

# Healthy people, healthy systems



**Strategies for outcomes-focused and value-based healthcare:  
A BLUEPRINT FOR A POST-2020 NATIONAL HEALTH AGREEMENT**



**DECEMBER 2017**





## OUR VISION

A healthy Australia, supported by the best possible healthcare system.

## OUR MISSION

To conduct research, educate and influence the healthcare system to achieve better health outcomes, improved patient and provider experience, greater equity and sustainability.

## OUR GUIDING PRINCIPLES

Healthcare in Australia should be:

Effective  
Accessible  
Equitable  
Sustainable  
Outcomes-focused.


## OUR CONTACT DETAILS

Australian Healthcare and Hospitals Association


Unit 8, 2 Phipps Close  
Deakin ACT 2600

PO Box 78  
Deakin West ACT 2600

P. 02 6162 0780  
F. 02 6162 0779  
E. [admin@ahha.asn.au](mailto:admin@ahha.asn.au)  
W. [ahha.asn.au](http://ahha.asn.au)

 [facebook.com/AusHealthcare](https://facebook.com/AusHealthcare)

 [@AusHealthcare](https://twitter.com/AusHealthcare)

 [linkedin.com/company/australian-healthcare-&-hospitals-association](https://linkedin.com/company/australian-healthcare-&-hospitals-association)

ABN 49 008 528 470

© Australian Healthcare and Hospitals Association 2017

# contents

MESSAGE FROM OUR CHAIR	2
BACKGROUND	3
EXECUTIVE SUMMARY	4
OUR VISION FOR A HEALTHY AUSTRALIA SUPPORTED BY THE BEST POSSIBLE HEALTHCARE SYSTEM	8
KEY CONCEPTS	10
Universal healthcare	
Quality health outcomes	
A holistic view of health and wellbeing	
Coordinated and integrated care	
Long-term sustainable funding	
Innovation in response to need	
Equity in health	
FOUR STEPS TOWARDS OUTCOMES-FOCUSED AND VALUE-BASED HEALTHCARE	12
1. A nationally unified and regionally controlled health system that puts patients at the centre	13
2. Performance information and reporting that is fit for purpose	15
3. A health workforce that exists to serve and meet population health needs	19
4. Funding that is sustainable and appropriate to support a high quality health system	20
ABBREVIATIONS AND ACRONYMS	22
REFERENCES	23



# message from our chair

It's with great pleasure and a sense of excitement that I present the Australian Healthcare and Hospitals Association's blueprint for a post-2020 national health agreement.

*Healthy people, healthy systems* was developed by Australia's health leaders for Australia's health leaders.

Health systems in advanced economies around the world are on the cusp of change, and now is Australia's chance to transform our healthcare system into a fit for purpose 21st century system that will meet 21st century needs and expectations. Maintaining the status quo and tinkering around the edges of system reform will not provide the future-proofed health system that Australians expect and deserve.

Negotiations between the Commonwealth Government, and the state and territory governments for a post-2020 national health agreement provides the opportunity to define a shared vision and ensure that everyone is doing what they can to work towards outcomes-focused, value-based healthcare.

This will require a nationally unified and regionally controlled health system that:

- puts patients at the centre;
- ensures performance information and reporting is fit for purpose;
- develops a health workforce that exists to serve and meet population health needs; and
- is supported by long-term, sustainable funding that drives high quality health outcomes.

Current roles and responsibilities for different aspects of our health system are divided among the Commonwealth, the states and territories, and public and private entities, with government roles set out in the Constitution, and influenced by factors beyond the health sector.



DR DEBORAH COLE

As such, coordination and integration of health services to meet the outcomes that matter to patients and communities needs a shared vision and coordinated effort, not just between governments but with all those who contribute to and influence the provision of healthcare.

Integrating local services commissioned and coordinated by Primary Health Networks and Local Hospital Networks (or equivalent) in addition to the wide range of services provided by the not-for-profit and private sectors will go a long way towards achieving this aim and providing a cohesive and more integrated health system to deliver improved outcomes.

If there is a genuine commitment to delivering patient-centred care that improves health outcomes, consumers must be genuinely engaged in co-designing services and how the

entire health system functions across hospitals, primary healthcare and prevention activities. There is a need to move away from siloed care delivered within four walls to an integrated model delivered by a healthcare neighbourhood. There is also a requirement to move away from an episodic view of healthcare to a model that meets people's health needs over the long term.

This will require progressing from simple data collection to embracing the information and communication technology revolution and transforming the vast amounts of data generated by our health system into intelligence that will facilitate continued improved system integration and a focus on outcomes.

This will require a health workforce that is flexible, competent, working to the top of their scope of practice, and actively participating in the design and delivery of health services.

This will require appropriate funding that is sustainable and durable, which provides certainty for longer-term planning.

This will also require sustained non-partisan cooperation across all governments, and existing professional and financial incentives not being allowed to frustrate healthcare system reform.

We know we need to provide value-based healthcare. We know integrated care fits the value agenda. We know we need intelligent data and a modern workforce to drive these changes. It's time to step out of our comfort zones and transform fragmented healthcare in Australia. The recommendations found in this blueprint are a good place to start.

# background

In early 2017 Commonwealth Health Minister Greg Hunt asked AHHA to contribute ideas for a blueprint for a 10 year health agreement. A similar request was made by Leader of the Opposition Bill Shorten and Shadow Minister for Health and Medicare Catherine King.

These requests follow the reaffirmation by the Council of Australian Governments (COAG) that providing universal healthcare for Australians is a shared priority, with agreement on public hospitals funding to June 2020 (COAG 2016a).

COAG has begun considering longer-term public hospital funding arrangements for post-June 2020, and agreement is expected to be reached by COAG in 2018 (COAG 2016b).

This blueprint has been developed in response to these requests.

It has been developed through substantial consultation with, and input from, AHHA's Board, broad membership and stakeholders across the hospital, primary and community health sectors—including clinicians, academics, policy-makers, administrators and consumers.

We are thankful for their generous contributions.



# executive summary

To achieve a healthy Australia supported by the best possible healthcare system, AHHA recommends that Australia reorientate the healthcare system over the next 10 years by enabling outcomes-focused and value-based healthcare. This requires:

1

A nationally unified and regionally controlled health system that puts patients at the centre

IN SUMMARY

SHORT TERM (within 2 years)	An independent national health authority is established, distinct from the Commonwealth, and state and territory health departments, and reporting directly to COAG (or the COAG Health Council), to support integration of health services at a regional level.
	The authority assumes responsibility for stewardship of primary care and dental care, as well as functions currently led by the Independent Hospital Pricing Authority (IHPA), the Administrator of the National Health Funding Pool, the Australian Institute of Health and Welfare (AIHW), the Australian Digital Health Agency and the Australian Commission on Safety and Quality in Healthcare (ACSQHC).
MEDIUM TERM (within 5 years)	The authority becomes the single source of truth for national health data collection (performance and funding), bringing together and rationalising current disparate investments in data collection by the Commonwealth across the Australian Bureau of Statistics (including the National Health Survey), the AIHW, the Commonwealth Department of Health, Medicare and other smaller agencies.
	Agreements between the Commonwealth and Primary Health Networks (PHNs), and the states and territories with Local Hospital Networks (LHNs), establish consistent governance arrangements for regional needs assessments, priority setting and funding; this coordinates and integrates approaches to reducing preventable hospital admissions and presentations.
	The independent national health authority reports annually to the Commonwealth, and state and territory parliaments on its key performance indicators, supporting regional needs assessments and replacing current (and often duplicated) reporting.
	The independent national health authority supports efficient alignment of all agreements established by the Commonwealth that impact on shared health objectives.



2

Performance information and reporting that is fit for purpose

IN SUMMARY

DATA STANDARDS	
SHORT TERM (within 2 years)	All providers receiving government funding are required to supply data on patient outcomes and other service provision dimensions to better inform system performance.
	A national minimum dataset and data dictionary for primary healthcare are developed.
	A whole-of-system framework is developed for a nationally-consistent and coordinated approach to the collection and use of patient-reported experience and outcome measures (PREMs and PROMs) across the health system.
	The matrix for identifying, measuring and monitoring institutional racism is validated in hospitals and health services.
ICT ARCHITECTURE	
SHORT TERM (within 2 years)	The development and implementation of interoperability standards to support better information sharing across the health system is fast-tracked.
	My Health Record data, as agreed for secondary use, is made available to the proposed independent national authority for public reporting purposes.
MEDIUM TERM (within 5 years)	Standards for general practices electronic health records are developed and implemented.
ANALYTICAL AND REPORTING CAPABILITY	
SHORT TERM (within 2 years)	A strategy is developed for a standardised national approach to measuring value-based patient-centred outcomes, and is reported at different levels of the healthcare sector, and to different audiences.
	The <i>Choosing Wisely</i> initiative and the ACSQHC mapping of variation in care include feedback loops to professionals. These initiatives are aligned to reduce duplicated effort and investment of public funds.
	Stakeholders are given financial and non-financial incentives to cooperate in introducing standardised tracking of health outcomes and costs of care.
MEDIUM TERM (within 5 years)	Benchmarking performance against standardised sets of value-based patient-centred outcomes is introduced.
	The matrix for identifying, measuring and monitoring institutional racism is incorporated into performance information and reporting requirements across the health system.
	Regional needs assessments determine projected needs of the population 5–10 years in the future to inform investment in prevention.
LONG-TERM (within 7–10 years)	Outcomes data published that empower patients to make informed choices about treatment options and providers is made public, and includes data on the outcomes that matter most to each patient.
	Stakeholders are given financial and non-financial incentives to improve healthcare value, based on standardised high quality outcomes data.

3

A health workforce that exists to serve and meet population health needs

IN SUMMARY

SHORT TERM (within 2 years)	A national health workforce reform strategy is developed that goes beyond the adequacy, quality and distribution of the workforce as it currently exists, to pursue outcomes-focused and value-based changes in scopes of practice and models of care to meet public need, with coordination of education, regulation and funding (at the Commonwealth, state and territory, and regional service levels) for both regulated and unregulated practitioners, and across health service environments.
--------------------------------	---

4

Funding that is sustainable and appropriate to support a high quality health system

IN SUMMARY

SHORT TERM (within 2 years)	Current Commonwealth funding levels for public hospitals, including the growth formula, are maintained for 7 years.
	Health services are funded on a regional basis, with the architecture of agreements being centred on patient needs, not individual sector needs, while still recognising that models of care must be sustainable and attractive to health service providers as well as patients.
	To support the movement to a value-based approach to healthcare funding, stakeholders are given financial incentives to cooperate in introducing standardised tracking of health outcomes and costs of care.
	A mixed funding formula, with a 25% component for achieved health outcomes, is trialled relating to the top 4 chronic diseases, risk factors or determinants, and is expanded to cover all health conditions within 10 years.
MEDIUM TERM (within 5 years)	Funds are dedicated to prevention activities based on the regional needs assessments determining projected needs of the population over 5–10 years.
LONG-TERM (within 7–10 years)	Following improvements in analytical and reporting capability, stakeholders are given financial incentives to improve healthcare value on the basis of outcomes data.

# our vision for a healthy Australia supported by the best possible healthcare system





# key concepts



## UNIVERSAL HEALTHCARE

Australia's public healthcare system is being severely tested by uncoordinated reforms occurring at both the Commonwealth level and within individual jurisdictions, all in the absence of any agreed overarching healthcare strategy, along with mounting financial strain and increasing demand. Although Australians have had access to universal healthcare for more than 30 years, our system is not immune to pressures such as an ageing population, a growing burden of chronic disease, increasing life expectancy, increasing individual and community expectations, and escalating healthcare costs associated with new technology and treatments. Strong and strategic leadership is needed from the Australian Government to address these challenges, in cooperation with the state and territory governments, to preserve effective and efficient universal healthcare.



## QUALITY HEALTH OUTCOMES

Australia's healthcare system consistently outperforms many other Organisation for Economic Cooperation and Development (OECD) countries when comparing key health indicators and costs. But burdens such as an ageing population, increased rates of chronic and complex disease, rising individual and community expectations and new medical technologies and treatments, are increasing the cost and complexity of healthcare. The provision of ineffective and futile care also persists (Duckett et al. 2015).

Maintaining the status quo and tinkering around the edges of system reform will not provide the future-proofed health system that Australians expect and deserve. Traditional approaches of measuring outputs rather than outcomes do not capture elements of quality and safety, nor do they place the patient at the centre of the care provided, rather than service provision. To ensure high quality, equitable and accessible healthcare, transparency and quality measures must be in place that show if reforms are achieving intended outcomes. Robust, real-time, linked data, through national minimum data sets, are needed both within and across care systems to inform the development of performance measures focused on health outcomes, along with routine monitoring of those outcomes.



## A HOLISTIC VIEW OF HEALTH AND WELLBEING

A person's healthcare should extend beyond immediate presenting concern(s) to take a broader view of their health and wellbeing. Such an approach requires consideration of the social determinants of health, as well as a preventive approach to healthcare, supported by deliberate investment by government. 'Health' as a key decision-making factor in all areas of policy is widely supported (WHO 2014a), including recognition of the significance of the early years of life.

Health should be seen as an investment, not just a cost. As reinforced in the Productivity Commission's recent report, there is a strong rationale for a greater emphasis on public health and prevention in an integrated system (PC 2017), with expenditure on such measures contributing to budget repair by reducing future demand on the health system while simultaneously improving health outcomes and quality of life for all Australians.

Innovative initiatives that focus on prevention can create savings through reduced healthcare costs in the future and improve quality of life over the life course. With the fourth Intergenerational Report highlighting the pressure that health costs will place on the Commonwealth budget (Treasury 2015), it is vital that there be a significant investment in preventive health strategies to lessen the individual, intergenerational and health system burden which will otherwise emerge in the future. This is consistent with Objective 1 of *The National Strategic Framework for Chronic Conditions*, which is 'to focus on prevention for a healthier Australia' (AHMAC 2017).



## COORDINATED AND INTEGRATED CARE

A whole-of-system approach to reform is needed to ensure Australians with multiple care needs are able to seamlessly access services. As our population ages and rates of chronic disease continue to rise, Australians will increasingly find themselves in need of multiple types of care. Better coordination is required, both within the healthcare sector and with other sectors such as aged care and disability services. Greater coordination and integration of services across care sectors will ensure better service delivery, improved efficiency, better health outcomes and improved quality of life. The intersect between concurrent reforms across care sectors must be clearly understood and coordinated so as to prevent unintended consequences of bilateral government reforms.

Alternative models of care must also be matched with complementary payment models, as traditional payment mechanisms such as fee-for-service can create perverse incentives and entrench fragmented care. There should be mechanisms to support innovation where traditional funding frameworks can be challenged, and flexibility for different approaches to be trialled.

For the health system to be meaningfully and sustainably re-orientated, it is vital that the Commonwealth and the state and territory governments collectively and cooperatively work in partnership to create a health system that is not constrained by Constitutional barriers or political positions. Similarly, vested professional and financial interests should not be permitted to stifle innovation within the health sector.



## LONG-TERM SUSTAINABLE FUNDING

The Australian healthcare system needs to be adequately funded in a sustainable and durable way, providing certainty for longer-term funding arrangements for the Commonwealth and the states and territories.

While Australia's rate of growth in health spending has slowed in recent years (AIHW 2016), there has also been a shift in the proportions different funders contribute. The proportion of total spending provided by governments has reduced in recent years, with relatively higher proportions now coming from private sources, e.g. private health insurers, compensation, individual out-of-pocket expenses and unpaid/informal carers. Australians spend more on out-of-pocket healthcare costs than the OECD average (OECD 2015).

The overriding objective of the public healthcare system should be to ensure high quality care that is equitable, accessible and affordable. Health budget sustainability must include the concept of affordability for individuals and communities while acknowledging capacity to pay and individual/family/community health vulnerability. The inefficiencies of siloed approaches to funding should be acknowledged and addressed. Existing resources should be used effectively with all parts of the health system working together to eliminate waste, remove inefficiencies and remove low-value care.

Competition policy reform across the entire health system should not be used as a mechanism to drive health system efficiency. It risks perverse incentives to the system with the marginalised, at-risk or individuals with poor health literacy being disadvantaged. It also does not work in all settings, e.g. rural and remote areas. In healthcare, equity of access, quality and a focus on outcomes, not just user choice, are critical.



## INNOVATION IN RESPONSE TO NEED

Australia has a high quality health system delivering world-class population health outcomes. However, for some groups, health outcomes are poor. There is an increasing incidence of sexually transmissible infections and blood-borne viruses, as well as hospitalisation for injury and poisoning (AIHW 2016). As the population ages, rates of chronic disease increase and individual and community demand grows, resulting in increasing pressure on the health system. Innovative approaches to health service delivery, underpinned by a strong evidence base, are required to respond to these challenges.

The Australian Government, in partnership with all state and territory governments, must also provide leadership on proactively redefining traditional workforce models of healthcare delivery, recognising that vested professional and financial incentives are an impediment to effective structural reforms in the way health services are designed, delivered and remunerated.



## EQUITY IN HEALTH

Complementing Australia's universal health insurance (horizontal equity) is a requirement to tailor major reforms to regional challenges and develop targeted programs for vulnerable populations (vertical equity). Market-based consumer-driven programs, effective in major capital cities, do not work in rural/remote regions of Australia where there are few or no services (market failure). Service providers in rural and remote areas, informed by PHN-led needs assessments, need the flexibility to fund-pool national programs such as the National Disability Insurance Scheme (NDIS) to minimise duplication and fragmentation of care while assuring access. Targeted programs and services are also required to address issues specific to vulnerable populations in the Australian community including: prisoners, refugees, LGBTIQ people, and Aboriginal and Torres Strait Islander Australians.



# four steps towards outcomes-focused and value-based healthcare

‘Value should always be defined around the customer, and in a well-functioning health care system, the creation of value for patients should determine the rewards for all other actors in the system. Since value depends on results, not inputs, value in health care is measured by the outcomes achieved, not the volume of services delivered, and shifting focus from volume to value is a central challenge. Nor is value measured by the process of care used; process measurement and improvement are important tactics but are no substitutes for measuring outcomes and costs’ (Porter 2010).

Outcomes-focused and value-based healthcare can be better enabled through a whole-of-government approach to achieve:

1

a nationally unified and regionally controlled health system that puts patients at the centre

2

performance information and reporting that is fit for purpose

3

a health workforce that exists to serve and meet population health needs

4

funding that is sustainable and appropriate to support a high quality health system.



1

## A nationally unified and regionally controlled health system that puts patients at the centre

### OBJECTIVE

The Commonwealth and the states and territories working in partnership to implement a nationally unified but regionally responsive health system, delivering integrated care and services centred on people's needs.

### OPPORTUNITY IN THE POST-2020 AGREEMENT

The following need was identified in the National Health Reform Agreement (COAG 2012): *‘The Commonwealth and the States will work together on system-wide policy and state-wide planning for GP and primary health care given their impact on the efficient use of hospitals and other State-funded services, and because of the need for effective integration across Commonwealth and State-funded health care services’*. For this to be realised, however, effective governance arrangements need to be formalised.

Leadership is needed to ensure the mechanisms to effect change at the regional level, at appropriate scale and pace, are established. For regional accountability and responsiveness, governance arrangements across the health sector need to ensure desired outcomes and value can be achieved. This will promote coordination of health service delivery, address unmet need and improve efficiency.

### CURRENT CONTEXT

The National Health Reform Agreement (NHRA) identifies shared objectives and the division of roles and responsibilities between the Commonwealth, and the states and territories (COAG 2012). However, governance arrangements for the provision of services at a regional level do not provide for coordinated care across the health sector as a whole. Public hospitals are governed by Hospital and Health Services or Local Health Districts/ Networks (LHNs) accountable to state and territory governments. Private sector, general practice, pharmacy and allied health services are subsidised by, and accountable to, the Commonwealth. Some primary care services are commissioned by Primary Health Networks (PHNs), which rely on funding from, and are accountable to, the Commonwealth. Finally, the states and territories are responsible for community health services.

In the absence of an agreed primary healthcare strategy, it could be argued that reforms to reduce avoidable hospital admissions and presentations will not be effectively achieved. Clarity and coordination of roles and responsibilities is essential in strengthening the interface between hospitals and the primary care sector. By taking a more cooperative approach to the funding and delivery of care across these settings, savings and other efficiencies can be internalised to the joint

benefit of all governments. Collective decision making through an independent agency with multi-jurisdictional representation has been effectively demonstrated with the Independent Hospital Pricing Authority (IHPA).

At a regional level, the formation of collaboratives and the pooling of funding to co-commission are occurring in some areas. However, governance arrangements can vary across and within jurisdictions, and often are not formalised.

The value of establishing governance mechanisms to support a nationally unified and regionally controlled health system has been recognised internationally. For example, in the United Kingdom it has been argued that, *‘providers of services should establish place-based “systems of care” in which they work together to improve health and care for the populations they serve. This means organisations collaborating to manage the common resources available to them’*. Without effective governance and oversight, a *‘fortress mentality’* can develop, with each service *‘acting to secure its own future regardless of the impact on others’*. This is particularly relevant in the Australian context where reducing avoidable hospital demand is a shared priority. In such circumstances *‘commissioning should be much more integrated and strategic in order to support the development of place-based systems of care’* (Ham & Alderwick 2015).



RECOMMENDED ACTIONS

<b>SHORT TERM</b> (within 2 years)	<p>A governance structure with funding responsibilities is created to support integration of health services at a regional level to achieve outcomes-focused and value-based healthcare. Given the shared roles and responsibilities between the Commonwealth and the states and territories, this would be achieved via the establishment of an independent national health authority, distinct from the Commonwealth, and state and territory health departments, guided by a skills-based Board with multi-jurisdictional representation and, consumer and professional expertise, reporting directly to COAG (or the COAG Health Council).</p> <p>The authority assumes responsibility for stewardship of functions currently led by IHPA, the Administrator of the National Health Funding Pool, AIHW, the Australian Digital Health Agency and ACSQHC.</p> <p>The authority assumes responsibility for stewardship of coordinating improvements in primary and dental care and cross-sector integration, including:</p> <ul style="list-style-type: none"><li>• providing independent oversight of regional needs assessments, and identification of priorities in primary healthcare and prevention</li><li>• ensuring coordination and integration between states and territories, LHNs and PHNs (including processes for distribution of pooled funding at a regional level)</li><li>• distributing Commonwealth funding to PHNs</li><li>• financial management and audit of PHNs</li><li>• performance monitoring and reporting for PHNs</li><li>• providing advice on optimal use of existing capacity and evolving opportunities within general practice and primary healthcare services.</li></ul> <p>The authority becomes the single source of truth for national health data collection (performance and funding), bringing together and rationalising current disparate investments in data collection by the Commonwealth across the Australian Bureau of Statistics (including the National Health Survey), the AIHW, the Commonwealth Department of Health, Medicare and other smaller agencies.</p>
	<p>Agreements between the Commonwealth and PHNs, and the states and territories with LHNs, establish consistent governance arrangements for regional needs assessments, priority setting and funding, aimed at a coordinated and integrated approach to reducing preventable hospital admissions and presentations.</p>
<b>MEDIUM TERM</b> (within 5 years)	<p>The independent national health authority reports annually to the Commonwealth, and state and territory parliaments on its key performance indicators which align with our vision for a healthy Australia supported by the best possible healthcare system.</p> <p>Reporting supports regional needs assessments.</p> <p>Reporting replaces current (and often duplicated) reporting, e.g.:</p> <ul style="list-style-type: none"><li>• the biennial report by AIHW to the Australian Parliament on Australia's Health</li><li>• the Report on Government Services</li><li>• National Health Performance Framework reports.</li></ul> <p>The independent national health authority supports efficient alignment of all agreements established by the Commonwealth that impact on shared health objectives, including reporting on their value to the overall health system. Examples include the National Indigenous Reform Agreement, the Community Pharmacy Agreement, the National Mental Health Agreement and Commonwealth budget investment in associated 'independent' entities such as NPS MedicineWise.</p>



2

Performance information and reporting that is fit for purpose

OBJECTIVE

Whole-of-system health performance information and reporting that is focused on health outcomes, and facilitates achieving value in healthcare and transparency of performance.

OPPORTUNITY IN THE POST-2020 AGREEMENT

Leadership is needed to establish a system where data accurately reflect care outcomes and are in the right format, timely and of sufficient quality to discern critical relationships between investment and results, as appropriate, for different audiences and purposes.

CURRENT CONTEXT

Health performance information and reporting serves a number of purposes:

- For the public—patient-friendly and clinically-relevant statistical information to inform individuals and communities, promote transparency and support research.
- At the point of care—enabling comparisons in order to drive service improvements.
- For jurisdictions—informing policy and driving health system improvements.
- For regions—driving strategic directions and allocation of funding and resources (Nous 2016).

Publishing information on health system performance can improve clinical outcomes for patients and benefit the system as a whole. This occurs in two main ways:

- increased consumer knowledge of healthcare provider performance can help consumers make informed choices (with low-performing providers losing market share and making meaningful changes to improve performance in response); and
- increased healthcare worker knowledge of their own performance can motivate them to provide better care.

There is a danger that performance reporting will drive risk-avoidance behaviour by services; this will need to be properly managed to ensure an overall positive impact (Chen 2010; Campanella et al. 2016).

A unifying framework is needed. Between August 2016 and March 2017, a review of Australia's health system performance information and reporting frameworks was undertaken, commissioned by the Commonwealth Department of Health on behalf of the Australian Health Ministers' Advisory Council (AHMAC) (Nous 2016). The purpose was to look at how AHMAC can modernise, strengthen and rationalise the performance information and reporting framework. Now that the public consultation process is complete, AHMAC will consider who has responsibility for implementation of the recommendations.

Data standards, information and communications technology (ICT) architecture, and analytical and reporting capabilities are needed to support systematic tracking of health outcomes, relevant risk-adjustment factors, segment-specific interventions, corresponding costs of care and other relevant dimensions of health system performance (WEF 2016).

DATA STANDARDS

There are national standards for data on hospital services. Performance data for all public hospitals are largely provided to the AIHW by state and territory health authorities (AIHW 2017), while activity and cost data are provided to IHPA. The provision of data by private hospitals is voluntary, although work being led by the Queensland Government Department of Health is exploring the extent to which mandatory reporting of healthcare quality and safety information should be extended to private healthcare service providers (Patient Safety and Quality Improvement Service 2017). As a fundamental requirement for receipt of public funding, private health service providers should be compelled under the terms of the funding arrangements to provide data for public reporting by the proposed independent national authority. Similarly, data relating to programs and services funded by the Commonwealth Government and the state and territory governments should be reported in a consistent, coordinated and transparent way.



In the National Healthcare Agreement, ‘potentially preventable hospitalisations’ are a health system performance indicator of accessibility and effectiveness. This indicator has also become a headline performance indicator for PHNs given their key objective of improving coordination of care to reduce these hospitalisations.

While the indicator may be calculated from routinely collected hospital data, it has significant limitations as an indicator of variation in the provision or quality of primary care. A key limitation is that not all of the hospitalisations captured by the indicator could have been prevented, at least in the short term. For example, there is often a long time lag between primary prevention initiatives and disease onset or complications. Further, it is influenced significantly by factors not easily influenced by health policy-makers (e.g. by socioeconomic status and prevalence of disease). The current specification also does not include all conditions which could potentially be used to measure the number of potentially preventable hospitalisations (Falster & Jorm 2017).

There have been various efforts over the years to draw together primary health data, including the Bettering the Evaluation and Care of Health (BEACH) program, data extraction and analysis tools used by PHNs, and NPS MedicineInsight. However none have been comprehensively successful, with data collection being pursued in the absence of a national minimum dataset for primary healthcare. With the Commonwealth, and the states and territories having joint roles and responsibilities, and strong interest in reforms to reduce avoidable hospital admissions and presentations through primary care initiatives, coordinated performance information and reporting is critical. Much reform is currently occurring in the primary healthcare sector in the absence of a national minimum dataset, e.g. the development of a performance framework for PHNs and the implementation of Health Care Homes.

There is also increasing interest across the health system in applying PREMs and PROMs to safety and quality improvement, but patterns of collection in Australia are highly variable (Centre for Health Service Development, AHSRI 2016). These are used widely in clinical trials and other research settings; however their use to improve the safety and quality of healthcare

is still emerging. There is some activity in this sphere being led by government entities (e.g. through the NSW Agency for Clinical Innovation), by public health providers (e.g. Dental Health Services Victoria), and across public and private health providers (e.g. in the Continuous Improvement in Care cancer pilot trial in Western Australia). There is increasing implementation of approaches based on the relevant International Consortium for Health Outcomes Measurement (ICHOM) standardised sets of value-based patient-centred outcomes. The ACSQHC has been scoping an appropriate role for the measurement and reporting of patient-reported experiences and outcomes to support the health system to deliver patient-centred care.

For Aboriginal and Torres Strait Islander people, institutional racism in hospitals and health services fundamentally underpins racial inequalities in health. It forms a barrier to accessing healthcare, and must be acknowledged and addressed in order to realise health equality. A matrix has been developed for identifying, measuring and monitoring institutional racism. Simple and cost-effective to administer, research to date shows its value as both an internal and external assessment tool (Marrie & Marrie 2014).

ICT ARCHITECTURE

The Australian Digital Health Agency has identified interoperability of clinical data as one of its priority outcomes, with the first regions in Australia showcasing comprehensive interoperability across health service provision by 2022. This will support patient data being collected in standard ways for sharing in real-time with patients and their healthcare providers (ADHA 2017).

A large proportion of primary healthcare occurs in general practices and allied health practices operating as private entities. This has implications for the mechanisms by which performance information and reporting can be achieved with accountability and responsiveness. Practitioners must firstly be engaged in focusing on outcomes and value. It must be easy for them to be involved in data collection, data must be interpreted appropriately and practitioners must see real-time value in the care they provide to their own patients. With general practice electronic

health records currently unregulated, there are inconsistent structures, data elements and use of clinical terminologies and classifications. Addressing the lack of standards across electronic health records will facilitate: transfer of clinical data between electronic health records for clinical purposes; linking individual health data for integration of care across different sectors of the healthcare system; and reliable extraction of patient data for practice improvement and research purposes (Gordon et al. 2016).

As noted above, as a fundamental requirement for receipt of public funding, for example practice incentive payments related to e-health, general practice should be compelled to provide data for public reporting by the proposed independent national authority.

Primary healthcare is also provided by a network of community health service providers, which may be government or non-government agencies, including not-for-profit or faith-based providers. ICT architecture can vary significantly across these providers, bringing similar inconsistencies and interoperability challenges as with private providers.

ANALYTIC AND REPORTING CAPABILITY

Performance information must be analysed and reported in a manner that is fit for purpose and timely, meeting the needs of different levels of the health system, as well as different audiences.

The AIHW is primarily responsible for national reporting on key health and health services issues in Australia. They release more than 180 print, web and data products every year that draw on national major health and welfare data collections, including their own. The *MyHospitals* website reports data to the level of individual hospitals or health services, and 48 indicators are measured and compared under the domains of equity, effectiveness and efficiency; the *MyHealthyCommunities* website presents data on how different areas, disaggregated to PHN level, perform against a range of indicators relevant to primary healthcare organisations and the populations they serve.

The ACSQHC is also responsible for national reporting on key health issues and services

through the *Australian Atlas of Healthcare Variation*, an interactive platform that illuminates variation by mapping use of healthcare according to where people live, providing key findings and recommendations for exploring the variation.

IHPA maintains a National Benchmarking Portal to allow hospital managers the ability to compare differences in activity, costs and efficiency at similar hospitals across the country. This simplifies performance benchmarking and highlights clinical variation. Access to the portal is controlled by the jurisdictions.

States and territories also collect data and report across the breadth of the areas covered by these national bodies. And at a regional level, each PHN is required to undertake a needs assessment process that will identify and analyse health and service needs within their regions. While the reports are published, regionally-collected data that underpins the health needs analyses are collected in

the absence of data standards and are not consistently available for broader use.

The private sector also holds significant collections of data. Private hospitals, private health insurers, corporate and individual service providers, and other organisations have information they collect, use and report in varying ways and for varying purposes, e.g., NPS MedicineWise collects data related to medicines use.

Clinical quality registries are used to systematically monitor the quality (appropriateness and effectiveness) of healthcare, within specific clinical domains, by routinely collecting, analysing and reporting health-related information. This information is fed back to clinicians to inform clinical practice and decision-making. Reports may also be provided to jurisdictions, healthcare providers, funders, clinical colleges and researchers (ACSQHC 2017b). Sweden has been the international pacesetter in clinical quality

registries, where they have been effectively used in an integrated and active way for continuous improvement, research and management to contribute to the best possible care for patients (Larsson et al. 2012). In Australia, ACSQHC is progressing work to develop a view on the national policy context for national clinical quality registries.

From the perspective of individual professions, the Royal Australasian College of Surgeons showed leadership in analysing and reporting data for quality improvement, partnering with Medibank to publish Surgical Variance Reports (RACS). These analyse a number of clinical and other indicators for common procedures within surgical specialties. By highlighting variation in practice, surgeons can consider reasons for the variations in order to improve clinical outcomes and patient care.

RECOMMENDED ACTIONS

DATA STANDARDS	
'It is well accepted in the world of statistics and large databases that metadata leads to better data. This is because they enable all people collecting, using and exchanging data to share the same understanding of its meaning and representation' (AIHW 2017).	
SHORT TERM (within 2 years)	All providers receiving government funding are required to supply data on patient outcomes and other service provision dimensions to better inform system performance.  Relevant data from the private sector (hospitals, general practitioners, allied health, private health insurers, etc.) are captured, with the requirements for public reporting of healthcare quality and safety also applying to private facilities and service providers.
	A national minimum dataset and data dictionary for primary healthcare are developed, with: <ul style="list-style-type: none"><li>• metadata aligned with acute care national minimum datasets to support data linkage and development of outcomes data reporting</li><li>• data submission a requirement for those receiving a Medicare provider number, practice incentive payments, or other government funding.</li></ul>
	A whole-of-system framework is developed for a nationally-consistent and coordinated approach to the collection and use of PREMs and PROMs across the health system, with standardised national definitions and descriptors.
	The matrix for identifying, measuring and monitoring institutional racism is validated in hospitals and health services.



ICT ARCHITECTURE	
‘All these innovations are rapidly expanding the “art of the possible” when it comes to integrating health data around the patient’. [They must] become integral components of the comprehensive informatics infrastructure for value-based healthcare’ (World Economic Forum 2017).	
SHORT TERM (within 2 years)	Business plans for the Australian Digital Health Agency include development and implementation of interoperability standards to support better information sharing across the health system, with this work being fast-tracked for achievement within 2 years.
	Work currently underway considering secondary use of My Health Record data includes using outcomes data to support better stewardship and governance of the health sector, with these data being made available to the proposed independent national authority for public reporting purposes.
MEDIUM TERM (within 5 years)	Standards for general practices electronic health records are developed and implemented. Elements addressed include: <ul style="list-style-type: none"><li>a defined electronic health record data model that links related data elements</li><li>consistent data element labels and definitions</li><li>use of standardised clinical terminologies and classifications</li><li>accreditation of general practices in terms of electronic health record capability and processes.</li></ul>
ANALYTICAL AND REPORTING CAPABILITY	
‘Once health systems begin to routinely track and share health outcomes data and other relevant information by condition and population segment, the resulting accumulation of data will become a powerful asset for driving research and innovation in healthcare’ (World Economic Forum 2017).	
SHORT TERM (within 2 years)	A strategy is developed for a standardised national approach to measuring value-based patient-centred outcomes, and is reported at different levels of the healthcare sector, and to different audiences.
	This includes setting clear objectives, defining target audiences, developing transparent principles and methodology through broad consultation, and timely monitoring and evaluation of unintended consequences.
	The <i>Choosing Wisely</i> initiative, facilitated by NPS MedicineWise, that identifies tests, treatments and procedures where evidence shows they provide no benefit or, and in some cases, lead to harm (NPS MedicineWise 2017), is extended to provide individualised feedback to professionals who continue to provide such services.
	Similarly, the work being led by the ACSQHC mapping variation in care should include a feedback loop to professionals where significant variation is identified.
MEDIUM TERM (within 5 years)	Ideally the <i>Choosing Wisely</i> initiative should be integrated with the work being undertaken by the ACSQHC to ensure alignment of activity and to reduce duplicated effort and investment of public funds.
	Stakeholders are given financial and non-financial incentives to cooperate in introducing standardised tracking of health outcomes and costs of care.
	Benchmarking performance against standardised sets of value-based patient-centred outcomes is introduced with: <ul style="list-style-type: none"><li>anonymous public reporting across and within health systems, but with reporting back to providers of their relative performance, with a focus on learning and continuous improvement</li><li>validating methodologies for outcomes tracking and risk-adjustment.</li></ul>
	The matrix for identifying, measuring and monitoring institutional racism is incorporated into performance information and reporting requirements across the health system.
LONG-TERM (within 7–10 years)	Regional needs assessments determine projected needs of the population 5–10 years in the future to inform investment in prevention.
	Outcomes data published that empower patients to make informed choices about treatment options and providers is made public, and includes data on the outcomes that matter most to each patient.
LONG-TERM (within 7–10 years)	Stakeholders are given financial and non-financial incentives to improve healthcare value, based on standardised high quality outcomes data.



3

A health workforce that exists to serve and meet population health needs

OBJECTIVE

A health workforce that supports service delivery models that are accessible and address population health needs more effectively and efficiently.

OPPORTUNITY IN THE POST-2020 AGREEMENT

Leadership is needed to proactively redefine traditional workforce models of healthcare delivery that better address population health needs. Leaders must recognise that vested professional and financial incentives are an impediment to effective structural reforms in the way health services are designed, delivered and remunerated.

CURRENT CONTEXT

There are joint roles and responsibilities between the Commonwealth Government and state and territory governments relating to the health workforce and their education and training requirements (COAG 2012; COAG 2017).

At both Commonwealth and state and territory levels, there is significant focus on the number and distribution of health professionals regulated under the Health Practitioner Regulation National Law Act 2009 (*the National Law*), in particular medical professionals and nurses. However, data do not currently capture information about accessibility, responsiveness, acceptability, quality and appropriateness. Further, data on numbers and distribution need to be interpreted in terms of evolving and innovative changes in scopes of practice and models of care, particularly with growing evidence of the comparative cost-effectiveness of allied-health-led care and multidisciplinary involvement in models of care across the patient journey (Office for Professional Leadership 2015). Data related to scopes of practice and use of the non-registered workforce are also unavailable.

The development of a National Allied Health Dataset will be important for understanding the contribution and costs of this workforce, provided it is linked with outcomes (Stephens & Erven 2015).

The Productivity Commission noted ‘*Labour costs comprise a large share of health expenditure, and so making better use of health workforce skills and competencies could lead to large efficiency gains. There is evidence that some tasks that are currently the exclusive responsibility of particular professionals could be performed just as effectively by others, without compromising patient safety or the quality of care. Carefully relaxing some specific regulations affecting scopes of practice could allow workers to be better allocated to tasks where they can add the most value, and reduce the labour resources needed to effectively deliver specific health care services (freeing up workers to deliver more services and potentially improving patients’ access to health care)*’ (PC 2015).

The former Commonwealth entity Health Workforce Australia reported that a ‘business as usual’ approach to the health workforce is not sustainable, with a need for coordinated, long-term reforms by government, professions and the higher education and training sector for a sustainable and affordable health workforce. The main policy levers required for change were innovation and reform, immigration, training capacity and efficiency, and workforce distribution, with innovation and reform measures identified as the area of most promise (HWA 2013).

While the National Law has an objective ‘to enable the continuous development of a flexible, responsive and sustainable Australian health workforce’, there is no shared vision documented for what such a workforce would look like. Further, there are limited mechanisms to ensure a match between health professional education and training which is controlled nationally, and the workforce needs

of the largely state-controlled healthcare organisations (Leggat 2014). The review of the National Registration and Accreditation Scheme (NRAS) identified that an improved mutual understanding about the future agenda in workforce reform was needed. Submissions to the review showed an almost universal agreement on the importance of developing national workforce policy guidance that can be acted upon by all entities and processes within, and interdependent with, NRAS—consumers, employers, professional associations, education providers, National Boards and government departments (Woods 2017).

Clinical training and experience, particularly clinical placements, are a critical component in preparing health professionals for practice. The quality of and time in pre-registration placements has been recognised as one of the main influencing factors in determining career destinations for health professionals (Universities Australia 2017). Support and incentives for placements are critical in terms of rural and remote distribution, but should also be considered in terms of areas of public need and service models.

With drivers to shift care from hospital to primary and community care sectors, there need to be similar drivers supporting clinical training/ placements in the latter settings, including primary healthcare, disability care, aged care and mental health. Without sufficient exposure to healthcare settings outside of public hospitals, the choice to practise in other settings (and their readiness to do so) is reduced.

Promoting efficient and sustainable use of limited clinical training resources is of value and benefits all stakeholders. While IHPA is designing a nationally consistent method of classifying teaching and training activities and the associated costs to inform activity-based funding (ABF) in public hospitals, consideration of, and responsibility for, placements beyond the hospital environment needs attention.

RECOMMENDED ACTIONS

SHORT TERM (within 2 years)	A national workforce reform strategy is developed, including action plans for medium term (within 5 years) and longer term (within 7–10 years) reforms.
	This strategy goes beyond the adequacy, quality and distribution of the workforce as it currently exists, to pursue outcomes-focused and value-based changes in scopes of practice and models of care to meet public need, with coordination of education, regulation and funding (at the Commonwealth, state and territory, and regional service levels) for both regulated and unregulated practitioners, and across health service environments.
	This strategy is linked with regional needs assessments and strategies.





# 4

## Funding that is sustainable and appropriate to support a high quality health system

### OBJECTIVE

The Commonwealth and the states and territories work in partnership to ensure health funding achieves high quality health outcomes for Australians.

### OPPORTUNITY IN THE POST-2020 AGREEMENT

Outcomes are the ultimate measure of success in healthcare.

Leadership is needed to ensure funding is directed to health sector priorities and used effectively and efficiently to deliver high-value services.

While payment mechanisms are just one of the policy levers to address quality in healthcare, they are recognised as a powerful instrument in altering health provider behaviour in terms of the volume and quality of health services delivered (European Observatory on Health Systems and Policies 2014). Payment mechanisms can be used to drive sustainable transformations in healthcare that will improve individual and population health outcomes.

### CURRENT CONTEXT

ABF is the system currently used for funding public hospital services based on the number of services provided to patients and the price to be paid for delivering those services. The

Commonwealth's contribution to the funding of hospital-based activity is based on a National Efficient Price (NEP), independently determined by IHPA. Each state or territory's contribution to the funding of hospital-based activity is based on a price per service determined by the state for services agreed to be provided (Administrator National Health Funding Pool 2017). For 2015–16, the Commonwealth to state/territory share in contributions to hospitals was about 40:60 (National Health Funding Body 2016). Under the addendum to the National Health Reform Agreement, the Commonwealth is set to meet 45% of efficient growth from 2017–18 onwards (with a growth funding cap of 6.5%) (COAG 2017).

In general and specialist practice, services are typically provided by fee-for-service (FFS), with Medicare reimbursing patients for 100% of the Medicare Benefits Schedule (MBS) fee for a GP and 85% of the MBS fee for a specialist. However out-of-pocket costs associated with this model have become more and more inconsistent, 'undermining the universality of Medicare, widening health inequalities and arguably leading to increased hospital costs' (Russell & Doggett 2015). FFS is also the most common mechanism by which allied health and dental services are funded, and typically through patient out-of-pocket contributions, sometimes supported by private health insurance or MBS rebates.

ABF and FFS can be effective mechanisms to achieve consistency and transparency in health service funding, although this can create inappropriate incentives to provide treatment and favour volume at the expense of effectiveness and quality of care. Equity and access can also be compromised.

A value-based approach to funding aligns payment incentives with health system objectives. These objectives may be related to such things as quality, care coordination, health improvement and efficiency, with the achievement of targeted performance measures rewarded. They typically blend or augment base payment systems (European Observatory on Health Systems and Policies 2014).

In Step 2 of this paper, recommendations relating to performance information and reporting have been identified. However, there are still challenges in applying funding and financing models to performance measures. The literature is growing, as are examples locally and internationally, from which we can learn. Factors that have been identified for the success of a value-based approach include:

- defining performance broadly rather than narrowly
- attention to limiting patient selection and health-reducing substitution
- including risk adjustment for outcome and resource measures

- involving providers in program design
- favouring group incentives over individual incentives
- using rewards or penalties, depending on the context
- more frequent, lower powered incentives
- absolute targets preferred over relative targets
- multiple targets preferred over single targets
- value being a permanent element of overall provider payment systems (European Observatory on Health Systems and Policies 2014).

In Australia, lessons can be learned from programs such as the adoption of the National Emergency Access Target (NEAT) across Australia (Silk 2016), the ACSQHC development and application of Clinical Care Standards (ACSQHC 2017a) for quality improvement, and the Practice Incentives Program in general

practice (European Observatory on Health Systems and Policies 2014).

Funding models being tested in other jurisdictions, e.g. in the Hospital Value-Based Purchasing Program in the Centers for Medicare and Medicaid Services in the United States (CMS 2017), and in public hospitals in Australia via IHPA, include a combination of activity-, block- and performance-related funding measures. A mixed funding model incorporating these measures is likely to be required in order to adequately compensate for activity, to protect equity (particularly in rural and regional areas and for vulnerable population groups), and to reward and incentivise agreed performance standards and outcomes.

Australia spends less on public health and prevention than most other OECD countries, ranked fourth lowest in 2014 with 1.9% of recurrent health expenditure spent on preventive care (OECD 2017). The increasing burden of chronic disease within Australia intensifies the

need for investment in evidence based preventive health strategies. This is reinforced by Australia's commitment to the 2025 WHO global targets to reduce premature mortality from the four major non-communicable diseases: cardiovascular disease, cancer, chronic lung diseases and diabetes (WHO 2013; Moodle, Tolhurst & Martin 2016).

An effective way to address government fiscal pressures is to take earlier steps to prevent health conditions from occurring, delaying the onset and reducing the severity of any conditions. Preventive health is therefore an important means of reducing future demand on the health system while simultaneously improving quality of life. Preventative health measures should be directed to activities that have been demonstrated to be cost effective (Jackson & Shiell 2017; WHO 2014b; Vos et al 2010) and which interpret lifestyle choices in the context of the opportunity costs and other incentives faced by individuals (Sassi & Hurst 2008).

### RECOMMENDED ACTIONS

SHORT TERM (within 2 years)	<b>Current Commonwealth funding levels for public hospitals, including the growth formula, are maintained for 7 years with a review commencing at year 5, to determine funding which could be quarantined as pooled PHN/LHN regional funding for cross-sector care coordination and delivery.</b>
	Health services are funded on a regional basis, with: <ul style="list-style-type: none"><li>• shared needs assessments between primary and hospital sectors, and regional planning, informing the distribution of funding</li><li>• shared needs assessments at a regional level informing investment in prevention</li><li>• continued investment in mechanisms to integrate healthcare across sectors (e.g. through HealthPathways)</li><li>• the architecture of agreements being centred on patient needs, not individual sector needs, while still recognising that models of care must be sustainable and attractive to health service providers as well as patients.</li></ul>
	To support the movement to a value-based approach to healthcare funding, stakeholders are given financial incentives to cooperate in introducing standardised tracking of health outcomes and costs of care.
	A mixed funding formula, with a 25% component for achieved health outcomes, is trialled relating to the top 4 chronic diseases, risk factors or determinants. This expands to cover the top 10 chronic diseases, risk factors or determinants within 5 years, and all health conditions within 10 years. Conditions are agreed, based on available data, by the proposed independent national health authority.
MEDIUM TERM (within 5 years)	Funds are dedicated to prevention activities based on the regional needs assessments determining projected needs of the population over 5–10 years. These funds should initially target a return to funding levels commensurate with the average in recent years of around 2.3% of recurrent expenditure on health, with the increase in funding being incremental over 5 years. Preventative health measures should be directed to activities that have been demonstrated to be cost-effective and which interpret lifestyle choices in the context of the opportunity costs and other incentives faced by individuals.
LONG-TERM (within 7–10 years)	Following improvements in analytical and reporting capability, stakeholders are given financial incentives to improve healthcare value on the basis of outcomes data.



# abbreviations and acronyms

<b>ABF</b>	Activity-based funding
<b>ACSQHC</b>	Australian Commission on Safety and Quality in Healthcare
<b>AHHA</b>	Australian Healthcare and Hospitals Association
<b>AHMAC</b>	Australian Health Ministers Advisory Council
<b>AIHW</b>	Australian Institute of Health and Welfare
<b>BEACH</b>	Bettering the Evaluation and Care of Health program
<b>COAG</b>	Council of Australian Governments
<b>FFS</b>	Fee-for-service
<b>ICHOM</b>	International Consortium for Health Outcomes Measurement
<b>ICT</b>	Information and communications technology
<b>IHPA</b>	Independent Hospital Pricing Authority
<b>LGBTIQ</b>	Lesbian, Gay, Bisexual, Transsexual, Intersex, Queer
<b>LHN</b>	Local Health Network (also known as Hospital and Health Service or Local Health District)
<b>MBS</b>	Medicare Benefits Schedule
<b>NDIS</b>	National Disability Insurance Scheme
<b>NEAT</b>	National Emergency Access Target
<b>NEP</b>	National Efficient Price
<b>NHRA</b>	National Health Reform Agreement
<b>NRAS</b>	National Registration and Accreditation Scheme
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>PHN</b>	Primary Health Network
<b>PREM</b>	Patient-reported experience measure
<b>PROM</b>	Patient-reported outcome measure

# references

Administrator National Health Funding Pool, *What types of NHR funding are there?*, viewed 1 November 2017, <http://www.publichospitalfunding.gov.au/national-health-reform/funding-what>

Australian Commission on Safety and Quality in Healthcare (ACSQHC) 2017a, *Clinical Care Standards*, viewed 1 November 2017, <https://www.safetyandquality.gov.au/our-work/clinical-care-standards/overview-of-the-clinical-care-standards/>

Australian Commission on Safety and Quality in Healthcare (ACSQHC) 2017b, *National arrangements for clinical quality registries*, viewed 1 November 2017, <https://www.safetyandquality.gov.au/our-work/information-strategy/clinical-quality-registries/>

Australian Digital Health Agency (ADHA) 2017, *Australia's National Digital Health Strategy*, Australian Government, Canberra, viewed 1 November 2017, <https://www.digitalhealth.gov.au/australias-national-digital-health-strategy>

Australian Health Ministers' Advisory Council (AHMAC) 2017, *National Strategic Framework for Chronic Conditions*, Australian Government, Canberra, viewed 1 November 2017, [www.health.gov.au/internet/main/publishing.nsf/content/nsfcc](http://www.health.gov.au/internet/main/publishing.nsf/content/nsfcc)

Australian Institute of Health and Welfare (AIHW) 2016, *Australia's Health 2016*, AIHW, Canberra, viewed 1 November 2017, <https://www.aihw.gov.au/reports/australias-health/australias-health-2016/contents/summary>

Australian Institute of Health and Welfare (AIHW) 2017, *MyHospitals*, viewed 1 November 2017, <http://www.myhospitals.gov.au/about-the-data>

Campanella, P, Vukovic, V, Parente, P, Sulejmani, A, Ricciardi, W & Specchia, M 2016, 'The impact of public reporting on clinical outcomes: a systematic review and meta-analysis', *BMC Health Services Research*, vol 16, no. 296, viewed 1 November 2017, [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4957420/pdf/12913\\_2016\\_Article\\_1543.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4957420/pdf/12913_2016_Article_1543.pdf)

Centers for Medicare and Medicaid Services (CMS) 2017, *The Hospital Value-Based Purchasing Program*, viewed 1 November 2017, <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HVBP/Hospital-Value-Based-Purchasing.html>

Centre for Health Service Development, Australian Health Services Research Institute (AHSRI) 2016, *Patient-reported outcome measures – an environmental scan of the Australian healthcare sector*, Australian

Commission on Safety and Quality in Healthcare, viewed 1 November 2017, <https://www.safetyandquality.gov.au/wp-content/uploads/2017/01/PROMs-Environmental-Scan-December-2016.pdf>

Chen, J 2010, *Public Reporting Improves Healthcare*, Bureau of Health Information, Sydney, viewed 1 November 2017, [http://www.bhi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0005/168368/Public-Reporting-Improves-Health-Care.pdf](http://www.bhi.nsw.gov.au/__data/assets/pdf_file/0005/168368/Public-Reporting-Improves-Health-Care.pdf)

Council of Australian Governments (COAG) 2012, *National Health Reform Agreement*, viewed 1 November 2017, <http://www.publichospitalfunding.gov.au/national-health-reform/agreement>

Council of Australian Governments (COAG) 2016a, Meeting Communique, 1 April 2016, viewed 1 November 2016, <https://www.coag.gov.au/meeting-outcomes/coag-meeting-communiqu%C3%A9-1-april-2016>

Council of Australian Governments (COAG) 2016b, Meeting Communique, 9 December 2016, viewed 1 November 2016, <https://www.coag.gov.au/meeting-outcomes/coag-meeting-communiqu%C3%A9-9-december-2016>

Council of Australian Governments (COAG) 2017, *Schedule I – Addendum to the National Health Reform Agreement*, viewed 1 November 2017, [http://www.federalfinancialrelations.gov.au/content/npa/health/other/Addendum\\_to\\_the\\_National\\_Health\\_Reform.pdf](http://www.federalfinancialrelations.gov.au/content/npa/health/other/Addendum_to_the_National_Health_Reform.pdf)

Duckett, S, Breadon, P, Romanes, D, Fennessy, P & Nolan, J 2015, *Questionable care: Stopping ineffective treatments*, Grattan Institute, viewed 1 November 2017, <https://grattan.edu.au/wp-content/uploads/2015/08/828-Questionable-Care2.pdf>

European Observatory on Health Systems and Policies 2014, *Paying for performance in health care*, World Health Organization, Geneva, viewed 1 November 2017, [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0020/271073/Paying-for-Performance-in-Health-Care.pdf](http://www.euro.who.int/__data/assets/pdf_file/0020/271073/Paying-for-Performance-in-Health-Care.pdf)

Falster, M & Jorm, L 2017, *A guide to the potentially preventable hospitalisations indicator in Australia*. Centre for Big Data Research in Health, University of New South Wales in consultation with Australian Commission on Safety and Quality in Healthcare and Australian Institute of Health and Welfare, Sydney, viewed 1 November 2017, <https://www.safetyandquality.gov.au/wp-content/uploads/2017/03/A-guide-to-the-potentially-preventable-hospitalisations-indicator-in-Australia.pdf>

Governance Institute of Australia 2014, *Good Governance Guides: Issues to consider in the formation of public sector boards*, viewed 1 November 2017, <https://www.governanceinstitute.com.au/knowledge-resources/guidance-tools/good-governance-guides/?pageNo=2&category=Public+sector>

Gordon, J, Miller, G & Britt, H 2016, *Reality check – reliable national data from general practice electronic health records*, Deeble Institute Issues Brief no. 18, viewed 1 November 2017, [https://ahha.asn.au/system/files/docs/publications/deeble\\_institute\\_issues\\_brief\\_no\\_18.pdf](https://ahha.asn.au/system/files/docs/publications/deeble_institute_issues_brief_no_18.pdf)

Ham, C & Alderwick, H 2015, *Place-based systems of care*, The King's Fund, London, viewed 1 November 2017, [https://www.kingsfund.org.uk/sites/default/files/field\\_publication\\_file/Place-based-systems-of-care-Kings-Fund-Nov-2015\\_0.pdf](https://www.kingsfund.org.uk/sites/default/files/field_publication_file/Place-based-systems-of-care-Kings-Fund-Nov-2015_0.pdf)

*Health Practitioner Regulation National Law Act 2009*, viewed 1 November 2017, <https://www.legislation.qld.gov.au/view/html/inforce/current/act-2009-045#sec.3-oc.2>

Health Workforce Australia (HWA) 2013, *Health Workforce 2025- summary*, Australian Government, Adelaide, viewed 1 November 2017, <http://www.health.gov.au/internet/publications/publishing.nsf/Content/work-review-australian-government-health-workforce-programs-toc-appendices-appendix-ii-health-workforce-2025-summary>

Jackson, H & Shiell, A 2017, *Preventive Health: How Much Does Australia Spend and Is It Enough?* Canberra: Foundation for Alcohol Research and Education.

Larsson, S, Lawyer, P, Garellick, G, Lindahl, B & Lundstrom, M 2012, 'Use of 13 disease registries in 5 countries demonstrates the potential to use outcome data to improve health care's value', *Health affairs*, vol. 31, no. 1., viewed 1 November 2017, <http://www.healthaffairs.org/doi/10.1377/hlthaff.2011.0762>

Legatt, S 2014, *Changing health professionals' scope of practice: how do we continue to make progress*, Deeble Institute Issues Brief no. NLCG-4, viewed 1 November 2017, [https://ahha.asn.au/system/files/docs/publications/deeble\\_issues\\_brief\\_nlcg-4\\_changing\\_health\\_professionals\\_scope\\_of\\_practice.pdf](https://ahha.asn.au/system/files/docs/publications/deeble_issues_brief_nlcg-4_changing_health_professionals_scope_of_practice.pdf)

Marrie, H & Marrie, A 2014, A matrix for identifying, measuring and monitoring institutional racism within public hospitals and health services, viewed 17 November 2017, <http://www.avidstudy.com/wp-content/uploads/2015/08/Matrix-Revised-2-9-14.pdf>



Moodle, A, Tolhurst, P & Martin J 2016, 'Australia's Health: Being Accountable for Prevention', *Medical Journal of Australia*, 204(6), pp. 223–225.e1.

National Health Funding Body, *Annual Report 2015-2016*, viewed 1 November 2017, [http://www.nhfb.gov.au/?wpfb\\_dl=89](http://www.nhfb.gov.au/?wpfb_dl=89)

Nous Group 2016, *Review of Australia's health system performance information and reporting frameworks: Public consultation paper*, viewed 1 October 2017, <https://pool.healthperformanceframeworksreview.com.au/files/Public-consultation-paper.pdf>

NPS MedicineWise 2017, *Choosing wisely*, viewed 1 November 2017, <http://www.choosingwisely.org.au/home>

Office for Professional Leadership 2015, *Demonstrating the value of allied healthcare in SA Health*, SA Health, Adelaide, viewed 1 November 2017, <http://www.sahealth.sa.gov.au/wps/wcm/connect/f9a86700476e95d5ada7bfdd1460951d/Demonstrating+the+Value+of+Allied+Health+Care+Final+20.02.15.pdf?MOD=AJPERES&CACHEID=f9a86700476e95d5ada7bfdd1460951d>

Organisation for Economic Cooperation and Development (OECD) 2015, *Health at a Glance 2015: How does Australia compare?* viewed 1 November 2017, <https://www.oecd.org/australia/Health-at-a-Glance-2015-Key-Findings-AUSTRALIA.pdf>

Organisation for Economic Cooperation and Development (OECD) 2017, *OECD.Stat: Health expenditure and financing*, viewed 25 November 2017, <http://stats.oecd.org/Index.aspx?DataSetCode=SHA>

Patient Safety and Quality Improvement Service 2017, *Discussion paper. Expanding healthcare quality and patient safety reporting across Queensland's health system*, State of Queensland (Queensland Health), Brisbane, viewed 1 November 2017, [https://www.health.qld.gov.au/\\_\\_data/assets/pdf\\_file/0028/667504/discussion-paper-patient-safety-reporting.pdf](https://www.health.qld.gov.au/__data/assets/pdf_file/0028/667504/discussion-paper-patient-safety-reporting.pdf)

Porter, M 2010, What is value in healthcare? *New England Journal of Medicine*, vol. 363, pp. 2477–2481, viewed 1 November 2017, <http://www.nejm.org/doi/full/10.1056/NEJMp1011024#t=article>

Productivity Commission (PC) 2015, *Efficiency in health*, Australian Government, Canberra, viewed 1 November 2017, <http://www.pc.gov.au/research/completed/efficiency-health>

Productivity Commission (PC) 2017, *Shifting the dial: 5 year productivity review*, Report No. 84, viewed 1 November 2017, <http://www.pc.gov.au/inquiries/completed/productivity-review/report/productivity-review.pdf>

Royal Australasian College of Surgeons (RACS) 2017, *Surgical variance reports*, viewed 1 November 2017, <https://www.surgeons.org/policies-publications/publications/surgical-variance-reports/>

Russell, L & Doggett, J 2015, *Tackling out-of-pocket health care costs. A discussion paper*, Menzies Centre for Health Policy, Centre for Policy Development, viewed 1 November 2017, <http://apo.org.au/node/52434>

Sassi, F & Hurst, L 2008, *The Prevention of Lifestyle-Related Chronic Diseases: An Economic Framework*. OECD Health Working Papers No 32, OECD, Paris, viewed 25 November 2017, <https://www.oecd.org/els/health-systems/40324263.pdf>

Silk, K 2016, *The National Emergency Access Target: aiming for the target but what about the goal?* Deeble Institute Issues Brief no. 16, viewed 1 November 2017, [https://ahha.asn.au/system/files/docs/publications/deeble\\_institute\\_issues\\_brief\\_no.\\_16\\_silk\\_0.pdf](https://ahha.asn.au/system/files/docs/publications/deeble_institute_issues_brief_no._16_silk_0.pdf)

Stephens, C & Erven, J 2015, *Presentation: Developing a National Allied Health Dataset*, Queensland Government Department of Health, viewed 1 November 2017, <http://abfconference.com.au/cms/wp-content/uploads/2015/06/3-1415-Stephens-L2-Thurs.pdf>

Treasury 2015, *2015 Intergenerational report: Australia in 2055*, Australian Government, Canberra, viewed 1 November 2017, <https://treasury.gov.au/publication/2015-intergenerational-report/>

Universities Australia 2017, *Submission: Department of Health Medical Workforce Assessment*, viewed 1 November 2017, <https://www.universitiesaustralia.edu.au/research-innovation-workforce/Research-and-Innovation-Submissions-Reports-and-Studies/Research-Innovation-Workforce-Submissions-Reports-and-Studies>

Vos, T, Carter, R, Barendregt, J, Mihalopoulos, C, Veerman, J, Magnus, A, Cobiac, L, Bertram, M, Wallace, A, ACE–Prevention Team 2010, *Assessing Cost-Effectiveness in Prevention (ACE–Prevention): Final Report*, The University of Queensland, Brisbane & Deakin University, Melbourne, viewed 25 November 2017, [https://public-health.uq.edu.au/files/571/ACE-Prevention\\_final\\_report.pdf](https://public-health.uq.edu.au/files/571/ACE-Prevention_final_report.pdf)

Woods, M 2017, *Australia's Health Workforce: strengthening the education foundation. Independent review of accreditation systems within the National Registration and Accreditation Scheme for health professions*, Australian Health Ministers' Advisory Council, viewed 1 November 2017, [http://www.coaghealthcouncil.gov.au/Portals/0/Accreditation%20Review%20Draft%20Report\\_U.pdf](http://www.coaghealthcouncil.gov.au/Portals/0/Accreditation%20Review%20Draft%20Report_U.pdf)

World Economic Forum (WEF) in collaboration with the Boston Consulting Group 2016, *Value in healthcare – laying the foundation for health system transformation*, World Economic Forum, Geneva, viewed 1 November 2017, [http://www3.weforum.org/docs/WEF\\_Insight\\_Report\\_Value\\_Healthcare\\_Laying\\_Foundation.pdf](http://www3.weforum.org/docs/WEF_Insight_Report_Value_Healthcare_Laying_Foundation.pdf)

World Health Organization (WHO) 2013, *Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020*, World Health Organization, Geneva, viewed 25 November 2017, <http://www.who.int/nmh/publications/ncd-action-plan/en/>

World Health Organization (WHO) 2014a, *Health in all policies: Helsinki statement. Framework for country action*, WHO, Geneva, viewed 1 November 2017, <http://www.ngos4healthpromotion.net/wordpress4hp/wp-content/uploads/2016/11/helsinki.pdf>

World Health Organization (WHO) 2014b, *The Case For Investing In Public Health - Strengthening Public Health Services and Capacity: A Key Pillar of the Europe Regional Health Policy Framework*, Health 2020, WHO, Geneva, viewed 25 November 2017, <http://www.euro.who.int/en/health-topics/Health-systems/public-health-services/publications/2015/the-case-for-investing-in-public-health>



