

25 October 2022

Mr Michael Brennan  
Chair  
Productivity Commission  
E: [productivity.inquiry@pc.gov.au](mailto:productivity.inquiry@pc.gov.au)

Dear Mr Brennan,

### **2022 Productivity Inquiry**

The Australian Healthcare and Hospitals Association (AHHA) welcomes the opportunity to provide input to the 2022 Productivity Inquiry on Australia's productivity performance.

AHHA is Australia's national peak body for public hospitals and healthcare providers. Our membership includes state and territory health departments, Local Hospital Networks (LHNs) and public hospitals, community health services, Primary Health Networks (PHNs) and primary healthcare providers, aged care providers, universities, individual health professionals and academics. As such, we are uniquely placed to be an independent, national voice for universal high-quality healthcare to benefit the whole community.

### **Focus of this submission**

This submission responds to insights presented in [Interim Report 1](#), as they relate to health and which underpin the recommendations in subsequent interim reports, that:

*'Innovation in service industries is less about inventing 'things' and relies more heavily on diffusing ideas and adapting business models. But this can be difficult for businesses ... in sectors [such as health] where government funding and regulation have a heavy influence.'* (Insight 2.8)

*'The large volumes of data produced by our increasingly digitised and services-oriented economy can be used to improve productivity. While there were good examples of effective data use during the COVID-19 response, Australia compares poorly internationally on use of data-driven technologies.'* (Insight 2.9)

### **Innovation is needed in health care for sustainability**

The health system is a complex ecosystem, with pressures that result from increased prevalence of chronic disease, the complexity of multimorbidity, an aging population, changing consumer expectations and the cost of new technologies. The capacity for individual health professionals to remain current with best practice is near impossible when medical knowledge has been estimated to double every 73 days (Denson, 2011). An average time lag of 17 years has been estimated for the time it takes research evidence to reach clinical practice (Morris, et al. 2011). Only 60% of health care is estimated to be consistent with guidelines, with 30% considered wasteful or low value and 10% harmful (Braithwaite, et al. 2020).

As the Productivity Commission notes, in the health sector, where government funding and regulation have a heavy influence, it is not simply scientific breakthroughs that will drive innovative, high quality and sustainable health care. More significantly, it is the diffusion of ideas and adaptive business models that are lacking and thereby restricting innovation (Productivity Commission, 2022).

This innovation must occur across a complex mix of health professionals and service providers; delivering services in numerous ways and settings; funded, operated, managed and regulated from all levels of government and the non-government setting (AIHW, 2022).

Effective and efficient use of health professionals and service providers is further challenged by the current organisation of roles having been developed in the absence of evidence and over-specialisation of professions being misaligned with the cross-disciplinary needs of the population (Leggat, 2014). It has long been recognised, globally and in Australia, that more generalist doctors are required to manage multimorbidity (Campbell, 2014). However, the numbers of non-GP specialists are growing faster than the number of GPs (Scott, 2021). These are not new issues but require changes that involve a coordinated approach to legislation, government policy and funding, and which politically may require confrontation with professional groups (Leggat, 2014).

Top down and linear models of change are insufficient for improving performance within the health system, which is a complex ecosystem that must respond to relentless demands and shifting internal and external pressures (Braithwaite, et al. 2020). Instead, network models are needed that draw from complexity science, that maintain pace with exponentially increasing volumes of evidence, and induce collaboration that transcends specialties and individual services (Braithwaite, et al. 2020).

### **Learning health systems**

Learning health systems have been identified as ‘the next stage in quality improvement’ and ‘what is required to find a sustainable way out of the current crisis’ (Hardie, et al. 2022). They are defined as ‘a systematic approach to iterative, data-driven improvement’, where a learning community is ‘formed around a common ambition of improving services and outcomes’ (Hardie, et al. 2022).

While there are many examples of such learning health systems, there is significant variation in approaches. Research in the UK (Hardie, et al. 2022) has identified four important areas for achieving tangible progress:

1. learning from data
2. harnessing technology
3. nurturing learning communities and
4. implementing improvements to services.

## Enabling learning health systems in Australia

As noted previously, top down and linear models of change are insufficient for improving performance within the health system. However, governments have a critical role in providing the infrastructure and supportive environment to enable learning health systems in the following areas:

### 1. Learning from data

A substantial volume of data is collected across the health system, but in fragmented silos. Australia's data linkage capability has grown substantially over the past 50 years, overcoming challenges in stakeholder and community support, complex legal and ethical environments, cross-jurisdictional collaborations and ongoing financial support (Smith & Flack, 2021). Population level insights and an understanding of variation also continue to improve through, for example, the work of the Australian Institute of Health and Welfare and the Australian Commission on Safety and Quality in Healthcare, as well as state-based agencies.

However, there are still many challenges to real-time access to information in Australia (Zurynski, et al., 2020), identified as a key component of a learning health system (Hardie, et al. 2022; Zurynski, et al., 2020). Bringing together information from different sources in a way that is easy to understand and act on will be particularly important for supporting treatment decisions for people with chronic and complex health needs (Hardie, et al. 2022).

Data must be brought together in a way that facilitates an understanding of both outcomes and costs. One element of this is a national, cohesive approach to standards for electronic health records. It has long been recognised, for example, that electronic health records in primary care require:

- A defined data model that links related data elements
- Consistent data element labels and definitions
- Use of standardised clinical terminologies and classifications (Gordon, et al. 2016).

Such standards are important to harness technology in a way that is person-centred and across full care pathways. However, learning from data requires more than just the data. It requires teams to be supported to understand and interpret the data, for individuals as well as around communities and populations.

While team-based care is recognised as important to the quality and safety of care delivery, enabling team-based care requires sector wide attention to such areas as collaborative population health planning (and funding models that incentivise workforce participation); clinical governance; the systematic use of person-centred goals, measures and indicators; and workforce development (AHHA 2021a). We expand on these areas in a supplement to the AHHA Blueprint for Health Reform, titled [\*Enabling person-centred, team-based care\*](#).

### 2. Harnessing technology

Australia has low maturity in interoperability in digital health technologies, as described by the Australian Digital Health Agency (ADHA; 2017), and this presents challenges with learning and improvement for teams across full care pathways.

While the technology may have been available for decades, effective and sustainable implementation will require sector wide attention to:

- Person-centredness of technology adoption
- Equity, including through digital literacy, access to technology and affordability of virtual health care
- Cross-sector leadership and governance
- A digitally capable workforce providing team-based care
- Interoperable and quality assured technology
- Funding for reform (AHPRA 2021b).

We expand on these areas in supplements to the AHPRA Blueprint for Health Reform, titled [\*The effective and sustainable adoption of virtual health care\*](#).

### 3. Nurturing learning communities

Five themes have been identified as integral to a nurturing learning community:

- Systematic approaches and iterative, continuous learning with implementation contributing to new best-practice care
- Broad stakeholder, clinician and academic engagement and co-design with a culture of learning and improvement
- Skilled workforce, capability and capacity building
- Resources with sustained investment over time
- Data access, systems and processes (Enticott, et al., 2020; Hardie, et al. 2022).

While not often termed ‘learning health systems’, there are numerous examples in Australia of projects being established that would fit the definition (to some extent). Most are condition-focused or thematic-based. Examples include [End of Life Directions for Aged Care \(ELDAC\)](#) and [Health Justice Partnerships](#). Primary Health Networks also drive significant activity in this space, through communities of practice and collaborations. The [NSW Statewide Initiative for Diabetes Management](#) provides an example of a cross-sector service-led collaboration taking a ‘one health system’ approach to improve health outcomes. The focus areas identified for this initiative align with those of a learning health system, i.e., capability building, shared information and data, identified governance and leadership with a focus on partnerships.

However, just from these examples, it is clear there is variation in how health services and stewards lead, interact and engage within such learning health systems from a place-based perspective. Available resources, workforce engagement and data availability continue to present challenges.

As such, there is significant opportunity for governments to support place-based learning health systems more explicitly. Such support aligns with the long-term health reforms identified in the National Health Reform Agreement (e.g., resourcing through joint planning and funding at a local level) and should be a fundamental element of support in policy reforms currently being pursued (e.g., the introduction of voluntary patient enrolment with general practices).

Governments should provide resourcing to initiate and sustain learning communities at the local level to come together to learn from data and design place-based solutions.

These place-based learning health systems could also provide a framework for longer term, flexible funding approaches that may be used to incentivise high value care, as well as address inequities that may be exacerbated through fee-for-service funding models, for example in rural and remote health care reform.

#### **4. Implementing improvements to services**

With worldwide interest in implementation research, a growth in research literature has produced an increasing number of frameworks with terminology that is inconsistently used to define constructs, measures, processes and activities. This has created a major problem in evaluating implementation of different models of care for the purpose of adoption, diffusion and spread (Salvador-Carulla, et al., 2022).

Place-based flexibility is important in designing innovative models of care, with flexibility needed both in the way funding is used as a policy lever and in how skill-mix changes and workforce reform can support new models of care. An evaluation model that is outcomes-focused will be important to support the necessary cultural shift, as well as enabling place-based accountability for learning from findings in real time. With this comes agility to continue to adapt and improve, with innovation being supported by the best available evidence and real-time engagement with data, rather than playing out in the media.

However, there is also a need to facilitate the diffusion of ideas between learning communities through the development of standardised frameworks for evaluating implementation, that not only identify the outcomes achieved, but reflect the processes and contextual factors on which those outcomes were dependent.

#### **In summary**

Place-based learning health systems, enabled through collaborative governance relationships between PHNs and LHNs (but involving the broad range of services and stakeholders), will enable a systematic approach to iterative, data-driven improvements in the way health care is provided.

Diffusing ideas and adapting business models across the health system will require approaches where data are used for learning, not as a 'weapon'.

There should be no assumption that 'data speaks for itself'. It must be explored and understood with people and communities, clinical expertise and environmental context. Place-based needs assessments are required that bring together the many parts of the health system around health planning and the co-design of models of care to meet identified needs.

In order to influence health outcomes, the system must support data being available to people at the time they are making decisions, through data standards and technological infrastructure. The workforce must be funded to participate, and this may be through alternative funding models that shift away from fee-for-service.

Consistency is needed in how we evaluate the implementation of new models of care, reflecting not only the outcomes and costs, but the processes and contextual factors important for success, in order to support the diffusion of ideas.

The system must support iteration and learning, with 'permission' to adapt programs, projects and policies based on evaluations and insights, in a shift away from short-term pilot approaches that impede the trust of both communities, the workforce and services to invest in new ways of working.

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