

**National Framework  
for Health Systems  
Improvement and  
Sustainability 2018:**  
**delivering effective and  
sustainable health care  
for all Australians**



**AHRA**



AUSTRALIAN HEALTH  
RESEARCH ALLIANCE

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# Foreword

The formation of the Australian Health Research Alliance (AHRA) in 2017 has facilitated the development of effective linkages between AHRA centres, their partners and other key organisations in the Australian healthcare sector. The alliance has explored ways in which Australia's Advanced Health Research and Translation Centres and Centres for Innovation in Regional Health can work together to advance health services research and the translation of knowledge into improved Australian health care.

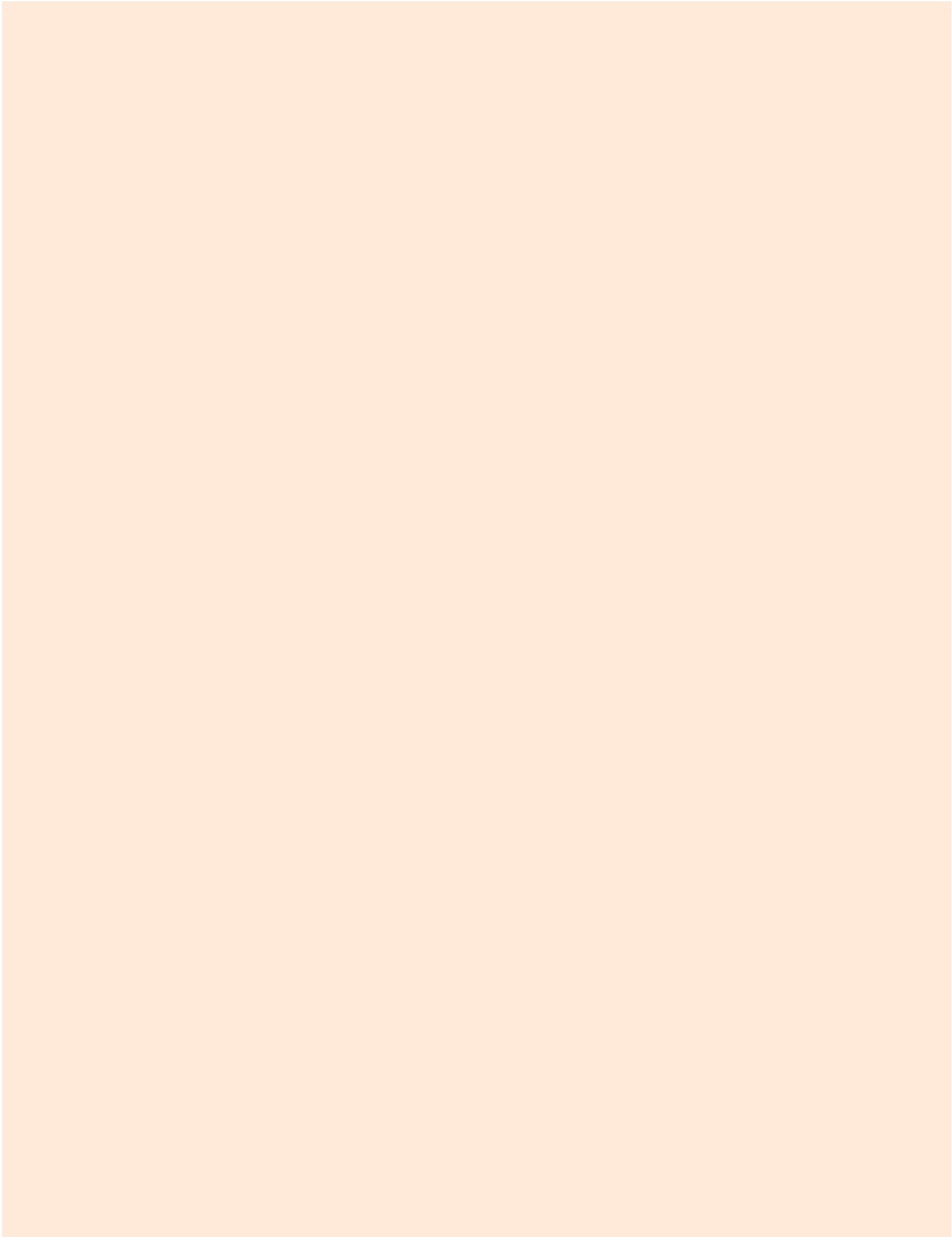
We now have an opportunity to make a major contribution to addressing two of the largest challenges currently facing Australian health care: health systems improvement and sustainability.

The National Framework for Health Systems Improvement and Sustainability outlines how we can harness the best Australian expertise and skills to develop the workforce and practical models and methods needed to improve Australia's healthcare system and make it sustainable. It is designed to guide future AHRA research, translation and collaboration.

We have developed the framework as one of the AHRA National Systems-Level Initiatives, with support from the Australian Government Department of Health and the Medical Research Future Fund. We have drawn on the expertise of AHRA partners and many external stakeholders to ensure the framework is based on sound evidence, is fit for purpose, and will make a real difference to Australian health care both now and into the future.

We are pleased to present this framework on behalf of AHRA, and commend it to the attention of the Australian Government and the Australian health care, research, education and consumer communities.

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# Executive summary

The Australian Health Research Alliance (AHRA), in collaboration with the healthcare sector and government agencies, has developed the *National Framework for Health Systems Improvement and Sustainability 2018*. The framework is one of the National Systems-Level Initiatives supported by the Australian Government Department of Health with funding from the Medical Research Future Fund (MRFF). It is designed to guide future AHRA research, translation and collaboration.

Internationally, Australia performs strongly in health and economic indicators. But we can do better. Greater consumer focus, greater coordination across the continuum of health care, better workforce skills and better funding models will allow us to deliver the best possible care in a sustainable system.

The framework addresses the challenges facing Australia in the critical areas of health systems improvement and sustainability: the unwarranted variations in the safety and quality of care delivered by Australia's healthcare systems, and the increasing pressures on healthcare budgets. AHRA research and consultations identified key drivers, building blocks, models and methods that will be required to deliver improved and sustainable health systems for the Australian community. These form the basis of the framework, in which 11 recommendations address the areas of need. These recommendations have been made based on the potential impact of the task, and the capacity of AHRA, partners and further collaborations to achieve the task. The framework is designed to provide a sound structure and roadmap with the flexibility to deliver practical results, both now and into the future.

## **Driver – collaboration**

The key recommendation in the framework is the development of a National Network for Health Systems Improvement and Sustainability. AHRA has built an effective partnership between members that is delivering valuable research outcomes. The AHRA National Network will build on this partnership to bring together the essential players in healthcare systems improvement – health service researchers, clinicians, managers, educators, consumer organisations and government departments and agencies. The network will not seek to duplicate existing work, but rather address identified gaps and needs, and build collaborations and synergies that will allow Australia to leverage current investment and expertise to drive change. Using the AHRA partnership as a strong hub, the AHRA National Network will be a virtual network of key players supported by effective communication and program structures.

## **Building blocks – resources and workforce**

Internationally and in Australia, the increasing cost of health care has seen funding models moving towards value-based care, focused on patient outcomes and cost-effectiveness. The AHRA National Network will explore models to support the development of a value-based care model for Australia.

A focus on patient outcomes and quality improvement also means that healthcare services need to be able to implement best-evidence practice, and compare and improve models by measuring clinical outcomes and cost-effectiveness. Embedding knowledge translation and implementation skills in all healthcare services will be essential to support change. The network will work with education providers, in consultation with health services, to develop a national approach to implementation science and knowledge translation training.

## **Models and methods – best practice**

Effective models and methods translate the best available evidence into practice. To improve the Australian healthcare system, it is important that we can accurately identify which models of care are effective and that these models can be implemented in various settings. The AHRA National Network will build on existing work by AHRA and others to develop and adapt models and methods to be used at the local level to evaluate models for comparative clinical effectiveness and cost-effectiveness, and to facilitate implementation of best-evidence practice. The network will develop and adapt models and methods to reduce unwarranted clinical variation and increase coordination between different levels of health care.

## Framework and recommendations

The framework is built upon a sound knowledge of the structure and needs of the Australian healthcare system, and the capacity of the AHRA partnerships and extended AHRA National Network to deliver change. AHRA has prioritised the recommendations as short (1–2 years), medium (3–5 years) or long (10 years) term. While the AHRA National Network is being established (Recommendation 1.1), initial work will use existing AHRA research to progress Recommendations 4.1–4.4. The framework provides broad target areas for research and research translation, and activities within each recommendation can be updated as the healthcare landscape changes. The short-term recommendations will be achieved with existing MRFF funds, and AHRA will develop a business case to support future additional recommendations.



Framework	Recommendations
<b>Driver – collaboration</b>	<p><b>Recommendation 1.1</b> – That AHRA establishes a National Network for Health Systems Improvement and Sustainability, in partnership with healthcare system, research, education and consumer organisations; Australian, state and territory governments; and relevant government agencies</p> <p><b>Recommendation 1.2</b> – That the AHRA National Network develops and embeds evidence-based linkages, pathways and strategies to facilitate health systems research, knowledge dissemination and adoption of best-evidence practice at all levels of healthcare delivery and in the community</p>
<b>Building block – resources</b>	<p><b>Recommendation 2.1</b> – That the AHRA National Network investigates and evaluates the economic and clinical effectiveness of new funding models to support integrated and sustainable health care for all Australians</p> <p><b>Recommendation 2.2</b> – That the AHRA National Network develops a business case to support funding for capacity and capability building in health systems research, the evaluation of models of care and implementation of change at the local level of healthcare delivery</p>
<b>Building block – workforce</b>	<p><b>Recommendation 3.1</b> – That the AHRA National Network works with universities, professional colleges and societies, and other education providers to develop a national curriculum in clinical practice improvement</p> <p><b>Recommendation 3.2</b> – That the AHRA National Network works in partnership to develop or adapt professional training modules in clinical services evaluation and improvement, and knowledge translation and implementation; and works with national professional bodies to ensure that this training is required in ongoing professional development</p>
<b>Models and methods – best practice</b>	<p><b>Recommendation 4.1</b> – That the AHRA National Network develops and adapts models and methods to evaluate health systems, and assess effectiveness, efficiency and cost-effectiveness of existing and new models of care</p> <p><b>Recommendation 4.2</b> – That the AHRA National Network develops and adapts models and methods to optimise knowledge translation, scale-up, implementation, adoption and diffusion of best-evidence practice</p> <p><b>Recommendation 4.3</b> – That the AHRA National Network develops and adapts models and methods to reduce unwarranted clinical variation</p> <p><b>Recommendation 4.4</b> – That the AHRA National Network develops and adapts models and methods to coordinate care between primary and acute healthcare services</p> <p><b>Recommendation 4.5</b> – That the AHRA National Network investigates the enablers of, and barriers to, the use of clinical guidelines and clinical registries, and develops and adapts models and methods to ensure their effective integration with health service delivery</p>

# The challenge – improvement and sustainability

Excellence in health care has two key components: the treatment and care provided to patients, and the systems and processes that support and enable the delivery of that treatment and care.

Australia has world-class researchers in health. However, health research is often focused on treatment and care, rather than on the healthcare systems. There is no nationally agreed framework guiding health services and systems research, and the translation of knowledge to drive sustainable health systems improvement. This improvement would include:

- optimising clinical pathways and care across the continuum of health services
- addressing clinical variation
- improving safety and quality of care
- evaluating the clinical, economic and social impact of new models of care
- disinvesting in low-value care.

AHRA has identified key areas of need in the Australian healthcare research landscape, and in healthcare systems improvement and sustainability. Addressing these areas of need will be essential to building a better, sustainable healthcare system for Australia.

## Collaboration

Healthcare research is often seen as a discipline that sits outside of healthcare delivery. Research funnels information to healthcare providers, but it generally sits in a separate space, and there is often little cross-fertilisation of ideas and feedback between academia and healthcare providers.

Additionally, many organisations that are developing knowledge or successful programs – in the healthcare delivery, research or education sectors – act within a silo. Learnings are not shared across similar organisations or between different sectors.

Both of these factors hamper the advancement and translation of knowledge to drive health systems improvement. Research and development efforts are also not leveraged through collaboration to ensure the best use of health resources.

In 2013, the McKeon Strategic Review of Health and Medical Research<sup>1</sup> identified the need to establish organised partnerships between the healthcare delivery and academic sectors. The concept was developed and endorsed by the Australian Government, with performance criteria and accreditation established by the National Health and Medical Research Council. Seven Advanced Health Research and Translation Centres and two Centres for Innovation in Regional Health – now brought together in AHRA – have been established since 2015.

## Resources

The Australian healthcare system is one of the world's most advanced, high-performing and well-funded systems. There is, however, increasing pressure on healthcare budgets. A 2018 report into Australia's health found that 'spending on health has grown by about 50 per cent in real terms over the past decade, from \$113 billion (\$5500 per person) in 2006–07 to \$170 billion (\$7100 per person) in 2015–16. This compares with population growth of about 17 per cent over the same period'.<sup>2</sup>

This increasing pressure comes from both growth in the demand on service delivery and increasing direct costs of service provision. Australia's growing and ageing population is increasing the demand on services. At the same time, advances in treatment and care can occur often without a rigorous assessment of the net health economic benefit. There are now concerns that, if healthcare expenditure continues to escalate at current rates, advances of major benefit to individuals and populations will not be able to be implemented because of budget constraints.

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1 McKeon S, Alexander E, Brodaty H, Ferris B, Frazer I, Little M (2013). *Strategic review of health and medical research in Australia: better health through research – summary report*, Australian Government Department of Health and Ageing, Canberra.

2 Australian Institute of Health and Welfare (2018). *Australia's health 2018*, AIHW, Canberra.

## Workforce

The healthcare workforce is under pressure from high workloads and competing priorities. These pressures can often create a barrier to effective clinical change and improvement.

AHRA's research found that improvement in clinical practice required management awareness and support; clinician empowerment, engagement and leadership; and collaboration between the academic health systems research sector and the clinical care delivery sector. In particular, it found that a trained workforce embedded within the healthcare delivery sector was critical to effective change. Training is needed to engage health service management and clinicians, and to provide skills in critical evaluation of evidence, comparative effectiveness research, knowledge translation and implementation, change management, and continuous systems improvement. Ongoing support through professional development and interprofessional collaborative practice then creates the best possible environment for long-term sustainable change.

## Best practice

Australian health care aims to provide best-practice care to all Australians, but there is still substantial variation in care between advantaged and disadvantaged groups, and between metropolitan, regional and remote areas. Much of this variation is considered to be unwarranted.<sup>3</sup>

AHRA's research found that there are pockets and silos of excellence in clinical improvement throughout Australia. But it also found that there is little to no capacity to expand, translate, scale-up and implement these programs more widely. Several Australian groups are researching translation and implementation, and their work is providing invaluable knowledge that can be applied nationally to address the challenge. The AHRA collaboration is well placed to drive this national change.

AHRA's research identified environmental requirements for clinical practice improvement, including:

- effective governance structures and frameworks for change, including resources for assessment and evaluation on multiple levels (clinical, social and economic indicators)
- stronger systems to support, empower and enable the conduct of research and quality improvement within healthcare organisations
- appropriate organisational engagement, culture and language to support change
- access to clinical guidelines and quality data from clinical registries, electronic medical records and other data frameworks
- regulation through models of external accreditation
- incentives, including financial
- broad stakeholder engagement.

In developing the framework, AHRA has identified areas where it is well placed to contribute to the development of some of these environmental enablers.

AHRA found that there was limited research in Australia on health systems evaluation and assessing new models of care. It also found that health services at the local level did not integrate monitoring and assessment of the implementation of models of care in their practice. Encouragingly, AHRA found that senior health executives wanted timely evaluations of clinical, economic and social indicators to support their decision-making around changing models of care and disinvesting in low-value care. This provides an excellent opportunity for AHRA to lead the development of effective, integrated assessment in healthcare delivery.

It is important to support and enable the healthcare system to measure outcomes and improve models of care to deliver excellent quality care at all levels with greater efficiency and effectiveness. The 2018 *Heads of Government Agreement between the Commonwealth and the states and territories on public hospital funding and health reform* includes funding based on healthcare reforms that deliver improved outcomes and quality of life.

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3 Australian Commission on Safety and Quality in Health Care (2017). *The Australian atlas of healthcare variation*, ACSQHC, Sydney.

# Background – the players and process

The Australian healthcare system supports and protects the health of Australians through a wide range of services, from population health and prevention through to general practice and community health; specialist care in private practice; emergency health services and hospital care; and rehabilitation, aged care and palliative care.

Healthcare research within Australia and worldwide is continually delivering innovations in prevention, treatment and care. Yet Australia currently lacks a national framework for health services research and its translation to drive health systems improvement. There are still gaps in the services and unwarranted variation in care. With the continuing rise in healthcare costs, the sustainability of Australia's healthcare system is an increasing concern.

The formation of AHRA provides a unique opportunity to support, enable and drive a new national partnership approach to support and enable healthcare systems improvement and sustainability.

## Australian Health Research Alliance

AHRA was formed in 2017 as a collaboration between:

- Advanced Health Research and Translation Centres (AHRTCs), accredited by the National Health and Medical Research Council (NHMRC)
  - Brisbane Diamantina Health Partners
  - Maridulu Budyari Gumal – The Sydney Partnership for Health, Education, Research and Enterprise (SPHERE)
  - Melbourne Academic Centre for Health
  - Monash Partners Academic Health Science Centre
  - Health Translation South Australia
  - Sydney Health Partners
  - Western Australian Health Translation Network
- Centres for Innovation in Regional Health (CIRHs), accredited by the NHMRC
  - Central Australia Academic Health Science Network
  - NSW Regional Health Partners.

AHRTCs are metropolitan and state centres undertaking research into health service improvement. CIRHs are regional partnerships focusing on improving the regional, rural and remote health services of Australia. Every centre aims to deliver health research, translation and professional education that addresses diverse and complex health challenges. They have established programs and activities to accelerate the translation of research findings into improved health care.

The role of AHRA is to undertake research and research translation. Building on the work of each centre, AHRA provides a unique national, integrated, systems-level platform for collaboration, communication and translational research.

AHRA membership currently covers 75 per cent of health services nationally and more than 90 per cent of health and medical researchers funded by the NHMRC. The AHRA centres are healthcare led and provide a purpose-built platform to connect with both the frontline management of healthcare services and the clinicians delivering care.

## Australian Health Research Alliance initiatives

In 2017, AHRA proposed a set of national initiatives to the Australian Government Department of Health. The initiatives addressed important strategic priorities within the Medical Research Future Fund (MRFF), and were designed to be focal points to which all nine centres could contribute. The AHRA initiatives were awarded MRFF funding as a suite of National Systems-Level Initiatives.

The four 2018 AHRA national initiatives are to:

- develop a national framework for health systems improvement and sustainability
- build capacity in data-driven healthcare improvement
- build workforce capacity in Indigenous health research and translation
- engage consumers and the community in health research.

This document is the result of the first initiative. AHRA recognises that there will be multiple areas of overlap, and mutual activity and support between the four national initiatives. The AHRA Council and steering committees will work together to link and harmonise relevant areas and approaches to progressing recommendations from the four initiatives.

## Development of the national framework

The *National Framework for Health Systems Improvement and Sustainability 2018* is an AHRA policy document that promotes and empowers a new approach for working together as a national partnership to improve healthcare systems and sustainability. The framework will guide future work by AHRTCs and CIRHs in AHRA, and will also guide additional collaborations and projects aimed at improving Australian healthcare systems and sustainability.

The framework sets a platform for detailed strategy development in areas where collaboration is likely to achieve best-evidence and value-based health care, along with continuous quality improvement. It is also designed to provide a potential mechanism for coordinated action at national, state, regional and local levels. This will enable a more harmonised approach to healthcare systems evaluation, improvement and sustainability. The framework is adaptable as healthcare delivery changes over time.

The framework has been developed in three stages. Documents that provide the underpinning background reviews and consultations are available in a separate volume, including the following reports from the working groups:

- *Health services research and evidence synthesis and education/dissemination – highlights of the process*
- *Unwarranted clinical variation and strategies to address variation – an assessment of the literature (2014–18)*
- *Enabling clinician involvement in clinical practice improvement – an examination of the literature*
- *A literature review of assessment of emerging health technologies and models of care*
- *The local level evaluation of health care in Australia.*

## Stage 1

In stage 1, three working groups of representatives from AHRA organisations researched an area of identified healthcare improvement need. The working groups conducted literature reviews of journals, grey literature and electronic databases to identify the state of current national and international knowledge and existing gaps. They also conducted interviews with key working group members, health service leaders (including health executives and government policy-makers) across Australia, and international experts. They developed consensus recommendations based on their research and discussions.

Working Group 1 looked at health services research and evidence synthesis, and education and dissemination of knowledge. Its objectives were to:

- identify key opportunities to develop national systems-level strategies to improve health
- undertake a systematic review of current health services research and activity
- identify gaps where new knowledge is needed in health systems improvement and sustainability
- recommend priority-driven research in these areas
- identify strategies for best-evidence dissemination and education
- identify strategies for improved implementation and knowledge translation.

Working Group 2 looked at clinical variation and clinical practice improvement. Its objectives were to identify mechanisms to:

- enable and empower clinicians to be more involved and exert greater influence in clinical practice improvement
- enable and empower health services management to facilitate clinical practice improvement
- align purpose and action between management and clinicians for clinical practice improvement
- identify, communicate, address and better manage unwarranted clinical variation.

Working Group 3 looked at health systems evaluation and the assessment of new models of care. Its objectives were to review and report evidence on:

- appropriate models for evaluation of systems or new models of care at a local level
- gaps in the current healthcare environment for evaluation of systems of care
- strategies that could be applied in the Australian setting to evaluate systems and technology.



## Stage 2

In stage 2, representatives from the working groups and other relevant organisations came together for a face-to-face consultation in July 2018. The facilitated workshop, which included representatives from all AHRA centres, explored the working groups' drafted recommendations to determine their priority for implementation.

Decision-making about the priorities was based on:

- the potential benefits and impact of the recommendations
- the cost-effectiveness of the potential outcomes
- how AHRA could add value to the work
- how the work complemented existing work within AHRA and within Australia.

The consultation discussions and workshop outcomes were used to draft this framework document.

## Stage 3

In stage 3, the draft framework document was circulated throughout AHRA and other relevant organisations for feedback, before seeking further engagement and refinement in a wider consultation process.

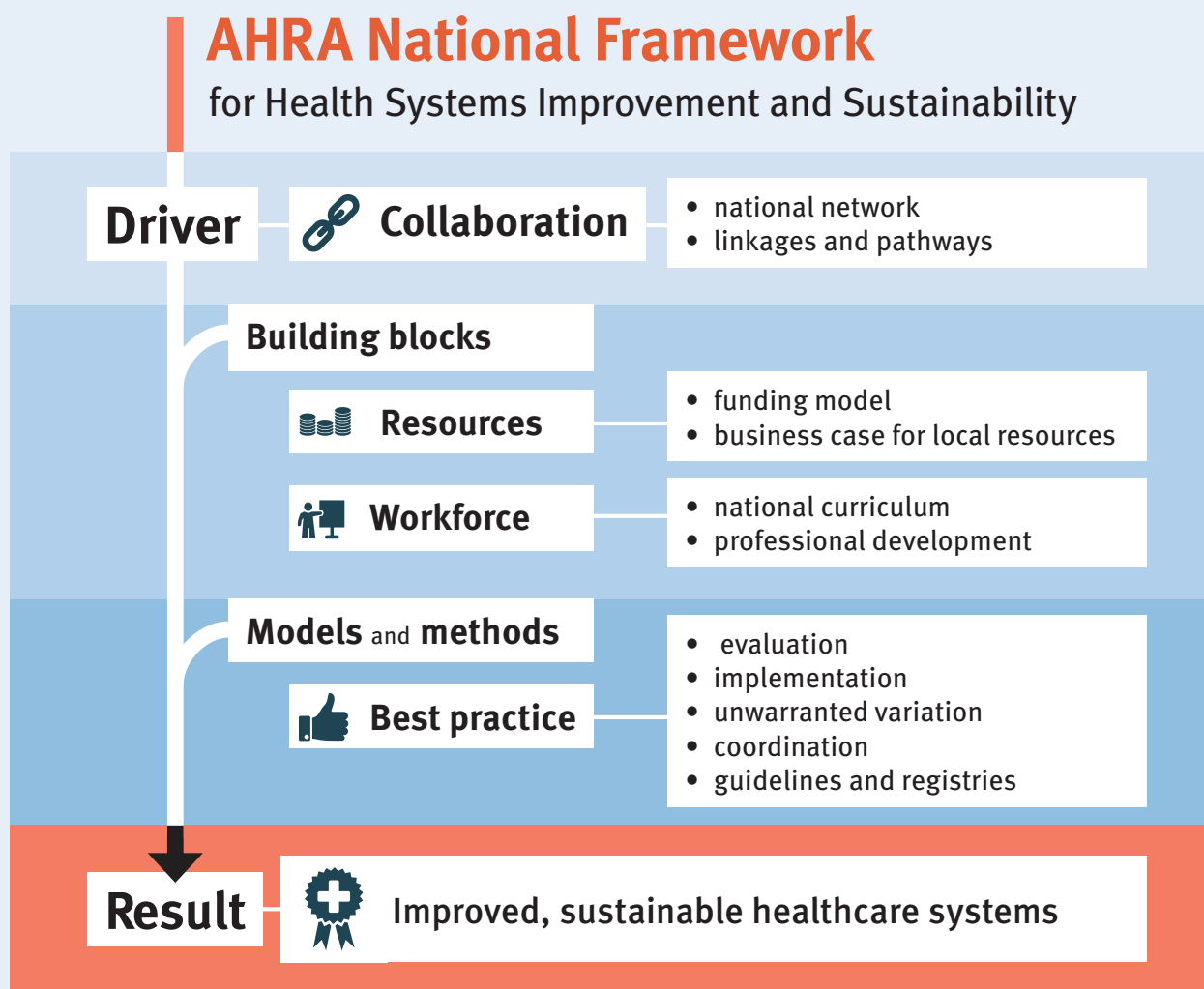
The final framework was endorsed by AHRA before presentation at the NHMRC Translational Symposium in November 2018.

# The framework – collaboration and impact

*The National Framework for Health Systems Improvement and Sustainability 2018* provides a unique opportunity to develop new approaches to improve Australia's health systems and make them sustainable through collaboration between healthcare delivery, research, education and consumer organisations, and healthcare policy-makers.

The framework addresses the challenges in delivering effective and sustainable care for all Australians. It is built around the drivers, building blocks, models and methods that AHRA and other stakeholders have identified as critical to achieving change in systems performance, models of care, clinical pathways and better patient outcomes (Figure 1):

- **Driver – collaboration.** The fundamental engine driving change will be collaboration between all the key groups involved in healthcare delivery, research and education, including consumer and community organisations.
- **Building blocks – resources and workforce.** The Australian healthcare system has two key building blocks to service delivery: the resources that support treatment and care, including funding at national and local levels; and the workforce that delivers the services and effects change.
- **Models and methods – best practice.** The delivery of best-practice health services will depend on the development and evaluation of new models and methods based on the best available evidence.



**Figure 1 National Framework for Health Systems Improvement and Sustainability**

The framework provides a set of 11 recommendations to inform the improvement of health care through applied research translation and implementation of current knowledge into practice.

The work will cover health systems research, knowledge synthesis, knowledge translation and continuous systems improvement. Work within the framework includes a focus on the MRFF priority areas of:

- clinical pathways and care across the continuum of health care
- clinical variation
- safety and quality of care
- evaluating the clinical, economic and social impact of new models of care.

The initial recommendations in the framework have been developed around the current identified needs. The framework has been designed to provide a robust structure that will allow AHRA to adjust and add new actions to the framework as progress is made and the landscape changes.

# 1 Driver – collaboration

## Recommendation 1.1

That AHRA establishes a National Network for Health Systems Improvement and Sustainability, in partnership with healthcare system, research, education and consumer organisations; national, state and territory governments; and relevant government agencies

The AHRA National Network forms the fundamental basis of the *National Framework for Health Systems Improvement and Sustainability 2018*. It is the engine room of change, delivering the essential components of improved, sustainable healthcare systems.

Using the AHRA partnership as a strong base, the AHRA National Network will be a virtual network of excellence, bringing together key players with effective communication and programmatic structures. AHRA will provide leadership to the network to ensure progress on the programs and national implementation of outcomes.

The **vision of the AHRA National Network** is an Australian healthcare system that delivers best-practice, value-based, sustainable health care.

The **mission of the AHRA National Network** is to form effective national collaborations between healthcare providers, researchers, educators, consumers and governments to leverage existing research and development, and develop the building blocks, models and methods needed to deliver improved, sustainable healthcare systems.

## Partnership

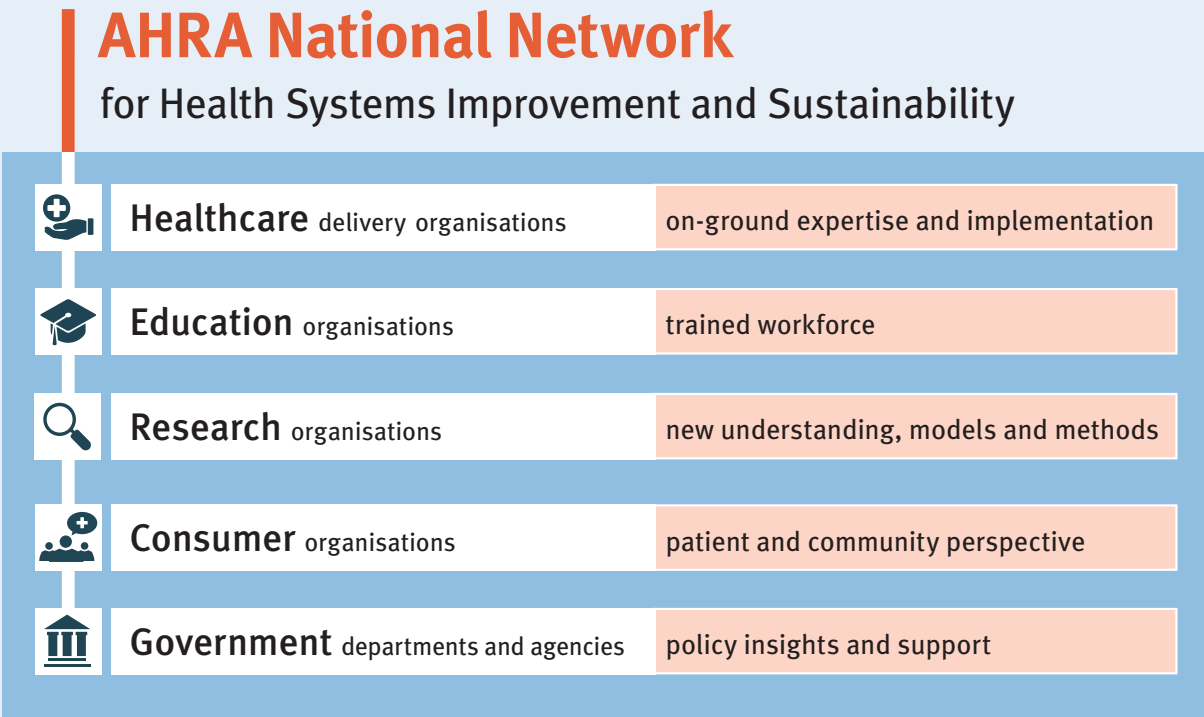
AHRA has brought together nine major partnerships of academic and healthcare organisations that represent a large proportion of the Australian research and healthcare landscape. AHRA has built a sound partnership that is already developing and delivering important insights for Australian health care. The AHRA partnership will grow with the addition of future centres and new centre partners.

This successful partnership provides an opportunity to build and expand on both the collaboration and the work. For real change to be achieved in health system improvement and sustainability, further inclusivity, connectivity and reach will be needed. To ensure the integration and alignment of AHRA research outcomes with the Australian healthcare system, we will need to work with stakeholders at all levels and from a wider range of disciplines.

The AHRA National Network will draw on the best Australian expertise, from inside and outside its existing partnerships, to form an effective network of key players in transformative fields that can guide system change (Figure 2), including:

- healthcare delivery organisations bringing a deep knowledge of their experience and requirements on the ground for change, and effective pathways and processes that will facilitate implementation of change
- education organisations providing links to the healthcare workforce, and delivering essential professional development skills and interdisciplinary knowledge to system change
- research organisations developing new understanding, models and methods, and bringing academic rigour to the delivery of change in healthcare systems
- consumer and community organisations bringing a unique perspective and input to research direction and adoption of outcomes
- government departments and agencies providing policy insights, support mechanisms and resources for rapidly implementing new knowledge broadly across their jurisdictions.

There are various governance models that could be applicable for the network, and AHRA will establish a leadership team and relevant model in consultation with members.



**Figure 2 AHRA National Network for Health Systems Improvement and Sustainability**



## Synergy

The AHRA National Network will seek to support partners and build on existing activities, rather than duplicate or replace current work. Organisations throughout Australia are conducting valuable research, running effective health systems research programs, and testing new models and methods of care. The network will:

- act as a catalyst to bring together organisations and projects in productive collaborations
- build on existing work to expand its scope and influence
- build on existing work to adapt it to national or local needs
- identify gaps in existing work and help to fill these through research and collaboration.

The AHRA partnership is ideally placed to act as the base for a National Network for Health Systems Improvement and Sustainability. AHRA has developed strong partnerships between member AHRTCs and CIRHs, and the network will capitalise on the existing investment and work of AHRA. It will also facilitate stronger connections between system-funded and research-funded initiatives, and between research and improvement.

## Action

The AHRA National Network will develop collaborations to implement programs and activities under the *National Framework for Health Systems Improvement and Sustainability 2018* (see Recommendations 2.1 to 4.5). In each program, the network will scope existing work in Australia to ensure that efforts are not duplicated, that major opportunities for delivering improvements are identified, and that the best evidence and experience are used. The network's collaborative approach will also seek to build synergies between programs to maximise their impact.

The network will use existing funds to support short-term projects, and develop business cases for funds to support additional work within AHRA and by network collaborators (see 'Next steps – short and long term').

The AHRA National Network will also work with and support the other AHRA national initiatives to leverage their outcomes. The perspective and learnings from the other three initiatives – in data, Indigenous health, and consumers and the community – will be essential in the network's work to drive health systems improvement and sustainability.

The network will provide a unique opportunity to drive change in Australia. It will also provide an opportunity for greater collaboration and influence internationally.

## Recommendation 1.2

That the AHRA National Network develops and embeds evidence-based linkages, pathways and strategies to facilitate health systems research, knowledge dissemination and adoption of best-evidence practice at all levels of healthcare delivery and in the community

For research from the AHRA National Network to have a real effect in Australian health care, it will be important to ensure that research outputs have a pathway to implementation.

The AHRA National Network will explore existing pathways to determine their effectiveness, and how they could be improved to accelerate translation of evidence into practice and ongoing systems improvement. For example, the HealthPathway<sup>4</sup> Communities have been well used to support best-evidence dissemination in some areas, but less so in others. By understanding the factors that support uptake and success, the network can help to improve the performance of effective implementation and support models.

The AHRA National Network will also explore new pathways, and develop models and methods for knowledge dissemination and adoption of best-evidence practice at different levels of the health service continuum (see also Recommendation 4.2). It will be particularly important to explore and develop pathways in different types of healthcare services, and in metropolitan, regional and remote areas. For example, network members will work with primary care services and networks, and Aboriginal Medical Services to explore ways to implement new knowledge in primary care settings; and will work with state and territory health agencies to facilitate the implementation of new knowledge in health services to ensure that change is sustained over the longer term.

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4 HealthPathways is an online manual used by clinicians to help make assessment, management and specialist request decisions. HealthPathway Communities implement, localise and evaluate HealthPathways in their region.

## 2 Building block –resources

### Recommendation 2.1

That the AHRA National Network investigates and evaluates the economic and clinical effectiveness of new funding models to support integrated and sustainable health care for all Australians

The World Health Organization defines integrated care as ‘the organization and management of health services so that people get the care they need, when they need it, in ways that are user-friendly, achieve the desired results and provide value for money’.<sup>5</sup> Integrated care aims to coordinate services to deliver seamless and comprehensive care for patients and the community across the healthcare continuum.

As highlighted earlier, there is increasing pressure on healthcare budgets. At the same time, existing funding models in Australia, which are mainly service-based funding models, impede integrated care. In contrast, many countries are beginning to adopt a ‘value-based’ approach to health care. Value-based health care is a model in which providers are paid based on patient health outcomes, rather than on the number of healthcare services they deliver.

Developing and evaluating new healthcare funding models will be essential to ensure that the Australian healthcare system is sustainable and accessible to all. New funding models based on indicators of quality can also support the better integration of care and the way health care will be delivered in the future.<sup>6,7</sup> For example, it may be valuable to explore and test funding models that expand the role of primary care as an accountable home for all health care, such as Health Care Homes.<sup>8</sup>

The development of new healthcare funding models is an active area for the Australian Government. The AHRA National Network is well positioned to contribute to this work through investigation and evaluation, drawing on network members’ expertise in health economics and other relevant areas, and through consultation with state and territory health departments.

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5 World Health Organization (2008). *Integrated health services – what and why?* WHO, Geneva.

6 Pricewaterhouse Coopers (2018). *Funding for value*, PwC, Sydney.

7 Australian Healthcare and Hospitals Association (2017). *Volume to value: strategies for outcomes-focused and value-based health care – a blueprint for a post-2020 national health agreement*. AHHA, Canberra.

8 A Health Care Home is a general practice or Aboriginal Community Controlled Health Service that coordinates care for patients with chronic and complex conditions.

## Recommendation 2.2

That the AHRA National Network develops a business case to support funding for capacity and capability building in health systems research, the evaluation of models of care and implementation of change at the local level of healthcare delivery

AHRA's research found that health services at the local level did not routinely assess their models of care and make adaptations based on these evaluations, even though health executives identified this as a need. There was also little monitoring and evaluation once a new model of care was introduced, meaning that it was often unknown whether promised patient outcomes materialised. The research also found that there was limited capacity to implement clinical improvement programs and processes at the local level.

An increase in evaluation and implementation resources – including skilled staff – at the local level will support the sustainable integration of evaluation and implementation into health services decision-making. It will also improve timely changes in on-ground processes. The AHRA National Network will develop a business case involving net cost–benefit analysis to present to the Australian and state and territory governments to support funding for these resources across Australian health services.

## 3 Building block – workforce

### Recommendation 3.1

That the AHRA National Network works with universities, professional colleges and societies, and other education providers to develop a national curriculum in clinical practice improvement

With any change to healthcare models or processes, it is the healthcare workforce that will need to be equipped with the knowledge and skills to implement change, monitor improvement and ensure sustained benefit within their own local context. This knowledge and skills are not just needed for clinical staff, but also for managers, executives and administrators.

The workforce has to be able to:

- plan and conduct evaluations of health technologies and models of care
- provide decision-makers in health services with appropriately communicated information to inform their decisions
- advise on the implementation of evidence-based decisions
- implement and manage change
- monitor and assess the impact of changes, and feed this information back to enable adaptive management.

AHRA's research has found that the healthcare workforce has a limited capacity to assess models of care on a multifactorial level (clinical, social and economic impact). There are individual and local examples of appropriate skill levels, but these vary significantly across the Australian health sector. There are state and local examples of training in these skills, including non-accredited training courses offered by the states and territories, but there is no coordinated national framework for education in this area.

To provide this capacity, the Australian healthcare system needs to address the current gaps in accredited education and training relevant to evaluation of models of care, implementation of knowledge translation and continuous clinical practice improvement. The AHRA National Network will work with relevant education and professional training organisations, and state and territory health departments, to develop an effective national accredited curriculum to increase the skills in these areas and ensure that a skilled workforce is available for all healthcare services. The curriculum will focus on developing relevant skills and instilling an evidence-based culture in clinical practice. It will be informed by health service needs and could be based on existing courses.

This national approach to training will have a real on-ground impact in the implementation of new models of care and removal of low-value care to improve healthcare services and patient outcomes.

### Recommendation 3.2

That the AHRA National Network works in partnership to develop or adapt professional training modules in clinical services evaluation and improvement, and knowledge translation and implementation; and works with national professional bodies to ensure that this training is required in ongoing professional development

Ongoing professional development is a requirement for Australian health professionals. Professional development in clinical practice improvement will complement the national curriculum. It will help to develop the workforce resources that Australia needs by providing more immediate training while the national curriculum is developed. It will also help to embed evaluation of models of care and implementation of new knowledge within clinical practice at a local level, by supporting interprofessional collaborative processes and practice.

Working with education providers, professional bodies, other accreditation bodies, and state and territory health departments, the AHRA National Network will help to develop, adapt and disseminate training modules at the postgraduate level for both clinicians and health service managers.



## 4 Models and methods – best practice

### Recommendation 4.1

That the AHRA National Network develops and adapts models and methods to evaluate health systems, and assess effectiveness, efficiency and cost-effectiveness of existing and new models of care

Traditionally, evaluation has been a process that has taken place at the end of a project – a new system was developed, trialled and then assessed to see whether it worked.

A more effective model embeds evaluation throughout the development of models of care. Feedback loops throughout the process mean that projects are not implemented and then evaluated, but continuously evaluated and adjusted. This saves resources by making new models as effective as possible, as quickly as possible. It also means that models that are not working can be identified and either changed or discontinued early.

The AHRA National Network will develop methods for systems evaluation, and assessing existing and new models of care. The work will scope, build on, evaluate and adapt existing methods, and also use best-evidence research to develop new methods. The models will incorporate social and economic indicators, as well as the traditional clinical indicators, to provide information on comparative effectiveness and cost-effectiveness of models. This will ensure that decision-makers have all the evidence they need to make timely decisions to change models of care or disinvest in low-value care.

The network will also develop flexible guidelines to ensure that the methods can be implemented at a local level and to suit the local context. Embedding evaluation models at the local level will be critical to implementation success and effective use of resources.

## Recommendation 4.2

That the AHRA National Network develops and adapts models and methods to optimise knowledge translation, scale-up, implementation, adoption and diffusion of best-evidence practice

There are many excellent examples of clinical practice improvement throughout Australian health care, in various settings. It is important that the healthcare system capitalises on this work by translation and scaling up to other settings and to the wider national context. This makes the most of health resources and ensures that the learnings from successful programs and sectors are captured and built on.

Scale-up and implementation is a strong area of research in Australia, in both health care and other sectors. However, this research has had limited impact on the delivery of healthcare services. Linking research with health service delivery organisations will help to ensure that research is translated to practice. It will also mean that on-ground perspectives are used to inform the local development and implementation of effective models, methods and tools. The clinical partners that support AHRA make AHRA uniquely able to do this.

Despite international development in this research area, the Australian evidence is relatively limited. The AHRA National Network will expand research capacity in health systems research in Australia. It will address the current gap in knowledge translation and scale-up by developing new understandings about how change happens, scoping existing methods, and developing, testing and adapting methods that will be applicable to Australia's varied healthcare settings.

This work will link with Recommendations 3.1 and 3.2, which focus on developing the workforce capacity in these areas.

Effective evaluation (Recommendation 4.1) and translation (Recommendation 4.2) will support the application and deployment of the other models and methods that will be developed in this section of the framework. The AHRA National Network is the only organisation with the requisite breadth and depth of expertise, and the connectivity and reach, to dissolve the barriers to effective evaluation and knowledge translation across the Australian healthcare system.

### Recommendation 4.3

That the AHRA National Network develops and adapts models and methods to reduce unwarranted clinical variation

*The second Australian atlas of healthcare variation*<sup>9</sup> found that there are significant local variations in care across all areas of health care, including chronic disease and infection, cardiovascular conditions, women's health and maternity, and surgical interventions. For example, rates of hospitalisation for chronic obstructive pulmonary disease varied 16-fold between local areas.

Unwarranted variations in care reflect poorer health outcomes for many Australians. Investigating the causes of variation, and developing models and methods that are effective at the local level to reduce variation will be key to improving the Australian healthcare system. This work has already commenced in some areas – for example, Choosing Wisely Australia has information and tools to help healthcare providers and consumers make better decisions about care, and eliminate unnecessary and sometimes harmful tests, treatments and procedures.

The AHRA National Network will build on existing work within AHRA and elsewhere to investigate, develop, evaluate and adapt models and methods to address unwarranted clinical variation, to be implemented at the local level. It will work with the national initiative on Indigenous health to examine unwarranted variations in care between many Aboriginal and Torres Strait Islander people and other Australians.

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9 Australian Commission on Safety and Quality in Health Care (2017). *The second Australian atlas of healthcare variation*, ACSQHC, Sydney.

## Recommendation 4.4

That the AHRA National Network develops and adapts models and methods to coordinate care between primary and acute healthcare services

The atlas of healthcare variation<sup>9</sup> also found that ‘a fundamental component of system changes to reduce these potentially preventable hospitalisations must be a shift to a better integrated primary care system, with a stronger role in coordinating care’. The atlas provided an example of a diabetes service in Brisbane that had halved the rate of hospitalisations due to diabetes complications by providing multidisciplinary, integrated primary and secondary care.<sup>10</sup> Strengthening implementation science within primary care generally, and the primary health networks in particular, will be important to coordinate and sustain change.

Some state initiatives have developed models of coordination. The AHRA National Network will scope and build on these models and on existing AHRA work to improve coordination across the continuum of care, particularly between primary and acute services. It will draw on consumer input from consumer organisations in the network, and from the consumer engagement national initiative, to include consumer engagement in value-based coordinated care models.



9 Australian Commission on Safety and Quality in Health Care (2017). *The second Australian atlas of healthcare variation*, ACSQHC, Sydney.

10 Zhang J, Donald M, Baxter KA, Ware RS, Burridge L, Russell AW, Jackson CL (2015). Impact of an integrated model of care on potentially preventable hospitalizations for people with type 2 diabetes mellitus. *Diabetic Medicine* 32:872–80.

## Recommendation 4.5

That the AHRA National Network investigates the enablers of, and barriers to, the use of clinical guidelines and clinical registries, and develops and adapts models and methods to ensure their effective integration with health service delivery

Clinical guidelines based on best-practice evidence are an important way in which clinical care is improved and standardised. Yet, in some cases, the use and impact of guidelines can be low. Agencies in Australia commonly invest considerable time and energy in developing and revising guidelines, including good stakeholder consultation, but comparatively little to support implementation and evaluation.

Research into how to increase the use of guidelines, and how to ensure that they are kept current through systematic reviews, will be important to reducing unwarranted variations in care. The AHRA National Network will build on existing guideline standards established by the NHMRC to explore and improve how people use and update guidelines.

Clinical registries collect data on quality and outcomes of health care for specific populations or purposes. They are potentially a very powerful tool for change – they can enable healthcare managers to identify areas of need by providing data on unwarranted variation in clinical practice or on outcomes over time. The AHRA National Network will support and encourage the wider use of clinical registries in Australian healthcare practice.

AHRA has conducted a national initiative on the better use of health data, and the network will harmonise with this work to examine current enablers and barriers to the use of registries and developing better usage models. The network will also work with the national initiative on data use to optimise outcomes.

# Next steps – short and long term

AHRA has developed the *National Framework for Health Systems Improvement and Sustainability 2018*, in consultation with a wide range of stakeholders and potential collaborators, to support the development of effective ways to improve Australian healthcare systems and make them sustainable.

## Priorities

In developing the framework, AHRA has identified the priority and timeframe for each activity (Table 1). This may be:

- short term – current MRFF funding period (years 1 and 2)
- medium term – over the AHRA accreditation period (over the next 3 to 5 years)
- long term (over the next 10 years).

These assessments have been based on:

- the importance of the task, and its potential impact on the healthcare system and patients, along with the broader effects on the Australian community and economy
- the ease or difficulty of the task
- the capacity for the task to be undertaken within AHRA and/or with other collaborators.

A number of activities have been identified to be undertaken in the short term because of their comparative ease. Of these, four are expected to be an immediate area of focus because they build on existing work within AHRA and other state and national initiatives. These are:

- Recommendation 4.1 (Models and methods for systems evaluation)
- Recommendation 4.2 (Models and methods for knowledge implementation)
- Recommendation 4.3 (Models and methods to reduce unwarranted clinical variation)
- Recommendation 4.4 (Models and methods to increase coordination between services).

Work against these four recommendations will continue while the AHRA National Network is being established.

Having identified the initial tranche of activities, it is expected that the framework will provide a robust structure that will allow regular assessment and readjustment of activities and priorities. AHRA will evaluate, adjust and develop new activities and priorities within the framework of Collaboration–Resources–Workforce–Best practice every two years to ensure consistency with the changing landscape, and with the MRFF priorities and strategic plan.

## Funding

AHRA expects that the short-term recommendations, including setting up the AHRA National Network, will be achieved under existing AHRA and MRFF funding. The medium- and long-term recommendations will require further assessment and development of a business case for funding, if needed.

**Table 1 Recommendations and priorities of the *National Framework for Health Systems Improvement and Sustainability 2018***

Framework	Recommendation	Timeframe	Notes
Collaboration	1.1 AHRA National Network for Health Systems Improvement and Sustainability	Short term	This is the first and fundamental priority of the framework, which will enable the activities discussed in this document, and others in the future
	1.2 Effective linkages and pathways for knowledge dissemination	Short, medium and long term	This will ensure that the work of the AHRA National Network is used effectively; linkages and pathways can be developed in concert with the establishment of the network in the short term, and continue in the medium and long term
Resources	2.1 Investigation and evaluation of healthcare funding models	Medium and long term	This is a crucial element in Australian health care, and input from the AHRA National Network will ensure that practical and effective solutions are developed in the medium to long term
	2.2 A business case to support evaluation and implementation resources	Short term	This will help to provide local-level resources to drive change, and will be an important support for the workforce block of the framework; the understanding needed to develop the business case is well developed, so it can be achieved in the short term
Workforce	3.1 A national curriculum in clinical practice improvement	Medium and long term	The development of effective partnerships with education providers will ensure that this can be developed in the medium term, and it will be implemented over the long term
	3.2 Professional development modules	Medium term	The module topics are well developed in Australian research, and some training is being successfully delivered; this will allow modules to be rapidly developed or adapted and more widely deployed in the medium term through partnerships with education providers

Framework	Recommendation	Timeframe	Notes
Best practice	4.1 Models and methods for systems evaluation	Short, medium and long term	Embedding evaluation models and capacity in local-level evaluation will be critical to success and effective use of resources; the AHRA National Network will build on existing work to deliver models and methods in the short and medium term, and these will be implemented over the long term as workforce capacity expands
	4.2 Models and methods for knowledge implementation	Short, medium and long term	Translation, scale-up and implementation are crucial ways to capture and build on success; Australian research strengths in this area will support delivery in the short and medium term, and also allow models to be tested and refined for local needs and as the landscape and workforce capacity change over the long term
	4.3 Models and methods to reduce unwarranted clinical variation	Short, medium and long term	Unwarranted clinical variation is a key area of clinical need; existing work by the AHRA partners will support the development of this research area to deliver models and methods in the short and medium term, which will be implemented over the medium and long term
	4.4 Models and methods to increase coordination between services	Short, medium and long term	The AHRA National Network will build on existing work by the AHRA partners to deliver models and methods in the short and medium term, which will be implemented over the medium and long term
	4.5 Models and methods to increase the use of clinical guidelines and registries	Short and medium term	Some systems are already in place in Australia for the use of clinical guidelines and registries; the AHRA National Network will build on these to deliver models and methods in the short and medium term

short term = years 1 and 2; medium term = over the next 3 to 5 years; long term = over the next 10 years

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## Other invited members

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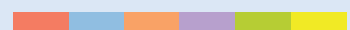
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# Acronyms and initialisms

AHRA	Australian Health Research Alliance
AHRTC	Advanced Health Research and Translation Centre
CIRH	Centre for Innovation in Regional Health
MRFF	Medical Research Future Fund
NHMRC	National Health and Medical Research Council
SPHERE	Sydney Partnership for Health, Education, Research and Enterprise



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