-to-moderate triage categories, approximately \$200m could be saved in consumer OOP costs.
- **Day hospitals** – while not directly related to a specific out-of-hospital care model, there is potential for at least \$70m in further system savings from day hospitals by improving cost-effectiveness in line with top quartile national benchmarks.⁵⁷

⁵⁵ Davis, C. "Home detox- supporting patients to overcome alcohol addiction", Australian Prescriber 41:180-2, December 2018

⁵⁶ AIHW. Palliative care services in Australia report. October 2022

⁵⁷ Australian Department of Health and Aged Care. Medicare Benefits Schedule (MBS) Review. 2020

4 Why Australia has lower uptake of out-of-hospital care

When examining global uptake of out-of-hospital models, there have been four primary drivers of growth: patient demand, appropriate funding and incentives, supportive regulation and supply of appropriate models of care.

- **Demand** – internationally there has been rapidly growing demand for innovative healthcare models from growing and ageing populations, as well as increased consumer demand for flexible services following the COVID-19 pandemic, as more consumers have been able to experience healthcare delivered effectively in other settings⁵⁸ Advances in technology like videoconferencing have meant more consumers have been able to experience, and become comfortable with, a range of services delivered at home.
- **Funding** – Increased transparency of funding to enable out-of-hospital care (e.g., the US Dept of Health and Human Services commitment of \$55m for virtual care⁵⁹), as well as new funding models (e.g., UK Integrated Care capitation model has contributed to rise in out-of-hospital rapid response and triage services) are supporting and incentivising a shift to OOH care models worldwide
- **Regulation** – Regulatory changes which are explicitly designed to increase OOH uptake (e.g., the Acute Hospital Care at Home Waiver in US⁶⁰) or to enable specific technologies (e.g., regulatory changes in France to allow more telecare in the *Arrêté*⁶¹), have also driven growth across different models.
- **Supply** – Countries where there has been increased education and support for the OOH workforce (e.g., clinical guidelines for chronic disease management and monitoring in the UK) have seen increased uptake of OOH models.⁶² Increased uptake of new technologies (e.g., increased uptake of remote patient monitoring technologies in the US) and increased physician acceptance of at home care models are also driving uptake.⁶³

In Australia, adoption of out-of-hospital care models has lagged other countries, primarily due to constraints along these same categories, particularly funding, regulation and supply. The exhibit below depicts an overall assessment of barriers to out-of-hospital care for each model of care and highlights that funding is the most significant obstacle. Key funding barriers include incentive structures that promote inpatient admissions or promote keeping patients in hospital for longer when OOH options are already available. For example, the current second-tier default benefits

⁵⁸ Catholic Health Australia, 'Out of Hospital Care in Australia' report, July 2020

⁵⁹ HHS Government media release

⁶⁰ Clarke D, et al. "Acute Hospital Care at Home: The CMS Waiver Experience", NEJM Catalyst: Innovations in Care Delivery, December 2021

⁶¹ Yaghobian S, et al. "France extends its tele-expertise funding model nationally after COVID-19", SAGE Journals, December 2021

⁶² Nolte E. et al, "Assessing chronic disease management in European health systems: country reports," *World Health Organization*, Regional Office for Europe, 2015.

⁶³ Insider Intelligence, 'The technology, devices, and benefits of remote patient monitoring in the healthcare industry', 19 January 2023

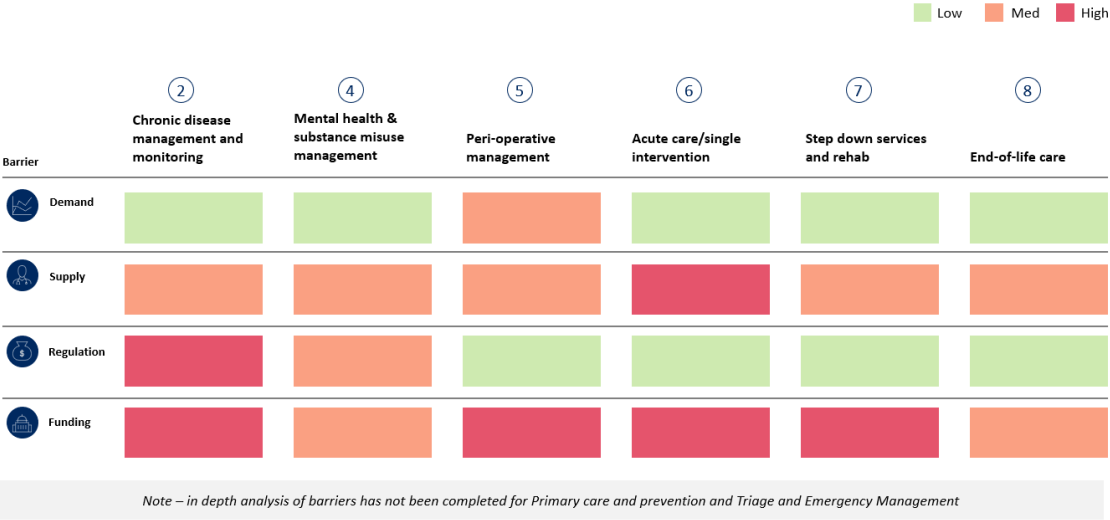
system for inpatient care means inefficient practices are supported through provision of a default benefit. This has skewed commercial incentives in the sector by leading to excessive and inefficient growth in the supply of inpatient beds, which subsequently means more patients are directed into inefficient hospital-based models of care to help maximise utilisation of these beds, even when quality and safe out-of-hospital alternatives exist.

Supply limitations are also significant across each model of care. These include limitations due to insufficient workforce, limited access to appropriate technology and lagging provider/industry acceptance of out-of-hospital care. This is attributed to a lack of integrated datasets, lack of clinical evidence to support adoption and integration of remote patient monitoring technology into care, hesitancy in clinical confidence and shortage of the community care workforce.

Regulatory barriers particularly impact chronic disease management and monitoring, and mental health and substance misuse management. This is because the *Private Health Insurance Act 2007* restricts certain types of care from being funded or conducted out-of-hospital or by certain professional groups.⁶⁴

EXHIBIT 7

Preliminary assessment of barriers to growth drivers suggests that supply-side challenges, regulation and funding are the biggest challenges for increased uptake



The subsequent sub-sections offer further detail on these barriers for uptake.

⁶⁴ Private Health Insurance Act 2007 (Cth)

4.1 FUNDING CHALLENGES

Funding challenges are a primary reason for Australia's lower uptake of out-of-hospital care, with significant barriers relating to availability of funding and inappropriate incentives within current funding models.

- **Lack of incentives to prioritise continuity of care** – In chronic disease management, fee-for-service funding models prioritise treatment volumes and do not incentivise improved care outcomes through hospital avoidance or multidisciplinary team-based care for chronic or complex conditions. Using fee-for-service funding models as the backbone of payment for clinicians hampers the ability to implement other funding types which better incentivise quality of care and outcomes over activity. Blended funding models, if designed properly, could incentivise better long-term patient outcomes and empower primary care workforces to operate at their full scope of practice to reduce preventable hospitalisations. Development of such models would also align with proposed shifts to community-based multidisciplinary care outlined in the *Strengthening Medicare Taskforce* report.⁶⁵
- **Lack of incentives to shift care out-of-hospital** – For peri-operative management, current activity-based funding models do not incentivise short-stay programs as they mostly reflect the cost of delivering services, not their cost-effectiveness. These models pay providers regardless of how long a patient is admitted, despite international evidence supporting shorter lengths of stay.⁶⁶ Similarly for acute care and step-down services, current activity-based funding models frequently offer payment regardless of whether a provider follows the optimal care pathway for a patient, and so do not incentivise a shift in site of care. Additionally, in some cases, clinicians are unable to receive the same reimbursement for care provided out-of-hospital (e.g. chemotherapy in the home) and so are disincentivised to refer into these types of models.
- **Second-tier default benefits for inpatient care** - the current second-tier default benefits system for inpatient care means inefficient practices are supported, including maintaining patients in hospital when care could be shifted to out-of-hospital programs. Second-tier default benefits currently act to transfer gains to lower quality provider hospitals and providers in oversupplied areas where hospitals maintain benefits regardless of the level of competition.⁶⁷ In addition to the problems caused by minimum benefits, the current policy of second tier default benefits both exacerbates the problems with minimum benefits by artificially inflating prices, and also results in suboptimal scenarios where additional hospitals in well serviced regions such as North Sydney receive a greater minimum payment for services than a new hospitals in underserved regions such as northern Tasmania or the Northern Territory. While funds are required to pay second-tier benefits for non-contracted hospitals, innovation is stifled and the market mechanisms that should promote out of hospital care are impeded.
- **Limited MBS funding for model of care** – For some specific models of out-of-hospital care, there are limitations to funding available through the current Medicare Benefits Schedule. Within end-of-life care, MBS items are limited to selected palliative medicine specialist services. These items can reduce the ability of community palliative care service providers to respond to client and

⁶⁵ Australian Government. *Strengthening Medicare Taskforce Report*. December 2022.

⁶⁶ Catholic Health Australia

⁶⁷ PHA. *Reforming hospital default benefits*. Sept 2022.

family needs and may not account for complexities of end-of-life care, including the contribution of carers and the desirability of its provision in out-of-hospital settings⁶⁸. Meanwhile, there are no rehabilitation physician items or mental health-related items currently designed as hospital substitutes under the MBS. Existing fee-for-service funding models for mental health hospital avoidance and rehabilitation are not likely to incentivise continuity of care or multidisciplinary team-based care.

4.2 REGULATORY BARRIERS

- **Regulation on who can provide OOH services** – current regulation restricts certain health professionals from being involved in Chronic Disease Management Program (CDMP) provision. Rule 12 of the Private Health Insurance (Health Insurance Business) Rules 2018 only permits insurers to fund non-MBS services from a specific list of allied health providers where there is a chronic disease management plan in place.^{69 70} This limits the type and number of programs that can be delivered by providers.
- **Regulation on types of programs that can be funded** – limitations on funding for outpatient care is a challenge for hospital avoidance models of care, particularly chronic disease management and mental health/substance misuse management. On chronic disease management, Rule 12 again limits innovation in CDMPs by restricting the types of programs that can be funded. Funds can decide to offer non-eligible programs to members; however, these are not subject to risk equalisation processes and therefore disincentivise investment from individual funds.⁷¹ On mental health/substance misuse management, regulation currently restricts hospital avoidance activities from being funded, which 1) limits private health insurers from funding community-based mental healthcare activities that are eligible for MBS rebates⁷², and 2) restrict funding of MBS-eligible mental health CDMPs to those provided by allied mental health professionals, including psychologists and ‘mental health workers’.

4.3 SUPPLY CHALLENGES

Key supply challenges preventing the uptake of out-of-hospital care relate to workforce shortages, lack of clinician confidence in or preference for out-of-hospital care models, lack of integrated datasets, lack of adoption of clinically proven remote patient monitoring and insufficient support for informal care required for at home models.

Clinician challenges

- **Lack of clinician confidence in, or preference for, out-of-hospital care models** – lack of training and support for clinicians in risk-stratification of patients, to help determine suitability for at-home models, leads to hesitancy in referring to these pathways. This was identified as a particular barrier for mental-health and substance misuse management, acute care/single

⁶⁸ Senate Committee Inquiry into Palliative care

⁶⁹ Private Health Insurance (Health Insurance Business) Rule 2018

⁷⁰ Australian government, Consultation paper: private health insurance reforms – second wave, December 2020

⁷¹ Parliament of Australia, ‘Value and affordability of private health insurance and out-of-pocket medical costs’ Report, 19 December 2017

⁷² UNSW, New Horizons Report

intervention models of care and short-stay surgery, where there may be the need for additional training in newer surgical and anaesthetic techniques.⁷³ Challenges include concerns regarding the appropriate management of risk of harm to self or others in community settings. One Australian study found that staff sometimes perceived the HITH service as a ‘transfer of care’ rather than a genuine alternative to inpatient treatment – this view shifted only after extensive education and promotional work.⁷⁴

Workforce challenges

- **Community-care and specialist workforce shortages** – impact upon most models of care with particularly significant shortages identified for chronic disease management and monitoring, mental health and substance misuse management and end-of-life care. For example, Australia has approximately 50% of the required palliative medicine specialists it needs, with implications on the ability to develop flexible models (e.g., hub and spoke) for out-of-hospital care². Workforce shortages limit the uptake of out-of-hospital models in three ways: 1) limiting the number of providers available, particularly in regional and rural areas, 2) limiting the volume of services providers can deliver and 3) in some instances, limiting the availability of high-quality providers for payors to partner with.
- **Insufficient support for informal care** – at home care models can place pressure on informal care by spouses, children, parents and friends. There are currently significant wait times to access support through carer packages for home-based care, further exacerbating this challenge. Limited availability of timely support is primarily a barrier for home-based end-of-life care, but can have impacts across other models

Technology and operational challenges

- **Lack of integrated datasets** – lack of in-depth integrated health record data (particularly between primary care and private sector) makes the process of direct referral into both chronic-disease management models and acute care/single intervention difficult. Patient care is frequently fragmented at the point of discharge from an inpatient hospital service, due both to this lack of datasets and sometimes inadequate discharge documentation.
- **Lack of maturity of remote patient monitoring (RPM)** – limited evidence on the cost-effectiveness and outcomes associated with RPM in specific models of care is a barrier of adoption of more advanced RPM technology. Remote patient monitoring will likely have a role in supporting out-of-hospital care models, but its use will need to be carefully monitored to ensure it is supported by clinical evidence and proven to be cost-effective for specific models of care. The patient data collected by remote monitoring should be used for the right purpose, which is the clinical care of the patient, rather than for market research by the manufacturer.
- **Lack of operational maturity for short-stay surgical models** – in the specific case of short-stay surgery, hospitals have frequently not yet established physical infrastructure, clinical workflows and processes to support provision of short-stay surgery efficiently and at scale. This lag in the

⁷³ Towicz M. et al. "Hospital-in-the-home as a model for mental health care delivery: a narrative review," *Psychiatric Services*, 72(12):1415-27, June 2021.

⁷⁴ Ibid

development of operational processes is secondary to the lack of incentives within current funding systems to support this type of investment.

4.4 DEMAND CHALLENGES

Consumer demand is generally high for all models of care due to an ageing and growing population, and rising consumer expectations for flexible healthcare options in the aftermath of the COVID-19 pandemic. In fact, the other barriers outlined above make it more difficult for consumers to effectively exercise their choice in preferred location of care – were those barriers to be addressed, consumer experience in healthcare would improve.

Lack of education and reassurance for patients may be a barrier for consumer demand and uptake of short-stay surgical models. There is local evidence of hesitancy among patients about early discharge.^{75 76} However, studies have shown this can be largely offset by careful assessment of patients prior to program entry and ensuring appropriate supports are available for home-based recovery⁷⁷.

⁷⁵ McDonald C, et al. "Exploring patient acceptability of a short-stay care pathway in hospital post arthroplasty: A theory-informed qualitative study", Wiley Online Library, June 2022.

⁷⁶ Specht, et al." Patients' experiences during the first 12 weeks after discharge in fast-track hip and knee arthroplasty – a qualitative study", International Journal of Orthopaedic and Trauma Nursing, November 2018.

⁷⁷ McDonald C, et al. "Exploring patient acceptability of a short-stay care pathway in hospital post arthroplasty: A theory-informed qualitative study", Wiley Online Library, June 2022; Ibid.

5 Summary of reform options to increase uptake of out-of-hospital care

Funds have a meaningful role to play in driving innovation by appropriately incentivising and supporting the uptake of quality out-of-hospital care backed by clinical evidence. To this end, funds have already been taking several actions to enabling an increase in out-of-hospital care, and are committing to further support to advance these care models. It is estimated that ~20-30% of the system-level value available from out-of-hospital care could be captured through these actions, though the full impact will require further action from Government and other stakeholders in partnership with funds and providers.

The action funds are taking and will continue to take include 1) changes to funding models to better align the incentives of stakeholders to achieve a shift in site of care, 2) expanding access to out-of-hospital care models by increasing funding or provision of care in line with global levels, and 3) increasing consumer awareness and education for out-of-hospital models of care. Specifically:

- 1) **Changes to funding models to align incentives for a shift in site of care** - firstly, funds have a further opportunity to scale up financial incentives for clinicians who choose to adopt out-of-hospital care models, with such incentives linked to outcomes or expected levels of out-of-hospital activity based on international benchmarks. The full opportunity is, however, constrained by current regulation.

Secondly, funds have been reducing or removing gap payments for out-of-hospital programs to support consumer uptake. This is also helping reduce the out-of-pocket cost burden to patients, alongside helping patients save sometimes material ancillary costs associated with inpatient care (e.g., travel, missed work, carparking fees).

Thirdly, several funds have been moving away from per diem payment structures that directly incentivise increased LOS, particularly for mental health and rehabilitation admission types where it is more commonly used.

Finally, funds can move towards the use of outcome-based or “blended funding models” for OOH providers to improve quality of programs based on an efficient episode/best practice. Benchmarking data on risk-adjusted LOS by condition could help with this transition.

- 2) **Expanding access to out-of-hospital care models** - funds have been increasing commitments to fund or provide OOH care in line with international benchmarks where it is a genuine substitute for in-hospital care, and this is anticipated to continue. Additionally, funds can support expansion of cover for out-of-hospital programs by ensuring access across different tiers of cover, subject to regulatory requirements that standardise inclusions at different tiers.
- 3) **Increasing consumer awareness and education for out-of-hospital models of care** - funds could collaborate with OOH care providers and consumer groups to implement consumer awareness campaigns on availability and benefits of models of care. This could have a focus on ensuring consumers are aware of their eligibility for OOH models and how to access these, to better empower consumers to exercise choice and reduce out-of-pocket costs.

While these actions by individual funds are critical, they alone will not be sufficient to increase the uptake of out-of-hospital care at the scale or pace required to meet the needs of future demand on the private healthcare system. Clinical leadership is vital. Doctors currently cannot provide the best possible out of hospital care to their patients, so clinical pathways are not well developed. Yet these clinician-led pathways are vital to ensure that patients have access to the best quality care.

Action from other stakeholders, including government stakeholders and other agencies, will be needed to ensure the sector can capture ~70-80% of the potential system savings of ~\$1.3bn (rising to ~\$1.5bn by 2027). The proposed set of potential actions below seek to increase uptake of out-of-hospital care while maintaining the ability of individual funds and providers to improve quality of care through their normal market-based interactions. Further detail on the reform options is outlined in Section 6. To summarise, the actions can be grouped across 4 priorities:

- **Addressing misalignment of incentives in existing funding models** – increased uptake of out-of-hospital care requires alignment of incentives between providers, payors, clinicians and patients. Independent benchmarking of price for selected DRGs based on international benchmarks on uptake of out-of-hospital care, designed to provide an input into market-based negotiations, could help address structural challenges in the current system. In addition, the Federal Government could expand MBS items for out-of-hospital services to cover analogous services to inpatient care and enable non-specialist delivery of care (e.g., by GPs, nurse-practitioners).
- **Enabling growth of OOH care providers to improve consumer access at scale** – several actions are required to support growth of OOH care providers.

Currently, OOH care providers are constrained in offering their highest quality programs by regulation limiting prescribed practitioners for CDMPs. This list of prescribed practitioners should be removed, to broaden the pool of health professionals who can deliver programs for chronic care. Regulation could also be amended to enable PHI funding of outpatient care for GPs and specialists for select accredited out-of-hospital programs. This aligns with current Federal Government policy to ensure health workers are operating to the full scope of their clinical training.

Beyond these regulatory changes, a significant increase in training on skills required for out-of-hospital models is required, as well as development of strategies to increase the volume of the community care workforce. This could include training on required skills for out-of-hospital models being embedded into relevant pre-vocational, graduate and post-graduate educational programs for all relevant professionals. Finally, increasing access to supports for informal carers using out-of-hospital care models can help reduce the burden of caregiving, prevent caregiver burnout, and improve the quality of care that patients receive at home.

- **Enabling increased OOH uptake through the better use of data and technology** – uptake of out-of-hospital care at sufficient scale will require significantly increasing information sharing between funds, providers and referrers and increased uptake and maturity of remote patient monitoring. Options to achieve this could include adopting information sharing guidelines for communication between hospitals, primary care, specialists and PHIs to better identify eligible members for out-of-hospital care programs, and implementing a standard minimum dataset across providers to enable improved monitoring of outcomes of programs. There should also be an increased focus on building evidence for cost-effectiveness of remote patient monitoring technologies, to allow their integration into episodes of care in an effective way.

- Standardising quality and safety of OOH care models** – given the rapid scale-up of OOH providers that is required, implementing a standard set of accreditation processes and clinical guidelines is important to ensure a consistent level of high-quality care and patient safety. The Federal Government could drive implementation of a national standard regarding the accreditation requirements for OOH providers and standardise clinical guidelines for assessing patients' suitability for out-of-hospital care. This could include specific standards or guidelines for CDMP programs to enable increased referrals by GPs for their patients with private health insurance. These standards should not unnecessarily constrain the discretion of funds to innovate in funding or providing high-quality OOH care.

Additionally, benchmarking of the proportion of patients admitted to inpatient vs out-of-hospital programs for selected DRGs (e.g., inpatient joint replacement rehabilitation, inpatient mental health admissions) could be implemented at a hospital-level. This could serve to educate individual hospitals regarding best practice and enable OOH providers have more certainty around the expected levels of activity.

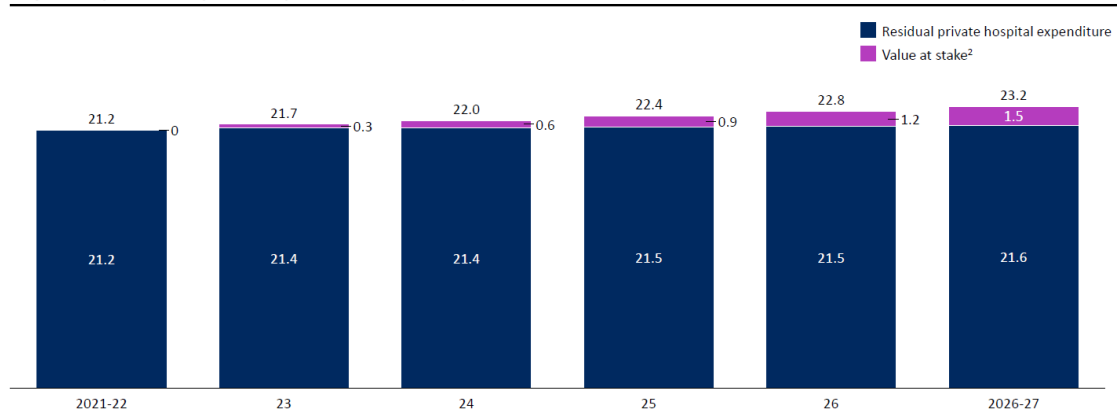
These actions would address many of the gaps in the current system by aligning incentives of various stakeholder groups while maintaining the benefits of a market-based system and increasing private sector capabilities to deliver out-of-hospital care at scale. From a consumer perspective, this means more incentive for clinicians to choose the most appropriate site of care for patients, reduced growth in private health insurance premiums, reduced out-of-pocket costs and ultimately greater access for inpatient care in the Australian healthcare system.

It is estimated that increased avoided admissions and the reduced costs of hospital substitution associated with out-of-hospital care could deliver over \$1.5bn of value (in today's terms, with value calculated in FY27) to PHI members. This would partly offset the \$2b expected growth in private health expenditure expected over the same timeframe driven by population growth and ageing.

EXHIBIT 8

From a system perspective, OOH care could offset part of expected growth in applicable private hospital expenditure if full value-at-stake is captured

Projected expenditure on private hospitals and value at stake, 2021-22 to 2026-27¹, \$ billions



1. Total expenditure on private hospitals estimated using AIHW-reported 2020-21 private hospital expenditure as a proportion of GDP, projected forward using RBA GDP growth rates. Applicable expenditure growth forecast assuming current rates of private health insurance uptake, on a per-capita separation growth basis. Projected separations estimated by applying 2021-22 separations per capita by age group for patients with hospital treatment cover to projected populations with hospital treatment cover by age group

2. Assumes phased implementation of reform and gradual increase in capture of value-at-stake over time

Source: Hospital Casemix Protocol annual report; Centre for Population, Population Statement 2021-22; APRA quarterly private health insurance membership coverage

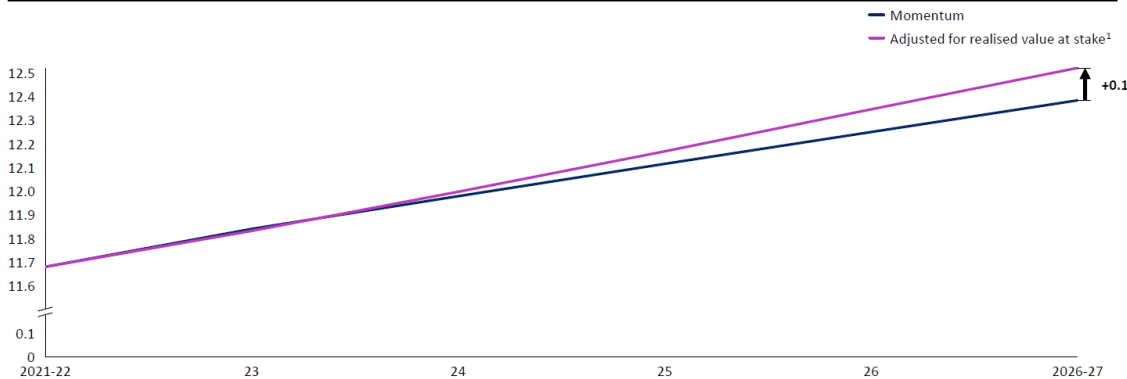
Without intervention, cost pressures on premiums driven by population growth and aging may reduce PHI participation rates by up to ~0.6% pts by 2026-27, relative to 2021-22, based on expected benefits growth and historical elasticity assumptions. Should the benefits of increased out-of-hospital care uptake be captured in their entirety as depicted and passed back to the consumer in the form of reduced premium increases, it is estimated that predicted PHI participation decreases by the start of the 2027 financial year could be offset by ~175,000 people, equivalent to a 0.6% of PHI participation⁷⁸

Assuming a similar age distribution to the current privately insured membership base, the shift of these participants from public hospitals to private hospitals could reduce costs to Government by ~\$240m in 2027, and by ~\$540m cumulatively over the next five years with a gradual ramp up aligning to the implementation plan⁸⁰.

EXHIBIT 9

Second order impacts: Realising value at stake may offset potential declines in PHI participation from ageing-driven outlay growth

PHI participation across momentum case and value at stake realised, 2021-22 to 2026-27, millions of persons



1. Linear realisation of value assumed from 2023-24 to 2026-27, to be further refined pending decision on preferred reform options
 2. As of 2021-22, 75+ year olds contribute to 0.6 separations per hospital treatment-insured person, compared to 0.2 separations for the broader hospital-insured population. Premiums may therefore rise in response to higher average cost outlays per hospital treatment-insured member
 3. Elasticity analysis based on historical impact on participation rate of premium growth relative wage growth. 2020-21 and 2021-22 data excluded in elasticity analysis due to one-off increases in participation induced by the COVID-19 pandemic
 Source: Hospital Casemix Protocol annual report; Centre for Population, Population Statement 2021-22; APRA quarterly private health insurance membership coverage

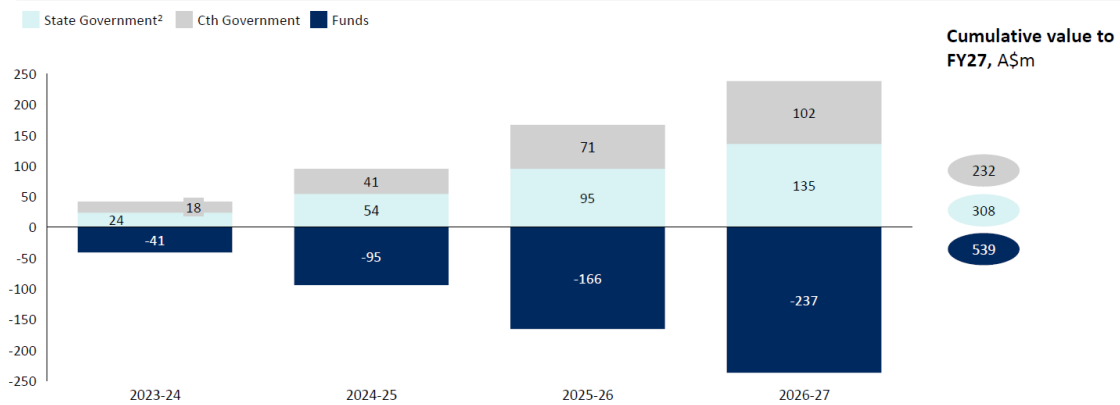
⁷⁸ The price elasticity of demand has been estimated using data from: Australian Government Department of Health. Average Annual Increases in Private Health Insurance Premiums. December 2019; and: Australian Regulation Prudential Authority. Private Health Insurance Membership and Coverage [Dataset]. June 2020. Further notes on modelling methodology are contained in the Appendix.

⁷⁹ Note that some savings would accrue directly to hospital providers, for example the use of step-down services where bundled payment models exist. In these circumstances, the savings passed directly to consumers may be lower. These savings would still represent avoidance of industry cost inflation, which could over time alleviate pressure on pricing and therefore have an indirect consumer impact.

⁸⁰ Cost savings have been using data from: Australian Government Department of Health. Hospital Casemix Protocol Annual Report 2018-19 [Dataset]. Further notes on modelling methodology are contained in the Appendix.

Third order impacts: 145k additional PHI members would transfer ~\$240m of costs from Government to private healthcare in FY27

Offset cost to Government for public hospital-based care¹, A\$m



1. Offset HT members calculated from historical elasticity assumptions against projected growth in private hospital cost. Elasticity analysis based on historical impact on participation rate of premium growth relative wage growth. 2020-21 and 2021-22 data excluded in elasticity analysis due to one-off increases in participation induced by the COVID-19 pandemic.

2. Ratio of savings between Commonwealth and State government estimated from current proportion of health expenditure on hospitals (AIHW, 2020-21)

Source: Hospital Casemix Protocol annual report; Centre for Population, Population Statement 2021-22; APRA quarterly private health insurance membership coverage; NHCCDC Public Hospitals Report;

The transition of care to high quality and safe out-of-hospital models would therefore have several benefits to a range of stakeholders:

- Consumers:** benefit through reduced private health insurance premiums, reduced out-of-pocket costs (including reduction in gap payments through gap cover schemes offered by funds, and reduced incidental costs such as travel and carparking), and increased empowerment. Consumers will increasingly be able to exercise their choice and preference for flexibility.
- Clinicians:** benefit through improved training, resourcing and support to deliver out-of-hospital models of care. Improved data sharing standards will also improve the quality and efficiency of care that can be delivered. Finally, release of funding constraints and provision of new funding models will increase the total pool of funding available for clinicians.
- Federal and State Governments:** as presented above, promoting sustainability of the private healthcare system by supporting provision of out-of-hospital care eases the burden on the public healthcare system, at an important time given significant fiscal and operational constraints.

From a provider lens, the proposed potential actions could also have a net positive impact. The current trajectory of the sector is unsustainable, and would not only impact the consumer perception of private healthcare in Australia (if premiums were to increase), but would push the operational constraints of many providers (in terms of physical infrastructure and workforce). Expansion of out-of-hospital care models will address these issues, create new value pools for growth that are less capital intensive and generate an environment that is conducive to innovation.

The following section contains further detail on the specific decision points that sit within the design of the proposed reform model.

The risk of imposing default benefits on out-of-hospital care

An alternative proposal for the funding of out-of-hospital care is to impose minimum default benefits for out-of-hospital care services. This would bear significant risk of being cost inflationary and of enabling low quality providers to access funding they would not otherwise receive.

Here, the current second-tier default benefit structure applicable to inpatient care presents a cautionary example. Second-tier default benefits in the inpatient setting provide patients receiving care in non-contracted hospitals default benefits for accommodation costs. This has created several system inefficiencies and poor incentive structures. Specifically, the current application of second-tier default benefits typically results in significant out-of-pocket costs for consumers (as hospitals that fall out of contract can charge consumers unregulated gaps in spite of receiving the benefits) and potentially low-value care. Hospitals are incentivised to invest in geographic areas and service lines where competition is already high, leaving areas of need under-invested. Default benefits also stifle innovation, constraining the action of market mechanisms that should promote out of hospital care.

Where default benefits have been extended in Australia, for example in rehabilitation, they have similarly led to inefficient low value care (e.g., the growth of rehab referrals in Australia's private sector well above the public sector and international benchmarks). This has an additive impact on costs for consumers and funds, without improving system outcomes.

Extending a similarly inefficient structure to out-of-hospital care could lead to:

- The addition of low quality services outside areas of need, further stifling the pace of innovation and limiting patient access
- Supply-induced demand for additive services, rather than genuine substitution and avoidance of hospital-based care, which would erode the identified system savings and consumer benefits
- Future cost inflation which will flow on to premiums, particularly as providers engaging in such low value services face competition for workforce from the aged care and disability care sectors, and will likely push for growth in funding levels as a result
- Enabling of lower quality care: as without explicit contractual arrangements there are fewer formal and informal protections on the consistency and quality of services provided in home-based settings

Finally, as out-of-hospital care is not a uniform category of services, but rather includes many different models that should be reimbursed appropriately, a single mandated payment is not an appropriate mechanism for funding of such care. Application of such uncapped arrangements will not be sustainable and will not lead to high quality care.

A more nuanced structure which enables funds to enable innovation while removing barriers to expanding out-of-hospital care, as outlined, would be a more effective strategy.

6 Detail of reform options to increase uptake of out-of-hospital care

As previously noted, funds have a significant role to play in pursuing actions which can increase consumer understanding of and access to out-of-hospital programs and better align the incentives of stakeholders to facilitate a shift in site of care. However, funds' actions alone are unlikely to be sufficient to increase uptake of out-of-hospital programs at the pace and scale required. The set of potential actions presented below represent the activities that funds can lead, as well as proposed activities that the Federal Government and other agencies could pursue to enable the capture of full system savings.

6.1 FUNDS CAN CONTINUE TO EXPAND STRATEGIES THAT INCENTIVISE A SHIFT TO OUT-OF-HOSPITAL CARE

1. Changes to funding models to align incentives for a shift in site of care

- **Offering financial incentives for clinicians working in or referring to out-of-hospital care models** – incentivising clinicians through gap cover schemes or block payments can help support clinicians with the costs of transitioning site of care, including required updates to practice management, associated retraining and changes to ways of working. Individual funds will determine the structure and extent of incentives offered, but mechanisms should be outcome-based where possible, and implemented in line with evidence-based practices.
- **Reducing or removing gap payments for out-of-hospital programs to incentivise consumer uptake** – reducing gap payments for out-of-hospital care can act to make programs more affordable and attractive to patients. This approach has already been employed for several out-of-hospital programs in Australia, including short-surgery programs.⁸¹ PHA will play a role in advocating for funds to reduce gap payments where possible to ensure patients are able to access OOH programs.
- **Moving away from per diem payment structures that directly incentivise increased LOS** – per diem payment structures typically have fewer incentives for cost-containment and may act to incentivise increased length of stay in the “bricks and mortar” setting, particularly for mental health and rehabilitation admissions where they are most commonly still used.⁸² Funds have already mostly moved away from per diem payment structures for acute care and PHA will advocate for funds to move away from per diem structures that incentivise length of stay to an episodic or bundled payment structure where possible, particularly for mental health and rehabilitation admission types.
- **Moving towards the use of outcome-based or “blended funding models” for OOH providers to improve quality of programs** – a shift in payment mechanisms to paying providers based on quality of care and outcomes, regardless of volume of services provided, means that payors and providers would have aligned incentives for improved clinical outcomes. This should ideally occur via a single bundled payment made to a lead provider. Such a shift would align with suggested change in payment of primary care as outlined in the

⁸¹ KPMG. Medibank facilitates a sustainable healthcare system. July 2022.

⁸² Pott, et al. Do discontinuities in marginal reimbursement affect inpatient psychiatric care in Germany? *The European Journal of Health Economics*. 2020

Strengthening Medicare Taskforce report and could, over time, improve the quality of out-of-hospital programs and build clinician confidence. Similar models have been particularly successful when implemented for patients with chronic conditions. For example, in the UK, 97.5% of primary care practices provide structured CDM based on the Quality and Outcomes Framework (QOF) which rewards practices based on clinical care and public health quality indicators.⁸³ This has been found to improve the quality of care for selected conditions, reduce emergency department admissions and reduce inequalities in care delivery.⁸⁴

2. Expand access to out-of-hospital care models

- **Committing to funding or provision of more OOH care in line with international levels** – Funds can increase transparency for providers planning to expand OOH care by indicating where there will be available funding for provision of a wider range of OOH care at scale, in line with global standards, where feasible. By offering this transparency, health funds will demonstrate their dedication to improving access to quality healthcare for patients in line with their preferences. This should ensure that what is funded is genuinely substitutive to in-patient care and not additive to the private health system.

This approach could be enabled by the development of a standard offer or expression of interest for funding specific out-of-hospital services, which is communicated to out-of-hospital providers to signal where increased supply is needed. Where the ability to offer services is likely to be impacted by geographical location, as well as the local provider market, funds can highlight this to both patients and other stakeholders to incentivise action.

- **Supporting expansion of cover** – Funds can play a crucial role in improving consumer access to at-home models by ensuring out-of-hospital care is available at different tiers of cover. For example, Palliative Care Australia has noted that while there has been good progress by private health insurers in piloting at home end-of-life models, there could be a move towards making sure these are available at all levels of cover to ensure equitable access.⁸⁵

3. Increase consumer awareness and education for out-of-hospital models of care

- **Implementing consumer awareness campaign on availability and benefits of models of care** - Funds and OOH care providers have begun to collaborate to build a campaign that raises awareness of the availability and benefits of models of care. These campaigns will continue to be more broadly adopted as offerings increase and may involve online, print or social media advertising through PHIs, healthcare providers or healthcare organisations. For example, multiple funds disseminate information to their members on the availability of OOH programs and the choice of providers available to them. This could be done in parallel to or as an input for government consumer awareness initiatives, such as *Medical Costs Finder*, to provide information on the geographies or funds that offer OOH services.⁸⁶ Overall, a consumer awareness program will promote the benefits of OOH care, encourage patients to seek these services and ultimately drive uptake of OOH models of care.

⁸³ NHS 75 Digital, Quality and Outcomes Framework

⁸⁴ Roland M, Guthrie B. Quality and Outcomes Framework: what have we learnt? *BMJ* 2016 354: j4060 doi:10.1136/bmj.i4060

⁸⁵ Palliative Care Australia. Media release. 2019

⁸⁶ Australian Department of Health and Aged Care. Medical Costs Finder. Accessed Feb 2023

- **Implementing consumer education campaign around eligibility and accessibility for OOH models** – Funds and providers are increasingly collaborating to develop consumer education campaigns around eligibility and access for out of hospital (OOH) care models to improve patient understanding of their eligibility for OOH services. Future campaigns could focus on reaching a broad audience, including patients, caregivers, private hospitals and healthcare providers, to ensure wide access to accurate information about OOH care. In terms of accessing OOH care, the campaign could provide clear and concise instructions on how patients can access these services for private hospitals, clinicians and patients. Funds could also address any potential barriers to access, such as lack of internet access or technology skills and develop these in consultations with relevant consumer groups, for example Health Consumer Organisations (HCOs).

Out-of-hospital care providers and private hospitals can be partners in these activities and jointly capture the opportunity that out-of-hospital care offers. Funds can engage these stakeholders by forming constructive bilateral relationships. This might involve engaging with providers and private hospitals that have certain characteristics which could be beneficial to new models of care and enable disruption of the current system (e.g. day hospitals). Inpatient hospitals do not necessarily need to be involved with providing services directly, but do need to enable seamless transition into out-of-hospital care services where needed to help support patient outcomes

6.2 ADDRESS THE MISALIGNMENT OF INCENTIVES IN EXISTING FUNDING MODELS

Increased uptake of out of hospital care requires alignment of incentives between providers, payors, clinicians and patients. Government intervention is needed because the current second-tier default benefits system for inpatient care means inefficient practices are supported, including maintaining patients in hospital when care could be shifted to out-of-hospital programs. As previously discussed, while funds are required to pay second-tier default benefits for non-contracted hospitals, innovation is stifled and the market mechanisms that should promote out of hospital care are impeded. This means that cost-weights do not move easily, even when there is good evidence that care can be delivered more efficiently at a different site of care.

The following reforms seek to provide guidance for funding from an independent body while maintaining the ability of individual funds and providers to improve quality of care through their normal market-based interactions.

- **Implement Independent Health and Aged Care Pricing Authority (IHACPA)-led benchmarking of price for selected surgical DRGs based on international ALOS benchmarks** – it is proposed that a dynamic price benchmarking model be administered by the Independent Health and Aged Care Pricing Authority (IHPACA) to act as a catalyst for more rapid shifts in cost-weight for selected surgical DRGs where there is well-established evidence of short stay models.

This benchmark could estimate the price for selected surgical DRGs based on the expected proportion of care that could be completed via a short-stay program. The proposed benchmark could enable reimbursement of both short-stay and non-short-stay surgical admissions at parity, at least in the short-term, as is currently the practice for hospital-substitute treatment by Medicare and a number of private health insurers. It would require routine collection of accurate and reliable cost data using a consistent cost allocation methodology.

Provision of such benchmarking as an input into hospital contracting could help enable providers offering short-stay programs to capture savings from efficiencies in care provision driven by a lower length of stay, while increasing competitive tension for providers not offering such programs. In addition, a lower cost-weight for inpatient admissions would disincentivise hospitals retaining patients beyond the expected percentage of activity. Separate processes could be implemented for outlier patients (e.g., complex with multiple morbidities).

Adjusting the cost-weight of selected DRGs to reflect the expected proportion of activity that could be done with a shorter length of stay has been effective in decreasing length of stay in other regions. For example, the British Association of Day Surgery (BADs) guidelines which outline the expected proportion of activity for selected surgical procedures that should be managed as a day case versus 2 days versus 3 days was used to adjust the cost-weight for those surgical admissions, meaning that hospitals were paid the same regardless of LOS. This resulted in rapid capability building of centres to manage lower lengths of stay and significant changes in the way these conditions were managed.⁸⁷

A benchmarking approach would balance retaining free-market conditions in negotiations between funds and providers, while setting an industry standard that better reflects the reality of evidence and global practice and can act to drive down cost-weights faster than free market alone. For example, applying a price benchmark for ten selected surgical DRGs where there is significant evidence for application of short-stay models could account for 50% of the overall system savings for short-stay surgical models and 25% of overall system savings.

- **Implement IHACPA-led benchmarking of price or trim points for selected conditions based on the expected proportion of OOH care** – a similar benchmarking approach could be used to provide guidance on price or trim points for selected non-surgical conditions (e.g., cellulitis, chemotherapy, orthopaedic rehabilitation) based on the expected proportion of activity that could potentially be done in an out-of-hospital setting. Benchmarking would enable private hospitals to better understand how they perform relative to local and international benchmarks to improve operational pathways and out-of-hospital capabilities. It would also enable OOH providers to have more certainty around expected levels of activity and could potentially be used to limit cost of low-value inpatient care by enabling funds to implement caps for higher-than-expected inpatient activity.
- **Expand outpatient palliative care MBS items to cover the same services as inpatient and enable non-specialist delivery of care (e.g., by GPs, nurse-practitioners)** - MBS items could be reviewed and expanded to cover the same services as inpatient care and enable non-specialist delivery of care (e.g., by GPs, nurse-practitioners). Currently, only professional attendances and case conferences are subsidised by Medicare for use in out-of-hospital palliative care models.⁸⁸ This could be expanded to ensure that specialists can be remunerated at a comparable rate to in hospital treatment to ensure there are not perverse

⁸⁷ British Association of Day Surgery. BADs Directory of Procedures and National Dataset. 2020.

⁸⁸ AIHW. Palliative care services in Australia. 2022

incentives for admission to a “bricks and mortar” hospital as opposed to out-of-hospital models.

These funding reform options could act to increase transparency around expected pricing for DRGs where out-of-hospital models are well-established. In doing so, they could act to provide guidance for providers as to the expected benefits they could receive for out-of-hospital services.

As outlined previously, and in contrast to these proposed actions, applying the existing minimum default benefits and second tier default benefits scheme to out of hospital care would both extend the problems with the existing minimum benefits regime – geographically maldistributed services, low value care provision and stifled innovation – but also introduce serious quality control and transparency issues. Hospital accreditation and the presence of other staff and patients in hospital provide both formal and informal controls on low quality care, protect patients and help ensure safe and effective services are provided. Home-based care has fewer natural protections of this kind, and thus clear contractual arrangements are necessary to ensure services paid for are provided at a suitable quality. The experience of the National Disability Insurance Scheme provides a cautionary example where minimum benefits with a lack of transparency can result in poor quality care and, in some cases, fraud.

6.3 ENABLING GROWTH OF OOH CARE PROVIDERS

It is proposed that training for the skills required for out-of-hospital models is expanded and strategies to increase the volume of the community care workforce are increased.

- **Amend regulation around prescribed practitioners for CDMPs to broaden pool of health professionals can deliver programs** – The list of prescribed practitioners for CDMPs should be removed, to allow for services to be provided by others, such as practice nurses, mental health nurses, social workers, and peer support workers. This will enable an increased number and range of programs to be funded by PHI and more flexible care, particularly for people living with chronic diseases and mental health conditions. It could also then serve as an enabler for more innovative multidisciplinary care models being incorporated within CDMPs.
- **Amend regulation to allow for funding of outpatient care, to enable PHI funding of GPs and specialists to provide select accredited out-of-hospital programs** – There is also an option to amend regulation to allow PHI to fund general practitioners and specialists in order to facilitate provision of selected out-of-hospital programs as a part of hospital avoidance and substitution programs. For chronic disease management, this would allow funds to pay general practices and/or general practitioners for services provided as part of a CDMP. This would not be duplicative with government funding of primary care as Medicare benefits are not payable for CDMP. Other specialists could be reimbursed for their services in managing conditions in a way that avoids hospitalisation or enables short-stay surgery (e.g., for additional pre-op appointments needed in preparation for short-stay surgery) – currently there is a lack of clarity on when such services can be funded. This should only cover targeted out-of-hospital services and should ensure adequate anti-inflationary mechanisms are in place to avoid unsustainable increases in benefit outlays.
- **Improved training for out-of-hospital care** – The government could prioritise workforce strategies aimed at growing and upskilling the community care workforce across all models of

care. While Australia has several healthcare workforce strategies, there needs to be a larger focus on providing more training on OOH care skills. This can include training on skills for transitioning between hospital and home care, or how to use at home technologies such as telehealth and remote patient monitoring. To do this, the government could consider liaising with educational institutions (e.g., VET providers, TAFE, universities), relevant professional bodies (e.g., the Australian College of Nurse Practitioners) and specialist colleges (e.g., the Royal Australasian College of Surgeons) to ensure these skills are embedded into vocational training, degrees or postgraduate certificates. This will ensure a larger and more flexible workforce that can adapt to working in OOH care, in both the public and private sectors.

For example, the National Medical Workforce Strategy 2021-2031 advocates for building the generalist capability of the medical workforce, and part of this skill building could include compulsory placements using OOH care models. Similarly, the government can carve out a specific focus for OOH care training in the National Mental Health Workforce 10-year Strategy, or in a national allied health workforce strategy.⁸⁹ Current initiatives like the Home Care Workforce Support Program can also be expanded to fund more organisations that support home care providers to attract, train and retain workers. A strategic plan to increase and train the community care workforce that supports OOH care will drive uptake of models of care.

- **Provide training for clinicians to learn new techniques to enable short-stay surgery** – The Federal Government could work closely with relevant Colleges to provide training for clinicians to enable short-stay surgery, which will support uptake in peri-operative management services at home. Developing training for short-stay surgical models will aid clinicians in their decision making and streamline the referral pathways for patients using at home care following surgery. Training the surgical workforce on techniques that are proven to enable short-stay surgery and decrease length of stay will also lead to increased uptake in peri-operative management models of care at home.
- **Increase access to supports for informal carers using out-of-hospital care models** – The Federal Government could prioritise access to supports for informal carers to support patients and families and make OOH care uptake more feasible. Access to supports may include respite care, peer support programs, counselling services, and training on how to provide care for patients with complex medical needs. By providing these supports, the government can help reduce the burden of caregiving, prevent caregiver burnout, and improve the quality of care that patients receive. The fragmented nature of the carer support system can be complex for time-poor carers to determine where they need to go for the support required to sustain their caring role. Streamlining access to supports will lower the administrative burden and make it easier for carers to look after patients at home using out-of-hospital care models.

6.4 IMPROVE DATA-SHARING AND USE OF TECHNOLOGY

Uptake of out-of-hospital at sufficient scale will require significantly increasing information sharing between funds, providers and referrers and increased maturity of remote patient monitoring

⁸⁹ Australian Government Department of Health and Aged Care. National Mental Health Workforce Strategy Taskforce.

- **Implement information sharing channels and guidelines for increased communication between primary care, specialists and PHIs** – channels are needed which promote a seamless and secure flow of information between healthcare providers and private health insurers to enhance delivery of OOH care. Such channels could leverage existing health information mechanisms, for example *My Health Record*, or be up to the discretion of individual funds. The data collection could be supported with policies that govern data sharing and ensure that legal requirements are met to ensure patient privacy and security. For example, information sharing should always have informed patient consent, meet minimum privacy standards, and be ethically used in a way that maintains community-rated private health insurance.

The current National Digital Health Strategy emphasises the interoperability of clinical data as essential to sustainable healthcare.⁹⁰ When providers and funds can access the same information about a patient’s health status and treatment plan, particularly upon discharge from an inpatient service, there is better coordination of care and data-driven decision making for both parties to make informed decisions about which types of OOH care are most effective and cost-efficient for patients. This can lead to better utilisation of resources, improved patient outcomes and better and higher allocation of at home care.

- **Implement minimum data collection guidelines for providers of OOH care** – The Department of Health and Aged Care can establish and mandate a standardised minimum data set for hospital substitution services, to provide transparency on OOH provider quality and outcomes to drive uptake of these providers. This will require funds to align on the required data from providers to ensure consistency of data collection. For example, under the *Private Health Insurance Act 2007*, all hospitals must submit Hospital Casemix Protocol (HCP) data to health insurers.⁹¹ Establishing a minimum data set will make data collection easier for providers who work across multiple funds and overcome supply challenges associated with a lack of integrated datasets in Australia. Support, in the form of grants to establish data reporting mechanisms, could be provided to smaller providers who may need administrative support to capture and provide the required data.
- **Make increasing uptake and maturity of remote patient monitoring a government priority** – Remote Patient Monitoring (RPM) should be a priority in the National Digital Health Strategy and Framework for Action (NDH Strategy) in order to bolster investment in technologies that support OOH care uptake. While the NDH Strategy refers to the importance of improving access to healthcare through telehealth, there is no explicit focus or implementation plan in relation to RPM in the Strategy itself or Framework for Action. Implementing a specific plan for boosting RPM research and investment will improve technological gaps that may limit the use of OOH care and improve the maturity of RPM in Australia. This may need to be developed in consultation with the Therapeutic Goods Administration which regulates software based medical devices. In particular, the use of RPM during the COVID-19 pandemic underwent a crisis induced expansion for use beyond chronic disease management for use in acute disease monitoring, with high level

⁹⁰ Australian Digital Health Agency. What are the next steps to continue advancing the interoperability agenda? November 2017.

⁹¹ Australian Government Department of Health. Hospital Casemix Protocol. December 2022.

of engagement and positive reception among healthcare workers and patients.⁹² It will be important to build on this foundation and test the cost-effectiveness of including different technologies within a bundle of care delivered outside the hospital. This will be particularly relevant for increasing uptake in models of care that use RPM technologies such as in chronic disease management and monitoring, and acute care/single intervention.

6.5 STANDARDISE QUALITY AND SAFETY OF OOH CARE MODELS

Given the rapid scale-up of OOH providers that is required, implementing a standard set of accreditation processes and clinical guidelines is critical to ensuring a consistent level of high-quality care and patient safety. The following set of reform options could support this:

- **Standardise clinical guidelines for assessment of suitability for out-of-hospital care** – the private health insurance industry and Federal Government could work with clinical groups to standardise clinical guidelines for risk-stratification and patient selection for out-of-hospital care models. This would improve clinician confidence, streamline referral pathways and ensure appropriate use of at-home models. These guidelines could leverage existing evidence-based standards where possible. For example, public sector state-based Hospital in the Home guidelines and Enhanced Recovery After Surgery (ERAS) guidelines could be leveraged for step down/rehab and perioperative models of care. Greater use of these guidelines has been shown to be associated with incrementally approved complication rates and reduced length of stay during the primary admission.⁹³ For other models of care where standardised guidelines currently don't exist (e.g for mental health hospital in the home), these could be developed by working closely with relevant clinical groups and up-to-date evidence base.
- **Implement standard requirements for the accreditation of providers** – The Federal Government could support establishment of national accreditation standards for out-of-hospital care through the Australian Commission on Safety and Quality in Healthcare. This would reduce state-based variation in OOH providers who receive provider numbers, and increase the volume of high-quality OOH care providers, which will improve clinician confidence and uptake of OOH care. While providers may currently comply with state-based standards or their own industry standards, they may not operate under the same national quality standards, clinical governance, and oversight standards as hospital-based services. Implementing national standards, potentially as a part of the National Safety and Quality Health Service Standards (NSQHS) would also bring OOH care in line with the Improved Models of Care Committee's recent recognition of the importance of a common framework in both hospital and non-hospital services for mental health and rehabilitation models of care.

The cost and administrative process of this accreditation scheme should be carefully monitored to ensure it is not prohibitive to small providers or new providers who are attempting to enter the market. If needed, grants should be available for smaller providers to help meet the accreditation requirements. These standards should also be tailored to take into account the differences in clinical requirements between different models of out-of-hospital care. For

⁹² Aalam A. et al. "Remote patient monitoring for ED discharges in the COVID-19 pandemic," *Emergency Medical Journal*, 38:229-231, 2021.

⁹³ Memtsoudis S. et al. "Enhanced recovery after surgery components and perioperative outcomes: a nationwide observational study," *British Journal of Anesthesia*, 124(5):638-647, March 2020.

example, services for acute care are likely to require different accreditation standards compared to rehabilitation services or chronic disease management programs and this should be reflected in the level of accreditation required. Standards should also be focused on core drivers of safety and quality, but not unnecessarily stifle innovation from new entrants.

- **Establish guidelines for CDMP programs that could be referred into by GPs** – specific standards could be established for CDMP programs to be provided by or referred into by GPs. These standards could be used to guide programs delivered by providers or funds based on evidence-based practice. Funds could use adherence to the standards as a recruiting tool for doctors to refer patients into programs, while GPs could use it as a trusted source of information to aid their decision-making in effective management of chronic diseases. In addition, governments could allow GPs to be funded by PHI for providing endorsed programs.
- **Implement Australian Commission on Safety and Quality in Health Care (ACSQHC)-led benchmarking at a hospital level for proportion of patients admitted in inpatient vs out-of-hospital programs for selected DRGs** – it is proposed that the Australian Commission for Safety and Quality in Healthcare implements benchmarking on the proportion of patients admitted into inpatient programs, vs out-of-hospital programs, for selected DRGs where there is substantial evidence for out-of-hospital models. This benchmarking could initially focus on selected DRGs where there is emerging evidence for low-value inpatient care, including inpatient rehabilitation for elective joint surgery, inpatient mental health admissions and inpatient drug and alcohol detox and rehabilitation programs. As discussed previously, the rate of inpatient rehabilitation for elective joint surgery rehabilitation is on average 40% for private hospitals in Australia, compared to 17% in the Australian public system and approximately 10% in the US and Canada.⁹⁴ Benchmarking would enable private hospitals to better understand how they perform relative to local and international benchmarks to improve operational pathways and out-of-hospital capabilities. It would also enable OOH providers to have more certainty around the expected levels of activity in Australia and could potentially be used to limit cost of low-value inpatient care by enabling funds to implement caps for higher-than-expected inpatient activity.

⁹⁴ Schilling et al. "Predictors of inpatient rehabilitation after total knee replacement: an analysis of private hospital claims data. Med J Aust. 2018

7 Potential path forward

As noted previously, funds have been taking action to promote out-of-hospital care services and will continue to do so. PHA will support the ongoing scaling of these efforts to enable the shift to out-of-hospital care. Actions by the funds individually within current system structures, however, can only achieve part of the total possible impact available.

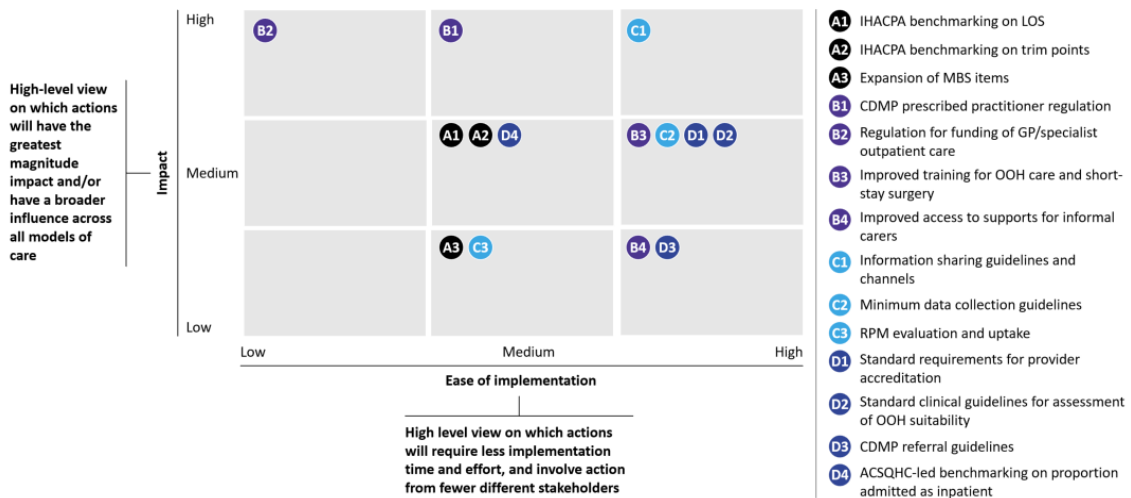
Given the fragmentation of stakeholders and dispersed responsibilities in the out-of-hospital care sector, there is currently no single body that well-placed or has a mandate to drive material change. Given this, it is proposed that a Modernising Models of Care Cooperative Research Centre (CRC) be established. This would be a collaborative research initiative between industry and leading research institutions.

The CRC would seek to consolidate an up-to-date evidence base to support increased uptake of OOH care, including the latest research on the effectiveness and optimal delivery of different models of care. This could then be used as an input into IHACPA benchmarking and guidelines, as well as being disseminated widely to ensure that healthcare providers access the latest research.

The CRC model has proven effective in other domains. For example, in 2022, the Care Economy CRC was approved to develop product and service innovation in the care sector (including in early education and care, aged care, disability services, health care, family services and social housing) to improve care quality, productivity and end-user experience. The establishment of a CRC dedicated to the benefits of OOH care would help build confidence in these models, provide input to Federal Government reform actions, and promote uptake amongst clinicians, providers and patients.

While the CRC is being established and commencing its activity, delivery of the following key priorities should begin in parallel. It is anticipated that the timeline of these priorities will balance the need to disrupt traditional models and deliver value to patients rapidly, and the need to manage a sustainable transition to new standards of quality, technology and funding models. As such, activities may be prioritised based on their ease of implementation and potential impact – a high-level assessment of each action along these dimensions is presented below.

Several actions will have medium-to-high impact, and in some cases may be relatively feasible to implement



Further detail on each component of the key activities follows in the remainder of this section.

7.1 KEY ACTIVITIES

Addressing misalignment of incentives in funding models

As previously outlined, funds will have a significant role to play in promoting outcome-based or blended funding models, moving away from per-diem structures that incentivise length-of-stay, and offering appropriate incentives for increased provision of out-of-hospital care, including expansion of ‘no gap’ schemes for such models of care.

In parallel, IHACPA could lead price benchmarking efforts given to its current role in determining funding for the Australian public health system. This process may take ~1-2 years, with further time for uptake as existing contracts need to be completed before implementation of new funding arrangements.

Additionally, The Department of Health as the manager of the Medicare Benefits Schedule could facilitate greater access to out-of-hospital care models by preparing an application for the introduction of MBS items to cover equivalent out-of-hospital services to inpatient care and enable non-specialist delivery of care.

Enabling growth of OOH care providers

Funds’ actions will help develop conducive market conditions and transparency to OOH care providers. Further action from other stakeholders will also be needed to ensure market conditions support OOH care providers, and to ensure there is sufficient workforce to improve consumer access.

It is anticipated there are two key phases of implementation required to achieve this:

- 1. Immediate regulatory changes:** it will be important to remove restrictions around practitioners for CDMPs, and amending regulations to allow PHI funding outpatient care, such as specialists and general practitioners who are directly involved in out-of-hospital programs. This will involve developing an amendment bill to the *Private Health Insurance Act 2007*. Legislating this change and implementing changes could take 1-2 years.
- 2. Increase pipeline of OOH care providers:** The CRC could liaise with colleges and academic institutions to identify gaps in OOH care training across relevant certificates, programs and degrees. Working with the institutions, new OOH training programs need to be developed and accredited. Relevant staff need to be trained to teach new OOH training and these materials need to be integrated across programs. To supplement this, current workforce strategies and informal carer support programs could be reviewed and revised. Ensuring an increase of OOH care provider pipeline via increasing training and volume is estimated to take between 2-3 years.

Enabling OOH use through data and technology

Data and technology are crucial to facilitating the implementation of out-of-hospital care by improving coordination and communication between patients, clinicians, providers and funds. The CRC could support implementation of information sharing channels, minimum data collection guidelines and uptake of RPM in Australia.

It is anticipated there are three key objectives that can enable OOH use through data and technology:

- 1. Implement information sharing channel guidelines:** This is likely to include consultation with relevant stakeholders (e.g., inpatient hospital providers, primary care providers, funds), drafting of initial guidelines for public consultation and publication of final guidelines with phased implementation. This process is expected to take 1 year.
- 2. Implement minimum data set:** This is likely to include consultation with relevant stakeholders including PHI and OOH providers to develop a minimum data set, development and implementation of guidelines, this process is expected to take 1-2 years.
- 3. Integrate Remote Patient Monitoring into National Digital Health Strategy:** Existing National Digital Health Strategy team to review and integrate RPM as a focus in the Framework for Action, focusing on supporting RPM where there is good clinical evidence for cost-effectiveness and safety. As this is currently under development, this process is expected to take 1-3 months in FY2024. From there, RPM could be one component of bundled care models for out-of-hospital care.

Standardising quality and safety of OOH care models

Standard quality and safety of OOH care models is required to ensure that OOH care providers are accredited and deliver high quality of care. Completing standardisation will likely require input from The Australian Commission on Safety and Quality in Health Care. It is critical that working groups are clinician-led, with a focus on performing an accelerated gap analysis and developing OOH care

standards and guidelines. This process for accreditation standardisation and prioritised guidelines is expected to take ~1 years. This would likely include consulting with relevant stakeholders, including OOH providers and the Australian Council for Healthcare Standards (ACHS), developing and publishing priority standards or guidelines, and implementing these with a transition period. It is anticipated that the focus could then shift towards identifying other clinical guideline gaps, developing and publishing these while engaging key stakeholders for implementation.

7.2 RISKS FOR CONSIDERATION

Several risks associated with the potential reform options merit acknowledgement and response.

Two primary categories of risk have been considered, and outlined in the tables below:

- Implementation risk: Risk relating to the ability to implement proposed reform in a timely and cost-effective manner.
- Post-implementation risk: Risk relating to potential stakeholder and industry consequences of proposed reform.

These risks are summarised in the below tables by reform priority.

Table 1: Implementation risks

Type	Risk	Mitigations
Price benchmark relevance	Low fund use of benchmark prices in hospital contract negotiations due to infrequency of benchmarking, or variables that drive cost variation across hospitals	Implement annual, quartile-based benchmarking with sufficient granularity, unless doing so would risk identifiable data
Provider accreditation	Provider accreditation requirements and clinical guidelines quickly become obsolete due to pace of innovation in clinical best practices and technologies, or are prohibitively expensive for smaller providers	Implement tiered accreditation fee structures, or phased accreditation requirement timelines, to support initial OOH care supplier ecosystem development Develop accreditation pathways and standards of practice in OOH care
Informal carer capabilities and capacity	Low uptake of home-based OOH care by patients, due to safety concerns of informal carers using medical equipment or capability/capacity to provide adequate support	Implement carer information campaigns on OOH care, and access to health professionals to seek advice (e.g., via allied health or primary care providers)

Table 2: Post-implementation risks

Category	Risk	Mitigations
Low value care	Growth in low value OOH care/ over reliance where care is not required, or where inpatient care is most appropriate, driving readmissions and suboptimal patient outcomes	<p>Leverage two-part funding – upside value share based on outcomes with material readmission penalties</p> <p>Implement clinical guidelines and standards aligned to global best practice to determine suitability for OOH care</p> <p>Publish provider quality rankings based on minimum dataset data and patient outcomes</p>
	Promotion of inefficient practices by implementation of minimum default benefits for out-of-hospital care	Implement full suite of reforms as described to give OOH providers certainty around expected price and levels of activity while promoting high-quality care
	Inpatient hospitals offer OOH care services as additive services to claim OOH care funding, without reducing inpatient LOS	<p>Implement IHACPA-led benchmarking of price for selected surgical DRGs based on international ALOS benchmarks</p> <p>Implement IHACPA-led benchmarking of price or trim points for selected conditions based on the expected proportion of OOH care</p>
	Price gouging by OOH care providers, leveraging no-gap funding arrangements from PHIs, or care setting/ patient outcome reporting falsification	<p>As above</p> <p>Establish data control and governance standards (e.g., standardised data, periodic unplanned site audits)</p>
Provider training uptake	Lack of training uptake by community care workforce due to constraints on capacity/ feasibility of leaving practices, particularly for those in regional and remote areas	<p>Embed OOH care training as a continuing professional development (CPD) requirement</p> <p>Offer virtual training options and in-person sessions in regional/ remote areas</p> <p>Fund locums to support backfilling of practices in regional and remote areas</p>
Clinician support for new models of care	Low clinician support for short-stay models of care and RPM due to preconceptions on efficacy of OOH models and bias towards inpatient care	Conduct clinician marketing campaigns focused on the value of OOH care for patient choice and outcomes

Conduct a targeted drive to build evidence-based for clinically effective and cost-effective use of RPM

Implement OOH care accreditation standards to reward and build trust in high quality providers

Patient selection bias	Outcome-based funding models encourage patient selection bias to prevent readmission penalties	Explore risk-adjustment approaches to funding
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Despite its risks, there are no foreseeable options where retention of status quo is the optimal choice – risks of inaction outweigh the risks of broader OOH care implementation. As examples, in a strained private health operating landscape, the following scenarios could easily occur without industry and regulatory reform:

- **Continued cost inflation in the private health system** spurred by population growth and aging, placing higher cost burden on health insurance members and pressure to increase premiums, in turn raising questions of affordability.
- **Exacerbation of challenges in health system access, equity, and experience** with projected growth in demand for care mismatched with supply in health professional workforce and OOH care providers, driving extended waitlists. This is already occurring in ageing demographic hotspots like south-east Queensland.
- **Proliferation of low/ inconsistent quality providers in both inpatient and OOH care**, leveraging a lack of transparency and accountability on provider quality and continued availability of funding through second-tier default benefits for inpatient care.
- **Extended influence on care delivery by emerging players** incentivised by parallel or competing priorities (e.g., profitability at the expense of sustainable, high-quality care). We have already seen this occur in the telehealth market in some treatment areas like weight loss.

8 Conclusion

Out-of-hospital (OOH) care presents a significant opportunity to unlock value for patients and the health system more broadly by offering the choice of flexible care and pressures in the inpatient system. However, its uptake in Australia is hampered by a system that incentivises outdated models of care. This system results in inflated costs being passed to patients and taxpayers, a reduction in consumer choice, and offers little consideration of long-term clinical outcomes.

Funds are already beginning to take several actions to enable an increase in out-of-hospital care. These actions could support the capture of part of the estimated health system savings if they were continued to be adopted more widely. More structural changes, however, are needed to capture the full potential. These changes could be enabled by government stakeholders and other agencies. The proposed actions involve addressing the misalignment of incentives in existing funding models, enabling growth of a sufficient pipeline of providers to expand the types of care that can be offered and enable consumer access, improving the use of data and technology, and standardising quality and safety of out-of-hospital models. These actions would help increase the uptake of out-of-hospital care while maintaining the ability of individual funds and providers to improve quality of care through their normal market-based interactions. Pursuing these options could also set the foundation for ongoing improvement in Australia's public and private out-of-hospital care system, including potential examination of outcomes-based funding incentives and private health insurance funding of outpatient care more broadly.

Ultimately, these reforms will benefit patients and taxpayers. The beneficiaries will include over 11 million Australians with private health insurance, for whom ~\$1.5bn in annualised benefit outlay reduction will translate into lower premium increases, and partly offset the expected \$2bn growth in private health expenditure over the same timeframe. The beneficiaries will also include taxpayers by helping facilitate a transfer of an estimated ~175,000 Australians from the public hospital system to the private hospital system by 2027. This will help contain costs in the public system at a time when healthcare needs and fiscal constraints are growing precipitously.

Most importantly, the beneficiaries will be patients. Through this reform, patients will have access to high-quality, evidence-based healthcare in a setting of their choice. The reform options proposed could also act to increase the access to healthcare more broadly, while providing more incentive for clinicians to choose the most appropriate site of care for patients and reducing growth in out-of-pocket costs of care.

Capturing this value will require disruption of traditional models of care, however this level of change is not prohibitive and is in line with evolving trends in the delivery of quality and safe care. Over the long-term, these reform options could address many of the challenges of the current system by aligning incentives to favour quality and cost-effective care, while maintaining the benefits of a market-based system and increasing private sector capabilities to deliver out-of-hospital care at scale. From a consumer perspective, this means more incentive for clinicians to choose the most appropriate site of care for patients, reduced growth in private health insurance premiums and ultimately greater access for inpatient care in the Australian healthcare system.

9 Appendix

9.1 DEFINITION INCLUSIONS AND EXCLUSIONS

We have defined key inclusions and exclusions for each archetype:

Table 3: Inclusions and exclusions

Model of care	What is included	What is not included
Primary prevention/ coordination	<ul style="list-style-type: none"> • Tailored navigation or coordination of public primary prevention programs (inc. screening) • Tailored primary prevention not covered by Medicare 	<ul style="list-style-type: none"> • Funding or provision of primary prevention covered by Medicare (e.g., age-related cancer screening)
Chronic disease mgmt & monitoring	<ul style="list-style-type: none"> • Programs designed to manage chronic disease, reduce risk factors, and/or delay disease progression (e.g., Chronic disease Management Plans), including secondary and tertiary prevention. • Tailored health coaching services for specific conditions following diagnosis 	<ul style="list-style-type: none"> • Funding or provision Medicare-funded GP management Plans
Triage and emergency mgmt	<ul style="list-style-type: none"> • Provision of triage or urgent care in the home (e.g., virtual EDs) that would otherwise require presentation to emergency department 	<ul style="list-style-type: none"> • Standard primary care consultations
Mental health & substance misuse mgmt	<ul style="list-style-type: none"> • Programs designed to help avoid admission for mental health conditions • Admission to mental health hospital in the 	<ul style="list-style-type: none"> • Residential mental health or rehab services/programs

	home directly or as a part of step-down services	
Peri-operative mgmt	<ul style="list-style-type: none"> • Short-stay or same-day surgery programs with follow-up support in the home 	<ul style="list-style-type: none"> • Community or at-home rehab programs
Acute care/single intervention	<ul style="list-style-type: none"> • Admission to hospital in the home without requirement for admission to “bricks & mortar hospital” • Provision of acute/sub-acute interventions (e.g., chemo) in the home or other community setting 	<ul style="list-style-type: none"> • Standard outpatient medical services for non-acute patients
Step down services and rehab	<ul style="list-style-type: none"> • Admission to hospital in the home following admission to “bricks & mortar hospital” • Provision of acute/sub-acute rehab in the home or other community setting 	<ul style="list-style-type: none"> • Standard outpatient rehab or medical services for non-acute patients
End-of-life care	<ul style="list-style-type: none"> • Programs to deliver palliative or end-of-life care in the home or other community setting 	<ul style="list-style-type: none"> • Hospice

9.2 OUT-OF-HOSPITAL CARE LANDSCAPE

The following sub-section details the definitions of each out-of-hospital model of care, the assessed benefits, overview of global and local uptake and highlights the opportunities for possible expansion in Australia.

9.2.1 Primary prevention/coordination

Primary prevention refers to measures which prevent the occurrence of a disease, injury, or other health problems⁹⁵. Coordination refers to the process of bringing together stakeholders to ensure that those measures are effective and efficient.⁹⁶ Common examples of programs in this archetype are coordination of cancer screening and wellness programs which target high-risk groups. Medicare funded preventive services have been excluded from this analysis as the *Private Health Insurance Act 2007*⁹⁷ prohibits PHIs their funding.

Benefits

While primary prevention coordination activities and general wellbeing programs have the potential to decrease rates of preventable conditions and improve long-term public health, there are variable levels of clinical evidence to support this. For example, health navigation programs have been shown to enhance uptake of cancer screening with variable rates between 11-91%⁹⁸. Meanwhile another insurance study identified a 18% reduction in risk of cardiovascular events, and an average 30% reduction of inpatient days per person, for those who attended annual screening exams⁹⁹.

Global uptake

Global uptake of this archetype differs significantly dependent on the overall funding structure of the health system. Global examples include public national value-based care frameworks and private corporate wellness programs with variable uptake.

Case Study: In the UK, the Healthier You NHS Diabetes Prevention Programme treated over 400,000 people in its first year of launch, identifying people at risk of type 2 diabetes and referring them onto a 9-month lifestyle change program¹⁰⁰. The programme successfully reduced new diagnoses in England and cut the risk of developing type 2 diabetes by over a third for people completing the program.

Other international examples include:

⁹⁵ World Health Organization

⁹⁶ AIHW, health care equality and performance

⁹⁷ *Private Health Insurance Act 2007* (Cth)

⁹⁸ Muliira J and D'Souza M. "Effectiveness of patient navigator interventions on uptake of colorectal cancer screening in primary care settings," *Japan Journal of Nursing Science*, 13(2):205-219, November 2015.

⁹⁹ Patel D. et al. "Participation in Fitness-Related Activities of an Incentive-Based Health Promotion Program and Hospital Costs", *American Journal of Health Promotion*, 25(5): 341-8, May 2011.

¹⁰⁰ NHSF 75 England

- In the U.S, the number of health navigator programs quadrupled in 2021 to support healthcare access and uptake of primary prevention programs in targeted groups (e.g., socioeconomic status, age)¹⁰¹
- In the U.S, 50-70% of workplace private health insurance provide wellbeing programs with varying intensity of interventions available.¹⁰² For example, Virgin Pulse is a turnkey program which engages users in healthy habits with >12 million US patients
- In Canada, TELUS Health acquired LifeWorks which supports employers across 160+ countries with health and wellbeing solutions¹⁰³

Australian landscape

Uptake of privately provided programs remain low in Australia due to the restrictions in PHIs ability to fund primary care. Data from private health insurers suggests that there are currently at least 8 private providers of wellness and preventive programs with total reach of ~4,300 privately insured patients. Providers generally target weight loss and weight management programs, such as Healthy Weight for Life and Digital Wellness.

Key opportunities

While there may be opportunity to expand primary prevention offerings for selected patient cohorts, there is variable evidence and uptake globally to support investment in this area. However, stakeholders such as the Royal Australian College of General Practitioners have suggested ways for PHIs to play a larger role in the primary prevention system, including in¹⁰⁴:

- Assessment and management plans for patient's ineligible for Medicare-funded General Practitioner Management Plans and Team Care Arrangements due to a lack of chronicity
- General wellbeing services, including those provided by allied health (e.g., dietetics and exercise physiology)
- Care coordination and team care, supporting patients to access nurse services, additional allied health visits and programs to assist patients transitioning between healthcare settings

¹⁰¹ Centers for Medicare and Medicaid Services, US government

¹⁰² Centers for Disease Control and Prevention

¹⁰³ TELUS Health

¹⁰⁴ RACGP, 'The role of private health insurance in primary healthcare' position statement. 2022 Jan

9.2.2 Chronic disease management and monitoring

Chronic disease management and monitoring (CDM) refers to programs designed to manage chronic disease, reduce risk factors, and/or delay disease progression at home (e.g., Chronic Disease Management Plans). This excludes provision of Medicare-funded GP Management Plans as the *Private Health Insurance Act 2007* prohibits PHIs from funding these services.

Benefits

CDM programs outside hospitals can lower hospital admission risk, costs, and increase patient satisfaction. Reviews found a 12%- 84% reduction in unplanned hospitalisations and readmissions which varied dependent on the conditions targeted and structure of program, with comparable disease-related complication rates and patient safety¹⁰⁵. There was also evidence of reduced length of stay of up to 3 days for low-acuity patients compared to conventional care¹⁰⁶. This has the added effect of lowering healthcare costs by 30-38% as patients are less likely to require expensive hospitalisation or emergency care¹⁰⁷. Studies have also found higher patient satisfaction as at home programs offer more personalised care and support. For example, in CDM home telemonitoring, ~80% of patients feel more involved in monitoring their health condition, ~70% feel more secured and assured, and ~90% are satisfied with the telemonitoring experience.¹⁰⁸

Global uptake

Around the world, growing attention has focused on shifting a larger proportion of CDM into the community or into the home, particularly post-COVID-19. This has been further fuelled by an uptick in chronic diseases worldwide and emerging technologies like remote patient monitoring.

Case Study: In the UK, 97.5% of primary care practices provide structured CDM based on the Quality and Outcomes Framework (QOF). The QOF aims to improve the quality of patient care by rewarding practices based on clinical care and public health quality indicators. Patients at the highest admission risk (top 5% responsible for 50% of costs) receive intensive OOH CDM with assigned Case Managers.¹⁰⁹

Other international examples include:

- In the U.S., uptake of chronic disease management programs is high (e.g., Omada Health, Livongo Health) with the top 20 providers reaching approx. 50 million patients. There has been a significant increase in polychronic providers (e.g., Oak Street Health, ChenMed and Iora Health)

¹⁰⁵ Rastogi A. et al., "Virtual triage and outcomes of diabetic foot complications during Covid-19 pandemic: A retro-prospective, observational cohort study," *PLoS ONE*, 16(5), May 2021.

¹⁰⁶ Rea H. et al. "A chronic disease management programme can reduce days in hospital for patients with chronic obstructive pulmonary disease", *Internal Medicine Journal*, 34(11), 608-14, Nov 2004.

¹⁰⁷ Levine, et al. "Hospital-Level Care at Home for Acutely Ill Adults," *ACP Journals*, 172(2):77-88, January 2020; Stewart, S, et al, "Impact of Home Versus Clinic-Based Management of Chronic Heart Failure: The WHICH? (Which Heart Failure Intervention Is Most Cost-Effective & Consumer Friendly in Reducing Hospital Care) Multicenter, Randomized Trial," *Journal of the American College of Cardiology*, 60(14): 1239-48, Oct 2012.

¹⁰⁸ Li J. et al. "Home telemonitoring for chronic disease management: Perceptions of users and factors influencing adoption," *Health Informatics Journal*, 27(1), March 2021.

¹⁰⁹ NHS 75 Digital, Quality and Outcomes Framework

- In France, ~1000 CDM provider networks provide coordinated care for complex needs, targeting specific diseases or population groups with public funding of €163m
- In France, 'Sophia Diabetes' is a patient support program offered by insurers that was extended to reach ~400k patients¹¹⁰

Australia landscape

In Australia, PHIs are generally limited to funding CDM patients through Chronic Disease Management Programs after diagnosis with a chronic disease from a hospital admission. Health insurer data also suggests that there are at least 34 providers reaching 40k+ patients with an average age of 50-70. Many providers cover a broad range of chronic conditions such as chronic heart failure, chronic obstructive pulmonary disease, osteoarthritis, type 2 diabetes and cardiovascular disease. Some providers target specific conditions, commonly diabetes, cancer, heart failure & osteoarthritis. For example, Healthy Weight for Life has a specific Osteoarthritis Management program which provides support on knee and hip pain before surgery.

Key opportunities

To expand CDM to a broader group of people, regulatory changes on funding and care providers are needed. This would increase private funding for a wider range of CDM services, including:

- Coordination for privately insured patients with multi-morbidities and comorbidities
- Targeted programs for polychronic disease management
- Evidence-based chronic disease prevention programs
- Care coordination and wrap-around team care for chronic diseases
- Allied health services such as dietetics, exercise physiology and physiotherapy

¹¹⁰ Chevreul, K et al. 'Assessing Chronic Disease Management in European Health Systems: Country reports,' *National Library of Medicine*, 2015.

9.2.3 Triage and emergency management

Triage and emergency management provide urgent care without requiring a presentation to an emergency department. This often involves virtual triage or emergency care using telemedicine or virtual consultations.

Benefits

Virtual EDs have been found to improve efficiency, lower costs and enhance patient experience. These models divert low acuity patients to cheaper forms of community care, reducing the burden of non-urgent cases and risk exposure to infectious diseases in hospital. There is variable evidence that suggests this allows around 28-44% in cost savings due to reduced overheads, staffing and transportation¹¹¹. However, while remote triaging systems for urgent care are increasingly popular, reported efficacy rates vary. Success rates for OOH treatment range from 22% for GP clinics to 90% for chest pain triaging services^{112,113,114,115} and a review of orthopaedic triage found comparable outcomes for pain levels, quality of life, functional disability, and psychological status¹¹⁶. Patient satisfaction is generally high with a satisfaction rate between 47-95%, due to low costs, reduced wait and travel time, high quality care and availability of results¹¹⁷.

Global uptake

Virtual emergency departments are increasingly popular worldwide, with many healthcare systems using telemedicine and virtual care to provide emergency services during COVID-19. These services primarily treat low acuity conditions such as allergies, cough, fever, throat pain, rashes, and minor injuries.

Case Study: In the US, Dispatch Health is a virtual emergency service which delivers on demand, in home medical care. The service provides urgent medical support to homes or other locations via a mobile app in over 44 states in America.

Other international examples include:

- In the U.K, Emergency Multidisciplinary Units provide assessment and treatment for adults with sub-acute care needs as close to patients' homes as possible – these have been stood up in >8 UK NHS Trusts

¹¹¹ Gidora, H, et al, "Effects of Telenursing Triage and Advice on Healthcare Costs and Resource Use," *National Library of Medicine*, 257:133-9, 2019; Faul, M, et al, "Large Cost Savings Realized from the 2006 Field Triage Guideline: Reduction in Overtriage in U.S. Trauma Centers." *Prehospital Emergency Care*. 16(2), 222-9. Oct, 2011

¹¹² Ure, A. *Journal of Primary Health Care*. 2022 Mar 3

¹¹³ Sax D. et al. "Tele-Triage outcomes for patients with chest pain: comparing physicians and registered nurses," *Health Affairs*, 37(12), Dec 2018.

¹¹⁴ Nataraj A. et al. "Emergency department referrals from a provincial medical call centre: is it more than just 1-800-go-to-emerg?" *Canadian Journal of Emergency Medicine*, 22(2): 241-44,2020.

¹¹⁵ Turbitt E, and Gary F. "Use of a telenursing triage service by Victorian parents attending the emergency department for their child's lower urgency condition," *Emergency Medicine Australasia*, 27(6):558-62, Sep 2015.

¹¹⁶ Hurley D. et al. "Virtual triaging in an eye emergency department during the COVID-19 pandemic," *Irish Journal of Medical Science*, Sept 2021.

¹¹⁷ Khairat S. et al. "Evaluation of Patient Experience During Virtual and In-Person Urgent Care Visits: Time and Cost Analysis," *Sage Journals*, January 2021.

- In Canada, the SCOPE Niagara program used >16 virtual ED hubs in Ontario used a nurse navigator telehealth program to provide urgent testing to patients – this diverted >70% ED visits
- In Sweden, 1177 is a nation-wide healthcare emergency triage platform with 2.3m+ calls since 2013
- In the US, there are trials in community paramedicine where paramedics provide community-based, preventative and primary healthcare services. The Commonwealth Care Alliance (CCA) piloted a program which served the Greater Boston region of ~ 2,600 CA members

Australia landscape

Virtual EDs are also being adopted widely across Australia but almost exclusively by public hospital services. Prior to the COVID-19 pandemic, virtual models of care involving telehealth in emergency medicine in Australia focused on remote support for clinicians but have been expanded to offer telehealth and virtual consultation services to patients, with platforms targeted to specific groups like children or post-natal women. Initial data found at least 7 publicly funded virtual ED programs in Australia (e.g., Northern Health’s Victorian Virtual Emergency Department) with only 1 private provider My Emergency Doctor fielding ~100,000 consultations since launch in 2016, or ~14,300 patients per year.

Key opportunities

There are limited opportunities for privately provided virtual EDs in Australia given the saturation of the public health system in this space and the price sensitivity of patients. However, there may be specific opportunities to provide urgent care/triage to select groups of patients (e.g., private obstetric patients or those with chronic diseases) or by expanding private EDs. The Australasian College for Emergency Medicine (ACEM) released a position statement advocating for insurance companies to review the determination of private EDs as outpatient services, and for the Government to allow for funding of emergency care for insured patients with acute illnesses¹¹⁸. There may be an opportunity then for private health insurers to fund urgent or priority care centres to further alleviate demand on public hospital EDs, however this would require significant regulatory change to enable PHI to fund primary care.

¹¹⁸ Australasian College for Emergency Medicine. Position statement: role of private hospital emergency departments. July 2022.

9.2.4 Mental health and substance misuse management

OOH mental health and substance misuse management includes programs aimed both at hospital avoidance for patients with mental health conditions, as well as hospital substitution (e.g., mental health hospital in the home and rehab-at-home).

Benefits

Home-based mental health treatment is a cost-effective and comfortable alternative to hospital or clinic-based care, reducing costs up to ~39% or \$1,844 to \$8,88 per episode of treatment, and increasing patient satisfaction through personalised treatment and privacy¹¹⁹. Community care for chronic mental health conditions can also reduce hospital admissions and readmissions by 60% and 40% but may not be suitable for those with alcohol and drug dependencies or at high risk of suicide or self-harm¹²⁰. While both in-home and inpatient treatment show similar clinical and social outcomes, the length of acute psychiatric treatment may be ~30% longer at home¹²¹.

Global uptake

The deinstitutionalisation of mental health has spread globally, leading to a diverse range of community-based mental health services for a variety of needs. The most common conditions are depression, bipolar disorder, anxiety and addiction.

Case study: In the UK, Crisis Resolution and Home Treatment (CRHT) teams provides short-term, home-based care at an intensity similar to inpatient admission, including for mental health. NHS England and NSH Improvement allocated an extra £261 million in community-based crisis teams and 'crisis alternatives' from 2019-21, including 24/7 intensive home treatment services and 24/7 mental health crisis services in every area in England.

Other examples include:

- In the US - MindCare is a leading 24/7 telepsychiatry service with 360k+ annual health encounters
- In the US, the COVID pandemic catalysed 'partial hospitalisation programs' which are telehealth-enabled services for acute mental health care in the home/outpatient setting
- In Norway, the health authorities implemented intensive home treatment teams within 35 of the 75 community mental health centres in the country within 3 years of launch

Australia landscape

In Australia, mental health care at home is more commonly offered via the public health system with relatively few private services in comparison. Analysis identified at least 14 private providers serving around 11,000 privately insured patients. Public outpatient detox services are also available in most local health networks, with some examples of privately provided programs (e.g., Star Health Home

¹¹⁹ Roos E. et al. "Health care utilization and cost after discharge from a mental health hospital; an RCT comparing community residential aftercare and treatment as usual," *BMC Psychiatry*, 18(363), Nov 2018; Towicz M. et al. "Hospital-in-the-Home as a Model for Mental Health Care Delivery: A Narrative Review," *Psychiatric Review*, 72(12): 1415-27, Dec 2021.

¹²⁰ Caplan G. A. "Systematic reviews - a meta-analysis of 'hospital in the home'," *The Medical Journal of Australia*, 197(9):512-9, Nov 2012.

¹²¹ Stulz et al. *The British Journal of Psychiatry*. 13 March 2019.

Detox and Addiction Solutions Victoria Rehab at Home). Private services focus on specific mental health issues, such as the Antenatal Support Program, Calm Kid Central, and Parent & Baby Wellbeing.

Key opportunities

There are opportunities to increase mental health and substance use management services in line with evidence-base and increasing global uptake, including:

- Increased delivery of privately provided specialised Mental Health Hospital-in-the-Home models to offer an alternative to inpatient care (where clinically safe)
- Increased delivery of Rehab-at-home models to offer alternative to inpatient detox and withdrawal programs with low clinical efficacy

9.2.5 Peri-operative management

This archetype includes short-stay surgery programs with follow-up support in the home that reduces inpatient ALOS. This is typically for procedures like joint replacements and spinal surgery, however there is increasing evidence to support implementation for spinal infusions and bariatric interventions. Excluded from this definition are community or at home rehab programs.

Benefits

Perioperative management in the home reduces default overnight or multi-day inpatient admission through same day support and early discharge. This has effect of reducing costs by ~6-32% depending on the procedure¹²², with 80-90% rates of high patient satisfaction. Additionally, day-case surgeries and early postoperative discharge have either equivalent or reduced hospital readmission rates according to Enhanced Recovery After Surgery (ERAS) protocols¹²³.

Global uptake

Short-stay surgery programs with home care are widely available at scale across North America and Europe and are attributed to reducing ALOS to between 1.9 days (UK and Denmark) to 2.8 days (Canada).

Case study: In the US, 40% of patients at select centres use The Enhanced Recovery After Surgery program which allows same-day discharge for eligible elective surgeries.

Case study: In Canada, 23-hour joint replacement programs have been implemented across the country with follow-up treatment in the home

Case study: In Denmark, the broad uptake of the "Fast-Track" surgical program has reduced ALOS to 1.6 for Total Hip Replacement and 1.9 for Total Knee Replacement.

Other international examples include:

- In the U.K, 80% of selected elective activity is funded via a short-stay model (funded on same rate for inpatient or day case, creating a financial incentive)
- In Finland, a 23-hour surgery model was trialled for 993 patients, with high success rate and patient satisfaction

Australia landscape

However, Australia has been a slower adopter of surgery short-stay models with minimal uptake in both the private and public sector compared to global healthcare systems. Only two pilots have been launched to explore this space. In 2022, Medibank's short stay pilot program for hip and knee replacements found that broad adoption of short stay models of care across the health system could

¹²² Bodrogi A. et al. "Management of patients undergoing same-day discharge primary total hip and knee arthroplasty," *Canadian Medical Association Journal*, 192(2), Jan 2020; Regenbogen S. "Costs and Consequences of Early Hospital Discharge After Major Inpatient Surgery in Older Adults," *National Library of Medicine*, May 2017.

¹²³ Biondi A. et al. "Feasibility of discharge within 72 hours of major colorectal surgery: lessons learned after 5 years of institutional experience with the ERAS protocol," *BJS Open*, 6(1), Feb 2022; Dey et al. "The safety and efficacy of day-case total joint arthroplasty," *The Annals of the Royal College of Surgeons England*," 103(9), April 2021.

save 217,000 bed days in 2030¹²⁴. In W.A, the Perth Urology Clinic launched an initiative to send specialists to the Albany Day Hospital for monthly urological treatment. Slow uptake can be demonstrated as Australia's ALOS for knee replacement surgeries is 5.4, lagging behind the 1.9 to 2.8 ALOS seen in countries like Canada, the UK, the US and Denmark. Other examples include ALOS for hip replacements (5.5 in Australia vs 2.5 in the US¹²⁵), spinal infusions (10.3 days in Australia vs 5.2 in the US¹²⁶ and 4 in the UK¹²⁷) and Transurethral Prostatectomy for Urinary Disorder: 5.1 days vs. 2.7 days in the US¹²⁸ and 3.0 days in the UK¹²⁹).

Key opportunities

There is significant opportunity for PHIs in Australia to provide same-day or short-stay surgery for 80% of elective joint surgery. This includes:

- Increased delivery of short-stay surgical programs for selected surgical conditions to enable reduced length of stay
- Potential for same-day discharge for selected surgical conditions with support in the home
- Opportunity to implement innovative evidence-based funding models (similar to those used in the UK) which provide the same level of benefits for selected surgeries regardless patients length of stay

¹²⁴ Medibank and KPMG, 'Medibank facilitates a sustainable healthcare system – The economic case of Medibank's short-stay, no gap program' July 2022.

¹²⁵ US commercial DRG activity compiled from CMS LDS and BHI

¹²⁶ Ibid

¹²⁷ NHS Hospital Admitted Patient Care Activity

¹²⁸ US commercial DRG activity compiled from CMS LDS and BHI

¹²⁹ NHS Hospital Admitted Patient Care Activity

9.2.6 Acute care/single intervention

OOH acute care includes programs that enable direct admission to hospital-in-the-home services without a proportion of the admission occurring in a “bricks and mortar” hospital. Single intervention care on the other hand includes treatment that involves a single procedure or therapy aimed at resolving a specific health problem (e.g., chemotherapy).

Benefits

The benefits of HITH services include greater patient satisfaction, lower healthcare costs and improved patient outcomes. Studies cite 80-99% satisfaction with HITH services for patients who can recover in the comfort of a familiar environment. Additionally, HITH allows for a more efficient use of hospital resources as sub-acute patients can be treated at home, reducing ALOS by 2 days, freeing up hospital beds and resulting in ~38-45% cost savings¹³⁰. HITH services also lead to equivalent or better clinical outcomes, including a reduction of rates in unplanned hospitalisations by over 50% compared to inpatient care while still carrying equivalent risks of readmission¹³¹. HITH care also demonstrated improvement in quality-of-life measures with decreases in Geriatric Depression Scale scores¹³². Further, existing programs for single interventions such as ‘chemo in the home’ (CITH) have also showcased potential to fully deliver care in the home, e.g., Medibank’s Chemotherapy at Home Trial and Vitalis’ CITH programs.

Global uptake

Acute care at home is growing worldwide following COVID-19, with the global acute care telemedicine market size valued at US\$17.5b in 2021¹³³. While Australia has a similar proportion of inpatient admissions with HITH services to countries like Canada (5%), the US (5%) and the UK (7%), those countries have committed to scale at a higher rate with respective targets of 10%, 13% and 20% by 2025. For example, in the UK, the NHS treated 85,000 people over 3 months with chemo home deliveries in 2020, and also began pilots of drones to deliver chemotherapy drugs in 2022.¹³⁴

Case Study: The US has seen a rapid increase in Hospital-at-Home following introduction of Acute HaH Waiver with 273 programs implemented in 3 years accounting for 5% of care, which will increase to approximately 12% of care in 2025 at current rates. A survey of physicians suggests that 30-40% of chemotherapy and up to 25% of dialysis could shift into the home by 2025.

Other international examples include:

- NHS treated 85k people over 3 months with chemo home deliveries in 2020. Additionally, the NHS is expanding virtual wards with the goal to treat 50k/ month (~20% of bed capacity) using remote patient monitoring

¹³⁰ Levine, et al. “Hospital-Level Care at Home for Acutely Ill Adults,” *ACP Journals*, 172(2):77-88, January 2020; Paulson M. et al. “Implementation of a virtual and in-person hybrid hospital-at-home model in two geographically separate regions utilizing a single command center: a descriptive cohort study,” *BMC Health Services Research*, 10(1093), Nov 2009; Hernandez C. “Home hospitalisation of exacerbated chronic obstructive pulmonary disease patients,” *European Respiratory Journal*, 21(58-67), 2003.

¹³¹ Mooney et al. American Society of Clinical Oncology. 17 May 2021.

¹³² Ricauda et al. *Journal of the American Geriatrics Society*. March 2008.

¹³³ Grand View Research, ‘Acute Care Telemedicine Market Report’

¹³⁴ NHS 75 England, ‘Chemo doorstep drops help to keep cancer patients safe’, 17 August 2020.

- Alberta's Hospital at Home services 15-25% of all cancer patients in the Albert region. British Columbia invested \$42m to treat 5-10% of acute patients via Health at Home in 2020

Australia landscape

While the market is expanding in Australia in recent years, it is largely dominated by chemotherapy services. Current data estimates around 19+ providers in Australia reaching approximately 77,100 patients. These consist of largely hospital in the home services, and condition specific single intervention services such as chemotherapy, IV therapy, infusions and dialysis. For example, Chemo at Home by View Health is a major provider of chemotherapy services at home and is used by many health funds.

Key opportunities

There is an opportunity to increase scale of acute care and single intervention services to 10-20% of all bed capacity in line with global benchmarks of uptake. There is also an opportunity to increase the proportion of selected single-intervention services at home, including chemotherapy (up to 30-40%) and dialysis (up to 15-25%).

9.2.7 Step down services and rehab

OOH step down services includes a range of healthcare services provided to patients transitioning from a high to lower level of care following inpatient hospital admission, for example traditional hospital-in-the-home models. This may include acute or sub-acute rehab in the home or community, which are designed to aid recovery from illness, injury, or disability.

Benefits

Step down and rehab services at home has significant cost savings, higher patient satisfaction and equivalent clinical outcomes. Patients who receive care at home consistently report higher satisfaction due to increased comfort, convenience, flexibility and personalised attention e.g., 73% for orthopaedic rehab, 80% for joint replacement rehab. This is supplemented up to ~40% in cost savings for selected models¹³⁵. Compared to conventional care, home and community-based rehab for patients were found to have no significant differences in hospital readmission risk or functional status for those recovering from stroke and joint arthroplasties^{136,137}.

Global uptake

There is booming global growth in the home rehab market, government commitments and specialised providers. In 2021, the global step down and home rehab market was worth US\$84.1bn, growing at CAGR of 4.8%. Home rehab is estimated to be ~38% of total global rehab services which is worth US\$221.2bn.

Case study: In the UK, the NHS is expanding virtual wards with the goal to treat 50,000 patients per month (equivalent to ~20% of bed capacity) using remote patient monitoring.

Case study: In Denmark, step-down services are innovating with specialised providers, such as Odense University Hospital relocating neonatal care from the hospital to the home via a telehealth service¹³⁸ which was used by more than 200 families in the first 3 years of launch

Other international examples include:

- In Canada, British Columbia invested \$42m to treat 5-10% of acute patients via Health at Home in 2020
- The US has high uptake (30%) of OOH rehab models for selected surgical procedures, including skilled nursing facilities

Australia landscape

Australia has a relatively mature industry compared to other OOH archetypes, but the rate of publicly provided services is growing faster at almost double the rate of the private sector (2.6% vs 6% over 5 years according to the Quarterly Private Health Insurance Benefit trends from the Australian

¹³⁵ Tung Y. et al. "Comparison of Cost-Effectiveness between Inpatient and Home-Based Post-Acute Care Models for Stroke Rehabilitation in Taiwan," *International Journal of Environmental Research and Public Health*, 18(4129), 2021; Perry B. "Medibank at Home treats 20,000 patients as new research shows Rehab at Home valued by patients and clinically effective," *Medibank*, Aug 2021.

¹³⁶ Donnelly et al. *Stroke*. 2003 Dec 2011

¹³⁷ Lopez-Liria et al. *Biomed Research International*. 2015 Apr 16

¹³⁸ Connected Health, 'Denmark – a telehealth nation', 1 March 2018

Prudential Regulation Authority. Private health data suggests there are 36+ private providers nationally reaching ~154,000 patients. A high proportion of these services are condition-specific including orthopaedic rehab, nursing wound management and post-natal care. Since being included for funding by the *Private Health Insurance Act 2007*, claims for insured 'hospital substitute treatment episodes'¹³⁹ (which includes step-down services and rehab) have increased to 5% of all private health hospital episodes in 2021.¹⁴⁰ However, while step down services are increasing overall in Australia, they are predominately provided by the public sector.

Key opportunities

There is an opportunity to increase scale of step-down services to 10-20% of all bed capacity in line with global benchmarks of uptake, including:

- There is an opportunity to shift ~30% of inpatient rehab to out-of-hospital models
- The private health system could play a larger role in rapidly scaling step-down models
- There is also an opportunity for more sub-specialised HiTH/rehab models (e.g., specialised neonatal/obstetrics HiTH models)

¹³⁹ 'Hospital substitute treatment episodes' covers acute care/single intervention and step-down services/rehab

¹⁴⁰ Australian Prudential Regulation Authority, Quarterly Private Health Insurance Benefits. March 2023.

9.2.8 End-of-life-care

OOH end of life care refers to programs that deliver palliative care at home, including medical and emotional support to patients at any stage of a life-limiting illness.

Benefits

Home based palliative care is associated with significant cost savings and better patient experience. There is evidence of cost-reduction from ~18-35%, as well as high patient satisfaction results from a sense of independence, comfort and privacy¹⁴¹. Patients are also 87.5% more likely to remain in the community until death when care is provided in the community. Home based palliative care may have similar or lower rates of admission and up to 30% reduction in readmission rates.^{142,143}

Global uptake

Globally, comparable healthcare systems are targeting from ~15 – 56% of home-based palliative care with virtual support. Global demand is driven by a growing ageing population and increased rate of conditions likely to require palliative care such as advanced cancer, dementia, heart failure and Parkinson's disease.

Case study: The UK. leads in palliative care with 56% of all palliative care services at home, 128 service providers for Hospice in the Home, and a Gold Standards Framework for health professionals to direct patients.

Other international examples include:

- 15% of Canadians receive home-based palliative care. They are also supported by the Canadian Virtual Hospice via an e-health feature 'Ask a Professional' which answered >3,000 qs by 2020
- 41% of palliative care services in the U.S are delivered in the home

Australia landscape

In Australia, dying is more institutionalised with only 1 in 10 palliative care related services provided at home. Up to 5 times more palliative care is delivered in the home in comparable countries including Canada, the US and the UK. This is despite 70% of Australians preferring to die at home, with only ~14% doing so and the majority dying in hospital or residential aged care.

Only 2 private providers have been identified with limited geographical range and reach of only ~1,800 patients. This includes the Medibank Palliative Care at Home trial which partners with specialist palliative care providers in Brisbane, Perth & Sydney. While this indicates nascent interest in the space, providers are still low despite the number of Medicare subsidised palliative care services almost doubling between 2015-2020. Medicare funded home visits for palliative care specialist services also increased on average by 18% p.a. over 5 years, with a total of 2,240 patients receiving home visits in 2019–20.

¹⁴¹ Luta, X. et al. "Evidence on the economic value of end-of-life and palliative care interventions: a narrative review of reviews," *BMC Palliat Care*, 20(89), June 2021.

¹⁴² Brumley et al. *Journal of the American Geriatrics Society*. July 2007.

¹⁴³ Jordhøy M. et al. "A palliative-care intervention and death at home: a cluster randomised trial," *The Lancet*, 356(9233):888-93, Sep 2000.

Key opportunities

Australia should aspire towards delivering >15% of palliative care at home in line with global benchmarks. This can be achieved through:

- Increased delivery of palliative care at home programs to 15-56% of all end of life services
- Expanding palliative care thresholds of current at-home programs is likely to promote increased uptake (e.g., removal for criteria of specific diagnoses)
- There is scope to increased coordination of services for between providers to holistically deliver end of life care given the fragmented healthcare landscape. This may include increased funding for wrap-around services

9.3 NOTES ON FINANCIAL IMPACT MODELLING METHODOLOGY

This report has included estimates of the value at stake as a portion of momentum case private hospital system costs, and first, second, and third-order effects of the proposed reforms, specifically examining the impact on value pools and different stakeholder groups:

- **Momentum case** refers to projected system-wide private hospital expenditure
- **Value at stake** refers to the addressable estimated system-wide cost reduction delivered through OOH care reforms, based on DRG-level analysis
- **First-order effects** include the direct impact of OOH care reforms by model of care, across payors (government, funds, and patients) and providers (clinicians and private hospital groups).
- **Second-order effects** include the impact of OOH care reform on private health insurance benefit outlays, leading to premium reductions and the resulting potential for increased uptake of private health insurance – the key stakeholder groups are funds, patients, and government.
- **Third order effects** include the impact of increased uptake of private health insurance on the public system.

9.3.1 Momentum case

System-wide private hospital expenditure

Total system-wide expenditure on private hospitals ($Spend_{private}$) was calculated as a proportion of Australia's GDP using AIHW and ABS data, projected forward using RBA estimated GDP growth rates (r_g). Expenditure on private hospitals as a proportion of GDP ($Prop_{private}$) has been held constant at 2020-21 rates, as the most recent data available.

$$Spend_{private} = GDP_{2022} \times r_g \times Prop_{private}$$

Addressable private hospital expenditure

For each model of care (m) outlined, DRGs (d) were mapped to estimate baseline system expenditure ($Spend_m$), using 2021-22 financial year values as the starting year. AR-DRG Version 10.0 was used in all analysis.

Underlying drivers of expenditure per model of care were examined at a DRG-level for overnight separations, and defined as:

- Sep_d : total hospital treatment-insured separations
- LOS_d : average length of stay, in days
- $Cost_d$: total overall cost per separation per day

$$Spend_m = \sum_d (Sep_d \times LOS_d \times Cost_d)$$

These variables were obtained from the Hospital Casemix Protocol (HCP) dataset.

Projected (x) expenditure was calculated based on projected separations per DRG, as a function of population growth by age group. This was to account for aging as a key driver of expenditure. Hospital treatment (HT) participation rates per capita by age group and overall case mix were held constant to 2021-22 values, i.e.:

$$Sep_{dx} = Sep_x \times \left(\frac{Sep_{d,2022}}{Sep_{p,2022}} \right)$$

Where:

- Sep_x : total HT-insured separations for the projected year.
- $Sep_{p,2022}$: total HT-insured separations per member in 2021-22.

Remaining drivers of expenditure were defined as:

- Pop : projected population by age group, per the Australian Government Centre for Population.
- HT_p : proportion of population with HT cover by age group as of 2021-22, per APRA data.
- i : cost inflation factor for average cost per private overnight separation, per HCP data.

Momentum case addressable expenditure per model of care (mx) is therefore calculated as:

$$Spend_{mx} = Pop \times HT_p \times \sum_d (Sep_{dx} \times LOS_d \times Cost_d \times i)$$

9.3.2 Value at stake

Value at stake from OOH care was calculated as the difference between momentum case expenditure and optimized expenditure (mx , *optimised*) drawing on three reform levers:

- **Reduced admissions (Sep_b):** Proportion of admissions that could be delivered in OOH care settings, according to international clinical research.
- **Reduced LOS (LOS_b):** International benchmark LOS for each DRG based on hospital activity data for the US, UK, Canada and the OECD, and best practice LOS determined by clinical literature.
- **Reduced overall cost per day ($Cost_b$):** Feasible discounted cost per day from OOH models of care relative to inpatient-based alternatives, according to international literature.

Reduced admissions were applicable for hospital avoidance models of care and select DRGs in hospital substitution models where research suggested opportunity to deliver care from the home. Reduced LOS and cost per day were applied across all OOH models of care.

$$Spend_{mx,optimised} = \sum_{dx} (Spend_{dx,substituted} + Spend_{dx,residual\ inpatient} + Spend_{dx,avoided})$$

$$Spend_{d,substituted} = (Sep_{dx} \times (1 - Sep_b)) \times LOS_b \times Cost_{bx}$$

$$Spend_{d,residual\ inpatient} = (Sep_{dx} \times (1 - Sep_b)) \times (LOS_d - LOS_b) \times Cost_{dx}$$

$$Spend_{d,avoided} = (Sep_{dx} \times Sep_b) \times LOS_d \times Cost_{bx}$$

Calculated value at stake is a net value – cost reductions for inpatient care from bed days shifted are offset by costs to provide care in home-based settings, though at discounted cost. Thus:

$$Value\ at\ stake_m = \sum_{mx} (Spend_{mx,optimised} - Spend_{mx})$$

Best practice clinical research for identified DRGs denote a reduced LOS where OOH care or OOH supported care is provided in replacement of or in addition to inpatient overnight stays. Suggested reductions in LOS from clinical research are typically greater than international benchmark LOS for each DRG. To remain conservative, international benchmark LOS have been used in place of best practice clinical research to determine a feasible LOS reduction, and this reduction in LOS has been fully attributed to the impact of OOH care.

9.3.3 First-order effects

First-order effects per model of care are calculated based on bed days shifted at a DRG-level from inpatient to OOH-based settings (hospital avoidance and/ or substitution), across payors and providers.

Cost impact is estimated based on the current contribution to total expenditure per DRG from each payor by spend area (hospital or medical cost), obtained from the HCP dataset. Cost impacts across payors is equal to inverse of impact across providers, which is equal to the value at stake per model of care.

It was assumed that reduction in overall cost per day per DRG ($Cost_b$) is delivered from reduced hospital costs per separation, while medical costs remain unchanged from current state. As such, the discount factor to hospital cost is greater than $Cost_b$

9.3.4 Second-order effects

Changes in PHI HT membership is estimated using a four-step process – firstly, to calculate the year-on-year increase in **benefit outlays** per member; secondly, to calculate the actual and effective **premium increase** per member; thirdly, to use the estimated price elasticity of demand for private healthcare to establish the **impact on participation**; and finally, to determine the **implied participation rate net of value at stake**.

It is assumed that all benefit outlay reductions for PHIs from capturing value at stake are passed onto consumers through reduced premiums.

- **Benefit outlays**

Historical fund benefit outlays are calculated using Hospital Casemix Protocol data and captures contribution across hospital and medical costs.

Projected benefit outlays are estimated using 2021-22 fund expenditure as a portion of total addressable cost, applied to momentum case cost projections ($Spend_{mx}$) as outlined in preceding sections. Outlays per member are calculated against projected HT-insured members.

- **Premium increase**

Premium increases are calculated as the year-on-year difference in cost per member attributed to population aging.

- **Impact on participation**

The price elasticity of demand for private health insurance has been calculated using historical data from 2014 to 2020 for participation rates and effective premium increases, indexed to wage growth, using publicly available data from the ABS, APRA and the ATO.

Future changes in HT membership, and thus participation rate (r_x), have been estimated using effective premium increases as calculated above, indexed to wage growth, based on the estimated price elasticity of demand.

- **Implied participation rate net of value at stake**

The adjusted participation rate net of captured value at stake (r_{nx}), is calculated by applying historical price elasticity assumptions to effective premium increases where value at stake offsets projected growth in fund benefit outlays.

Implied HT members retained ($HT_{retained}$) is calculated as the difference between the adjusted participation rate and the momentum case participation rate, multiplied by the projected population, i.e.

$$HT_{retained} = Pop_x \times (r_{nx} - r_x)$$

Note that this analysis does not account for the potential for different price elasticities across differing tiers of HT members, nor how demographic and other effects may impact the proportion of members in each tier.

9.3.5 Third-order effects

Costs avoided ($Cost_{avoided}$) from offset reductions in PHI participation rates are used to estimate projected savings to the public hospital system, and thus Government.

For simplicity, this value shift is calculated using the average cost per public hospital separation ($Cost_{public}$) as of 2019-20, as the most recently available data, multiplied by the average separations per HT-insured member ($Sep_{average}$), i.e.:

$$Cost_{avoided} = HT_{retained} \times Sep_{average} \times Cost_{public}$$

The ratio of savings between Commonwealth and State Governments is estimated from the 2020-21 proportion of health expenditure on hospitals, obtained from AIHW.