



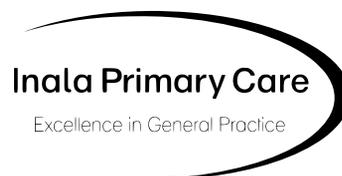
## Achieving person-centred primary health care: a value co-creation approach





# Achieving person-centred primary health care: a value co-creation approach

Coordinating Editors:  
Tina Janamian and Paresh Dawda



---

The Australian Government Department of Health funded the following national programs reported in this Supplement: Health Care Homes; IBD GP Aware; and the Gwandalan National Palliative Care Project.

# Contents

- S3 Creating person-centred health care value together  
Paresh Dawda, Tina Janamian and Leanne Wells
- S5 Activating people to partner in health and self-care: use of the Patient Activation Measure  
Tina Janamian, Michael Greco, David Cosgriff, Laurence Baker and Paresh Dawda
- S9 Co-creating education and training programs that build workforce capacity to support the implementation of integrated health care initiatives  
Tina Janamian, Angelene True, Paresh Dawda, Melanie Wentzel and Tamiaka Fraser
- S14 Building capacity in those who deliver palliative care services to Aboriginal and Torres Strait Islander peoples  
Tina Janamian, Paresh Dawda, Gregory Crawford, Angelene True, Melanie Wentzel, Donald Whaleboat, Tamiaka Fraser and Christopher Edwards
- S19 Lessons from the implementation of the Health Care Homes program  
Angelene True, Tina Janamian, Paresh Dawda, Tracey Johnson and Gary Smith
- S22 Value in primary care clinics: a service ecosystem perspective  
Janet R McColl-Kennedy, Teegan Green and Mieke L van Driel
- S24 Value-based primary care in Australia: how far have we travelled?  
Paresh Dawda, Angelene True, Helen Dickinson, Tina Janamian and Tracey Johnson

# Creating person-centred health care value together

Paresh Dawda<sup>1,2</sup>, Tina Janamian<sup>3,4</sup>, Leanne Wells<sup>5</sup>

**G**lobally, we need health systems and models of care that are more responsive to individual needs, focused on population health, and well integrated across all levels of the health care landscape — all with the vision of achieving the Quadruple Aim.<sup>1</sup> The Quadruple Aim strives to achieve improvements in clinical outcomes and the experiences of consumers and those working in the health system, and to create efficiencies, all in tandem.

Person-centred care has been an aspirational goal for health systems, advocated on political, ethical and instrumental grounds, with the World Health Organization describing it as an innovative approach for better health outcomes.<sup>2</sup> There are many definitions of the dimensions of person-centred care and debates about its nature and the extent to which it is truly embedded in our system. Achieving it at scale and population level has been challenging amid this diversity of definitions, its multidimensional nature and the complexity of its implementation.<sup>3</sup> It remains a common aspiration in major Australian policies and intergovernmental agreements, a practice enshrined in professional and service standards, and a fundamental right for consumers. Fundamentally, person-centred care comprises four components: individualised, coordinated, enabling, and delivered in a way that is respectful and compassionate with dignity.<sup>4</sup> The key questions are: to what extent is person-centred care truly embedded in our system, and are we making the most of the policy levers that could help?

Consumers generally view Australia's health system positively, although we continue to see vast inequities across the community.<sup>5</sup> Our system delivers good clinical outcomes on the whole,<sup>6</sup> and consumers value a longstanding relationship with a general practitioner.<sup>5</sup> However, two significant areas for improvement are consistently identified: uncertainty and cost.<sup>5</sup> Uncertainty relates to knowing what health care is available and how to access it. It reflects a gap in both coordination and enablement. The lack of affordability for health care is leading Australians to avoid spending on health care when they have other priorities. Health care is becoming a discretionary expenditure for some, which means people are failing to access care services such as prescriptions.<sup>5</sup>

Australians have cited challenges in accessing after-hours care.<sup>5</sup> Care in rural and remote areas continues to be a challenge. Person-centred care for older Australians and those in the aged care system was the subject of the Royal Commission into Aged Care Quality and Safety. The Royal Commission made 143 recommendations in its final report focusing on person-centred care.<sup>7</sup> The report identified key gaps in care which were even more evident for Aboriginal and Torres Strait Islander peoples and those from culturally and linguistically diverse communities.

Person-centred care has the potential to be the bridge that can traverse the gaps in our health care system. The Australian Commission on Quality and Safety in Health Care has reviewed the evidence and surmised that it is "clear that patient-centred

## Summary

- In this article we ask: to what extent is person-centred care truly embedded in our system, and are we making the most of the policy levers that could help?
- We describe person-centred care, shine a light on deficits in the health system, and point to some policy enablers to support person-centred care.
- Cultural change and a commitment to value-based health care are required. We highlight the merit in adopting and acting on patient-reported measures as an indicator of what matters to the patient, the need for integrated data systems, and the role of a co-creation approach. Most importantly, we underscore the importance of funding reform and consumer leadership.

care has significant benefits associated with clinical quality and outcomes, the experience of care, the business and operations of delivering health services and the work environment", namely the Quadruple Aim.<sup>8</sup> Internationally, health care systems have focused on strengthening primary care, particularly general practice, to build person-centred integrated health care systems.<sup>9</sup> The federal government has published a primary health care 10-year plan<sup>10</sup> to set a vision and path to guide future primary health care reform, as part of its Long Term National Health Plan.<sup>11</sup>

Achieving person-centred care is an endeavour that requires transformational and cultural change supported by fit-for-purpose systems, structures and processes. A system level commitment to a value-based health care approach would seek to ensure that outcomes that matter to patients are monitored as a key driver for improvement. Well connected digital infrastructure and data-driven improvements are key enablers of truly person-centred initiatives<sup>12</sup> and may also support capturing patient-reported measures (eg, the Patient Activation Measure),<sup>13</sup> thereby facilitating consumer enablement. Too often when it comes to quality and patient safety there is a lack of connected datasets to inform and guide understanding and learning.<sup>14</sup> Early insights from initiatives linking datasets between primary and tertiary care demonstrate promising potential, including the positive effects of primary care in reducing readmissions and improving outcomes for people with undiagnosed chronic conditions such as chronic kidney disease and diabetes.<sup>15</sup> Appropriate innovative funding models are necessary to enable person-centred outcomes. These models also need to consider resource allocation and local approaches to deliver coordinated care that is as close as possible to where people live and focuses on prevention and improvement rather than a one-size-fits-all approach. There are promising programs underway or completed that offer positive lessons, experience and cost savings. For example, the Australian Commission on Quality and Safety in Health Care has provided Australian case studies to guide the journey of person-centred care and has identified the attributes of high performing person-centred health care organisations.<sup>16</sup> A focus on value co-creation where individuals, families and communities are empowered to partner in their health, health care and better self-care is

<sup>1</sup> University of Canberra, Canberra, ACT. <sup>2</sup> Prestantia Health, Canberra, ACT. <sup>3</sup> Client Focused Evaluation Program Surveys, Brisbane, QLD. <sup>4</sup> University of Queensland, Brisbane, QLD.

<sup>5</sup> Consumer Health Forum, Canberra, ACT. ✉ paresh@prestantiahealth.com • doi: 10.5694/mja.2.51531

fundamental to achieving person-centred care.<sup>17</sup> Achieving person-centred care also demands deeper involvement of consumer preferences, insights and experience in future system and service design. This comes with an obligation to invest in both clinical and consumer leadership. Some forays have been made in this arena with the adaptation of the Kings' Fund Collaborative Pairs program to the Australian context under the stewardship of the Consumers Health Forum of Australia.<sup>18</sup>

The challenge is moving beyond a series of time-limited programs, pilots and trials to create an authorising environment that facilitates primary care to push the boundaries of person-centred care at scale and across the country, so all Australians can receive individualised, coordinated, enabling care delivered with dignity, compassion and respect. It is time to shift gears.

**Open access:** Open access publishing facilitated by University of New South Wales, as part of the Wiley - University of New South Wales agreement via the Council of Australian University Librarians.

**Provenance:** Commissioned; externally peer reviewed. ■

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

- 1 Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med* 2014; 12: 573-576.
- 2 World Health Organization Regional Office for Europe. Towards people-centred health systems: an innovative approach for better health outcomes. Copenhagen: WHO, 2013. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/186756/Towards-people-centred-health-systems-an-innovative-approach-for-better-health-outcomes.pdf](https://www.euro.who.int/__data/assets/pdf_file/0006/186756/Towards-people-centred-health-systems-an-innovative-approach-for-better-health-outcomes.pdf) (viewed Apr 2022).
- 3 Nolte E, Merkur S, Anell A, editors. Achieving person-centred health systems: evidence, strategies and challenges. Cambridge University Press, 2020. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/455986/person-centred-health-systems.pdf](https://www.euro.who.int/__data/assets/pdf_file/0010/455986/person-centred-health-systems.pdf) (viewed Apr 2022).
- 4 Health Foundation. Person-centred care made simple: what everyone should know about person-centred care. London: Health Foundation, 2016. <https://www.health.org.uk/publications/person-centred-care-made-simple> (viewed Jan 2022).
- 5 Consumers Health Forum of Australia. Results of the 2018 consumer sentiment survey. Canberra: Consumers Health Forum of Australia, 2020. [https://chf.org.au/sites/default/files/consumer\\_sentiment\\_survey\\_public\\_report.pdf](https://chf.org.au/sites/default/files/consumer_sentiment_survey_public_report.pdf) (viewed Jan 2022).
- 6 Schneider E, Shah A, Doty MM, et al. Mirror, mirror 2021: reflecting poorly. Health care in the US compared to other high-income countries. Washington: The Commonwealth Fund, 2021. <https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly> (viewed Jan 2022).
- 7 Royal Commission into Aged Care Quality and Safety. Final report: care, dignity and respect. Volume 1 – summary and recommendations. Canberra: Royal Commission into Aged Care Quality and Safety, 2021. [https://agedcare.royalcommission.gov.au/sites/default/files/2021-03/final-report-volume-1\\_0.pdf](https://agedcare.royalcommission.gov.au/sites/default/files/2021-03/final-report-volume-1_0.pdf) (viewed Jan 2022).
- 8 Australian Commission on Safety and Quality in Health Care. Patient-centred care: improving quality and safety through partnerships with patients and consumers. Sydney: ACSQHC, 2011. [https://www.safetyandquality.gov.au/sites/default/files/migrated/PCC\\_Paper\\_August.pdf](https://www.safetyandquality.gov.au/sites/default/files/migrated/PCC_Paper_August.pdf) (viewed Jan 2022).
- 9 Van Weel C, Kidd MR. Why strengthening primary health care is essential to achieving universal health coverage. *CMAJ* 2018; 190: E463-E466.
- 10 Australian Government Department of Health. Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022-2032. Canberra: Commonwealth of Australia, 2022. <https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032> (viewed Apr 2022).
- 11 Australian Government Department of Health. Australia's Long Term National Health Plan to build the world's best health system. Canberra: Commonwealth of Australia, 2019. [https://www.health.gov.au/sites/default/files/australia-s-long-term-national-health-plan\\_0.pdf](https://www.health.gov.au/sites/default/files/australia-s-long-term-national-health-plan_0.pdf) (viewed Jan 2022).
- 12 Deloitte. Australia's health reimagined: the journey to a connected and confident consumer. March 2022. <https://www2.deloitte.com/au/en/pages/life-sciences-and-healthcare/articles/australias-health-reimagined.html> (viewed Apr 2022).
- 13 Janamian T, Greco M, Cosgriff D, et al. Activating people to partner in health and self-care: use of the Patient Activation Measure. *Med J Aust* 2022; 216 (10 Suppl): S5-S8.
- 14 Russell LM, Dawda P. Patient safety in primary care: more data and more action needed. *Med J Aust* 2015; 202: 72-73. <https://www.mja.com.au/journal/2015/202/2/patient-safety-primary-care-more-data-and-more-action-needed>
- 15 Correll P, Feyer A-M, Phan P-T, et al. Lumos: a statewide linkage programme in Australia integrating general practice data to guide system redesign. *Integr Healthc J* 2021; 3: e000074.
- 16 Australian Commission on Quality and Safety in Health Care. Case studies for delivering person-centred care and implementing the Partnering with Consumers Standard. <https://www.safetyandquality.gov.au/our-work/partnering-consumers/case-studies-delivering-person-centred-care-and-implementing-partnering-consumers-standard> (viewed Jan 2022).
- 17 Russo G, Moretta Tartaglione A, Cavacece Y. Empowering patients to co-create a sustainable healthcare value. *Sustainability* 2019; 11: 1315-1334
- 18 Dickinson H, Brown A, Robinson S, et al. Building collaborative leadership: a qualitative evaluation of the Australian Collaborative Pairs trial. *Health Soc Care Community* 2022; 30: 509-518. ■

# Activating people to partner in health and self-care: use of the Patient Activation Measure

Tina Janamian<sup>1,2</sup>, Michael Greco<sup>3,4</sup>, David Cosgriff<sup>5,6</sup> , Laurence Baker<sup>7</sup>, Paresh Dawda<sup>8,9</sup>

“Better health for all, through better self-care by all” is the vision of the *Self-care for health* policy blueprint.<sup>1</sup> We need this vision because medical care only partially contributes to overall health: 89% of health comes from genetics, behaviour, environment and social circumstances — all factors outside the clinical setting.<sup>2</sup> We see the influence of a person’s behaviour on health outcomes in everything from preventing illness to managing long-term health conditions.<sup>3</sup> Therefore, it is vital that people are engaged with adopting positive health behaviour and partnering in health and self-care. The World Health Organization defines self-care as “the ability of individuals, families and communities to promote health, prevent disease, maintain health, and cope with illness and disability with or without the support of a health-care provider”.<sup>4</sup> This concept of self-care incorporates the capability to care for oneself (knowledge, skills and confidence) as well as self-care activities.<sup>1</sup> The underlying determinants and enablers of self-care include factors beyond the individual, spanning environmental, economic and social factors. The importance of strategies to support self-care are captured in Australia’s Primary Health Care 10 Year Plan.<sup>5</sup>

The self-care perspective introduces a way of conceptualising and measuring engagement that is known as patient activation. Patient activation is defined as an individual’s knowledge, skill and confidence for managing their health and health care.<sup>6</sup> It is a behavioural concept covering several core components of a person’s involvement in their health and health care, each of which is important for active engagement and participation. Positive change in activation equates to positive change in various aspects of self-care behaviour.<sup>6</sup> Evidence from the United States,<sup>7–10</sup> the United Kingdom<sup>11–13</sup> and more recently Australia<sup>14–16</sup> shows how using patient activation to intervene in the delivery of health and health care can help achieve the Quadruple Aim — improving population health, the cost-efficiency of the health system, and patient and provider experience.<sup>17</sup>

## The Patient Activation Measure survey is the most common measurement tool

In health care, measurement is vital for effectively improving care. The Patient Activation Measure (PAM) survey, created in 2010<sup>18</sup> and owned by the University of Oregon, is the most used measure of patient activation that has been validated globally.<sup>3</sup> Across more than 700 published studies, the PAM has been extensively validated with diverse populations (in more than 30 languages and countries), covering different ages, genders, education, income and ethnicity, and including patients significantly affected by social determinants.<sup>19</sup> Further, the relationship between patient activation and health outcomes is well understood, and has been demonstrated across populations and health conditions.<sup>7</sup>

## Summary

- Patient activation is a behavioural concept and is at the heart of personalised care. It is defined as an individual’s knowledge, skill and confidence for managing their health and health care.
- Evidence indicates that patient activation scores can predict health behaviour and are closely linked to various clinical outcomes: reduced unnecessary emergency department visits, hospital admissions and re-admissions. Patients with lower activation levels (25–40% of the population) are less likely to adopt healthy behaviour, and more likely to have poorer clinical outcomes and higher rates of hospitalisation.
- Effective interventions can improve a patient’s activation level, and positive change in activation equates to positive change in self-care behaviour. But to improve patient activation, we must first measure it using a robust evidence-based tool such as the Patient Activation Measure (PAM) survey.
- Armed with the patient’s PAM score, providers can tailor their care and help patients achieve better self-care, which can improve outcomes of care and reduce unnecessary health care utilisation.
- The PAM is also useful for population segmentation and risk stratification — to target interventions and health strategies to meet the needs of patients who are at different points along the activation continuum, to measure the performance of health care systems, and to evaluate the effectiveness of health care interventions.
- The role of patient activation requires further serious consideration if we are to improve the long-term health and wellbeing of all Australians. The PAM tool is a feasible and cost-effective solution for achieving the Quadruple Aim — improving population health, the cost-efficiency of the health system, and patient and provider experience.

Self-care behaviour varies significantly depending on activation level. Higher PAM scores, regardless of illness type, are associated with improved patient self-management behaviour (eg, medication adherence, healthy diet, engagement in regular exercise, and stress management).<sup>3,6,7,20</sup> This is reflected in all types of preventive behaviour, meaning that a person’s activation level is a predictor of self-care.<sup>6</sup> There is also substantial evidence that higher PAM scores are closely linked with improved clinical outcomes,<sup>3,8,21,22</sup> and reduced unnecessary emergency department visits, hospital admissions and re-admissions.<sup>9,11,23</sup> Activation levels are also highly predictive of health care costs; an increase in activation is associated with reduced health care costs, particularly in high-risk populations.<sup>8,9,23,24</sup> In general, 25–40% of the population have low levels of activation, which means they have low levels of knowledge, skill and confidence relating to self-care.<sup>3</sup>

The PAM uses statements to assess a patient’s knowledge, skill and confidence to understand their self-care ability. It takes 3–5 minutes, and can be easily administered via phone, tablet, email or paper in a home, office, clinic or hospital setting. It combines answers to give a single score that is between 0 and

<sup>1</sup>Client Focused Evaluation Program Surveys, Brisbane, QLD. <sup>2</sup>University of Queensland, Brisbane, QLD. <sup>3</sup>Griffith University, Brisbane, QLD. <sup>4</sup>Care Opinion, Brisbane, QLD. <sup>5</sup>Western Sydney University, Sydney, NSW. <sup>6</sup>Osana, Sydney, NSW. <sup>7</sup>Oregon Health and Science University, Portland, ORE, USA. <sup>8</sup>University of Canberra, Canberra, ACT. <sup>9</sup>Prestantia Health, Canberra, ACT.

 tina.janamian@cfep surveys.com.au • doi: 10.5694/mja2.51535

1 The four activation levels of the Patient Activation Measure\*



\* Image reproduced with permission from Insignia Health, a Phreesia company. ♦

2 Care along the activation continuum: training to support tailoring care to activation level



100.<sup>20,25</sup> While a person's PAM score lies within this range, for the purpose of intervention, patients are often subdivided into four groups known as levels of activation. Box 1 shows activation levels 1 to 4, where level 1 is the lowest and level 4 is the highest (20–25% of people are at the highest level).<sup>20,25</sup>

The PAM administration platform offers real-time data to clinicians; each patient's PAM score and activation level are instantly available to the clinician via an online portal once the patient completes the survey, along with their previous data. Health services can access a dashboard of real-time aggregated data that includes: total surveys completed; PAM level breakdown (current state); score changes (capturing changes in activation over time); PAM re-administration; and outlier rates. Health organisations can also generate reports of PAM data on

a population by region, program, clinician or any relevant factor so they can track improvements on a continuum. Return-on-investment reporting is also available, to show expected savings to the health care system based on mean PAM score change and expected behaviour change in the patient population of interest. It would save clinicians time if the PAM level was integrated into general practice or health services software to provide seamless access to this vital sign.

Health interventions tailored to a patient's activation level are likely to improve their activation level, and positively affect their health outcomes and experiences as their activation level improves.<sup>20,26</sup> Therefore, it would be worth exploring how the PAM could be incorporated into existing primary care assessments, continuous quality improvement initiatives and

chronic disease management programs to increase the benefits from these interventions. The PAM could be administered as part of the annual health assessment or mental health assessment and incorporated into the GP Management Plan or Team Care Arrangement.

The value of a single point change in PAM score is significant and well understood, as is the shift between activation levels.<sup>3,9</sup> Patients with lower activation levels and those with long-term conditions benefit most from patient activation. At the lower end of activation, a 1-point incremental change equates to an improvement in health outcomes of about 3% and a reduction in health costs of about 3%. It is expected that patients with lower activation levels (any group of patients and any chronic medical condition) would achieve a 7–10-point change with targeted interventions within 4–6 months.<sup>7,9,22</sup>

The PAM has three key uses: risk stratification and profiling of a population based on activation levels (thereby assisting with improved resource allocation); tailoring patient support to PAM levels; and measuring the effects of health care programs and interventions (eg, a program targeted at patients with type 2 diabetes, to reduce their HbA<sub>1c</sub> levels).<sup>3,27</sup> Traditional risk models rely on past utilisation and have been shown to miss more than half of the people in the two lower activation levels.

The clinician can tailor care to the patient's needs by using different communication techniques, interventions and strategies, and providing an appropriate level of support, making it more likely that the patient will adopt behaviour that contributes to better health.<sup>3,6,27</sup> Using the PAM, the clinician can also determine how to gradually increase the patient's knowledge, skill and confidence so that their health and wellbeing outcomes improve. By re-administering the PAM every 3–6 months, clinicians can understand the impact of patient support strategies and programs much sooner than they would with traditional outcome measures.<sup>7</sup>

### Tailoring care can increase patient activation

Well designed interventions for disease management, including tailoring care, can increase patient activation and positively improve self-management behaviour.<sup>20,22,27</sup> A 2020 scoping review identified two critical success factors: the clinician understanding the value of the PAM, and the clinician being supported by well defined and flexible administration processes.<sup>20</sup>

Client Focused Evaluation Program Surveys has adapted the Advanced Development Programme,<sup>28</sup> which includes online micro-learning modules, videos, webinars and other resources aimed at helping clinicians to develop advanced skills to apply the PAM, tailor care to each patient, and activate patients along the PAM continuum (Box 2). The training also provides clinicians with skills to support and motivate their patients to take an active role in their self-care. Evidence shows that to improve chronic disease-related health outcomes, health care providers should implement interventions tailored to activation level and strengthen the patient's role in managing their health care.<sup>7</sup> There are no eligibility criteria for the training and participants receive continuing professional development hours from their college for completing the online modules.

The training helps the clinician to nimbly adjust their consultation to suit each patient's activation level, as measured with the PAM. The online modules address each activation level and can include interactive webinars and face-to-face training for care providers. The training is usually delivered once the clinician is

familiar with using the PAM and the survey reports are readily available through electronic health records. Training occurs over time and between sessions, clinicians identify specific advanced techniques to add to their repertoire of communications skills.

The PAM survey is increasingly being used in Australian settings. Some examples include:

- several Primary Health Networks (<https://www.health.gov.au/initiatives-and-programs/phn>), which are independent organisations working to streamline health services to better coordinate care;
- Remedy Healthcare (<https://www.remedyhealthcare.com.au/>), a private community health organisation that provides virtual and in-home health care services;
- Osana (<https://osana.care/>), a group of private general medical practice clinics with a model of care that focuses on prevention and wellbeing;
- Integrated Living Australia (<https://integratedliving.org.au/>), a not-for-profit organisation that provides a range of health and wellbeing options such as aged care and disability support for individuals and their families in the community;
- EACH (<https://www.each.com.au/>), which provides a range of health, disability, counselling and mental health services across Australia; and
- Central Gippsland Health (<https://www.cghs.com.au/about-us/>), a subregional integrated health service that provides a broad range of primary, secondary and tertiary services, including a near comprehensive range of Home and Community Care services, through to adult intensive and coronary care.

In line with findings in Australian and overseas studies,<sup>7-9,11,14-16</sup> the use of the PAM by these health services has been effective in various ways, including risk stratification, program evaluation and tailoring care, and has shown improvement in the mean PAM score for patients at lower activation levels (levels 1–3) over time (unpublished data). Care providers were trained to tailor care to a patient's activation level — making sure that the level of support they provided was appropriate to the patient's needs, and gradually increasing the patient's levels of knowledge, skill and confidence relating to self-care, to improve health outcomes. Remedy Healthcare also used health coaching as an intervention. In Australia, further research should address how PAM-tailored interventions can be integrated into clinical practice, and how they can guide the patient–clinician interaction in ways that help improve the quality of patient care.<sup>20</sup>

### We must seriously consider the role of patient activation in Australia

Worldwide, the PAM is being used across populations. For example, the Centers for Medicare and Medicaid Services (the federally funded health care system in the United States for people aged 65 years and older and lower income individuals not covered by commercial insurance) are using the PAM through alternative payment models with up to 5 million patients.<sup>9,10</sup> Within NHS England (England's publicly funded health care system), trusts (hospitals), clinical commissioning groups and integrated care systems are using the PAM to support more than 10 million patients.<sup>11-13</sup>

Delivering better patient-centred care with a focus on self-care and patient activation is essential to the long-term health and wellbeing of all Australians. Using a reliable and

evidence-based patient-reported measure such as the PAM across the population to measure activation (or self-care ability) and implementing PAM-tailored interventions to each patient's activation level can have many benefits. These include substantially improving self-care and disease prevention, improving health outcomes (particularly for patients with chronic conditions), reducing health care costs, and enhancing the patient and care provider experience — the four elements of the Quadruple Aim.<sup>3,6-9,11-13,21-23</sup>

In Australia, patient activation is noted as an enabler of the Primary Health Care 10 Year Plan, which focuses on delivering person-centred care and aims to achieve the Quadruple Aim to optimise health system performance.<sup>5</sup> We must seriously consider the role of patient activation, and pursue and evaluate the utility, feasibility and cost-effectiveness of the PAM on a larger scale in Australia, as has been done in the US and UK health systems.

**Open access:** Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

- 1 Nichols T, Calder R, Morgan M, et al. Self-care for health: a national policy blueprint. Policy paper 2020–01. Melbourne: Mitchell Institute, Victoria University, 2020.
- 2 Choi E, Sonin J. Determinants of health. Arlington: GoInvo, 2020. <https://www.goinvo.com/vision/determinants-of-health> (viewed Apr 2022).
- 3 Hibbard J, Gilbert H. Supporting people to manage their health. An introduction to patient activation. London: The King's Fund, 2014.
- 4 World Health Organization. Self-care can be an effective part of national health systems. Geneva: WHO, 2019. <https://www.who.int/news/item/02-04-2019-self-care-can-be-an-effective-part-of-national-health-systems> (viewed Apr 2022).
- 5 Australian Government Department of Health. Future focused primary health care: Australia's Primary Health 10 Year Plan 2022–2032. Canberra: Commonwealth of Australia, 2022. <https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032> (viewed Apr 2022).
- 6 Hibbard JH, Mahoney ER, Stock R, et al. Do increases in patient activation result in improved self-management behaviors? *Health Serv Res* 2007; 42: 1443-1463.
- 7 Cuevas H, Heitkemper E, Huang YC, et al. A systematic review and meta-analysis of patient activation in people living with chronic conditions. *Patient Educ Couns* 2021; 104: 2200-2212.
- 8 Greene J, Hibbard JH, Sacks R, et al. When patient activation levels change, health outcomes and costs change, too. *Health Aff (Millwood)* 2015; 34: 431-437.
- 9 Lindsay A, Hibbard JH, Boothroyd DB, et al. Patient activation changes as a potential signal for changes in health care costs: cohort study of US high-cost patients. *J Gen Intern Med* 2018; 33: 2106-2112.
- 10 Guo Y, Vogel WB, Muller KE, et al. The Wellness Incentive and Navigation intervention improved health-related quality of life among Medicaid enrollees: a randomized pragmatic clinical trial. *Health Serv Res* 2019; 54: 1156-1165.
- 11 Deeny S, Thorlby R, Steventon A. Reducing emergency admissions: unlocking the potential of people to better manage their long-term conditions. London: The Health Foundation, 2018. <https://www.health.org.uk/publications/reducing-emergency-admissions-unlocking-the-potential-of-people-to-better-manage-their-long-term-conditions> (viewed Apr 2022).
- 12 Barker I, Steventon A, Williamson R, et al. Self-management capability in patients with long-term conditions is associated with reduced healthcare utilisation across a whole health economy: cross-sectional analysis of electronic health records. *BMJ Qual Saf* 2018; 27: 989-999.
- 13 Roberts NJ, Kidd L, Dougall N, et al. Measuring patient activation: the utility of the patient activation measure within a UK context—results from four exemplar studies and potential future applications. *Patient Educ Couns* 2016; 99: 1739-1746.
- 14 John JR, Tannous WK, Jones A. Outcomes of a 12-month patient-centred medical home model in improving patient activation and self-management behaviours among primary care patients presenting with chronic diseases in Sydney, Australia: a before-and-after study. *BMC Fam Pract* 2020; 21: 158.
- 15 McNamara RJ, Kearns R, Dennis SM, et al. Knowledge, skill, and confidence in people attending pulmonary rehabilitation: a cross-sectional analysis of the effects and determinants of patient activation. *J Patient Exp* 2019; 6: 117-125.
- 16 Begum N, Donald M, Ozolins IZ, et al. Hospital admissions, emergency department utilisation and patient activation for self-management among people with diabetes. *Diabetes Res Clin Pract* 2011; 93: 260-267.
- 17 Sikka R, Morath J, Leape L. The Quadruple Aim: care, health, cost and meaning in work. *BMJ Qual Saf* 2015; 24: 608-610.
- 18 Hibbard J, Collins P, Mahoney E, et al. The development and testing of a measure assessing clinician beliefs about patient self-management. *Health Expect* 2010; 1: 65-71.
- 19 Insignia Health. Research studies featuring PAM. Portland: Insignia Health, 2021. <https://www.insigniahealth.com/research/research-studies> (viewed Apr 2022).
- 20 Kearns R, Harris-Roxas B, McDonald J, et al. Implementing the Patient Activation Measure (PAM) in clinical settings for patients with chronic conditions: a scoping review. *Integr Healthc J* 2020; 2: e000032.
- 21 Greene J, Hibbard JH. Why does patient activation matter? An examination of the relationships between patient activation and health-related outcomes. *J Gen Intern Med* 2012; 27: 520-526.
- 22 Hibbard JH, Greene J, Tusler M. Improving the outcomes of disease management by tailoring care to the patient's level of activation. *Am J Manag Care* 2009; 15: 353-360.
- 23 Hibbard JH, Greene J, Sacks RM, et al. Improving population health management strategies: identifying patients who are more likely to be users of avoidable costly care and those more likely to develop a new chronic disease. *Health Serv Res* 2017; 52: 1297-1309.
- 24 Hibbard JH, Greene J, Sacks R, et al. Adding a measure of patient self-management capability to risk assessment can improve prediction of high costs. *Health Aff* 2016; 35: 489-494.
- 25 Hibbard JH, Stockard J, Mahoney ER, et al. Development of the Patient Activation Measure (PAM): conceptualizing and measuring activation in patients and consumers. *Health Serv Res* 2004; 39: 1005-1026.
- 26 Kinney R, Lemon S, Person S, et al. The association between patient activation and medication adherence, hospitalization, and emergency room utilization in patients with chronic illnesses: a systematic review. *Patient Educ Couns* 2015; 98: 545-552.
- 27 Bolen S, Chandar A, Falck-Ytter C, et al. Effectiveness and safety of patient activation interventions for adults with type 2 diabetes: systematic review, meta-analysis, and meta-regression. *J Gen Intern Med* 2014; 29: 1166-1176.
- 28 Wallace L, Turner A, Kosmala-Anderson J, et al. Evidence: co-creating health: evaluation of first phase. London: Health Foundation, 2012. ■

# Co-creating education and training programs that build workforce capacity to support the implementation of integrated health care initiatives

Tina Janamian<sup>1,2</sup>, Angelene True<sup>3</sup>, Paresh Dawda<sup>3,4</sup>, Melanie Wentzel<sup>1</sup>, Tamiaka Fraser<sup>5</sup>

Over the past 20 years, value co-creation (often referred to as co-creation) has been increasingly used across diverse sectors and applied in many ways.<sup>1</sup> Typically used in the business sector, value co-creation supports multimillion dollar businesses to better understand end user expectations, spark meaningful dialogue and improve value for all.<sup>2</sup> It has taken several years for value co-creation to gain momentum in other sectors, but now the health<sup>3-5</sup> and research<sup>6-8</sup> sectors use it to co-create outcomes of value for end users, and the public sector applies it to boost innovation.<sup>9</sup> Value co-creation practices within education are developing and include generative dialogue, negotiation, and collaborative and reciprocal processes whereby all stakeholders contribute variously to curricular or pedagogical conceptualisation, decision making and implementation.<sup>10-12</sup>

Value co-creation focuses on creating value with and for multiple stakeholders and end users through facilitated processes and interactive platforms.<sup>1,2,11,12</sup> It redefines the way an organisation engages people internally and externally, and uses a process of proactive and purposeful engagement focused on enriched experiences to collectively co-design new products and services and garner strategic insight to add value.<sup>13</sup>

Co-design, informed by the principles of user-centred design,<sup>14</sup> is another effective approach that many sectors use to support multidisciplinary teams in co-designing or adapting products, services or resources from the perspective of how the end user will understand and use them.<sup>15,16</sup>

Evidence suggests that value co-creation and user-centred design approaches can be flexible, systematic, holistic and iterative means of developing tailored, fit-for-purpose education resources.<sup>17-19</sup> Engaging with end users and other stakeholders to directly tailor resource content and delivery mode to meet their needs and preferences makes it more likely that the resources will be adopted, be used long term, be sustainable, and help to co-create outcomes of value.<sup>14,20-22</sup>

For the past 6 years, the Education and Innovation Department of Australian General Practice Accreditation Limited (AGPAL) has used value co-creation and user-centred design to co-create education resources and training programs to enhance workforce capacity and strengthen the implementation of many national and state-based person-centred and integrated care programs.<sup>6</sup>

Here, we present two case studies to show other trainers and health care program developers how they can engage with end users and key stakeholders to co-create their own education resources or potentially any other solution in primary health care.

## Summary

- Value co-creation focuses on creating value with and for multiple stakeholders—through purposeful engagement, facilitated processes and enriched experiences—to co-design new products and services. User-centred design enables multidisciplinary teams to design and develop or adapt resources from the end user's perspective.
- Combining value co-creation and user-centred design offers an effective, efficient, user-friendly and satisfying experience for all participants, and can result in co-created, tailored and fit-for-purpose resources. These resources are more likely to be adopted, be usable, be sustainable and produce outcomes that matter, and thereby create value for all parties.
- Over the past 6 years, the Education and Innovation Department at Australian General Practice Accreditation Limited has used these methods to co-create education and training programs to build workforce capacity and support implementation of many person-centred integrated care programs.
- In this article, we present examples of how Australian General Practice Accreditation Limited used value co-creation and user-centred design to develop and deliver education programs in primary health care, and offer insights into how program developers can use these methods to co-create any health care product, service or resource to better address end user needs and preferences.
- As we strive to strengthen the role of consumers as active partners in care and improve service delivery, patient outcomes and patient experiences in Australia, it is timely to explore how we can use value co-creation and user-centred design at all levels of the system to jointly create better value for all stakeholders.

## Value co-creation for developing and delivering education resources and training programs follows six steps

Value co-creation follows six steps. The processes that AGPAL implemented in each step to co-create education resources and training programs are shown in Box 1. AGPAL applied the six steps of value co-creation with targeted populations of stakeholders and end users, using an advisory committee, action-focused working groups and a forum. Subject matter experts were encouraged to collaborate and work with key stakeholders: care providers in integrated care (doctors, nurses, specialists, allied health professionals, Aboriginal and Torres Strait Islander health workers and practitioners, and social workers); patients, their families and their carers; and other stakeholders in the private, public and social sectors.

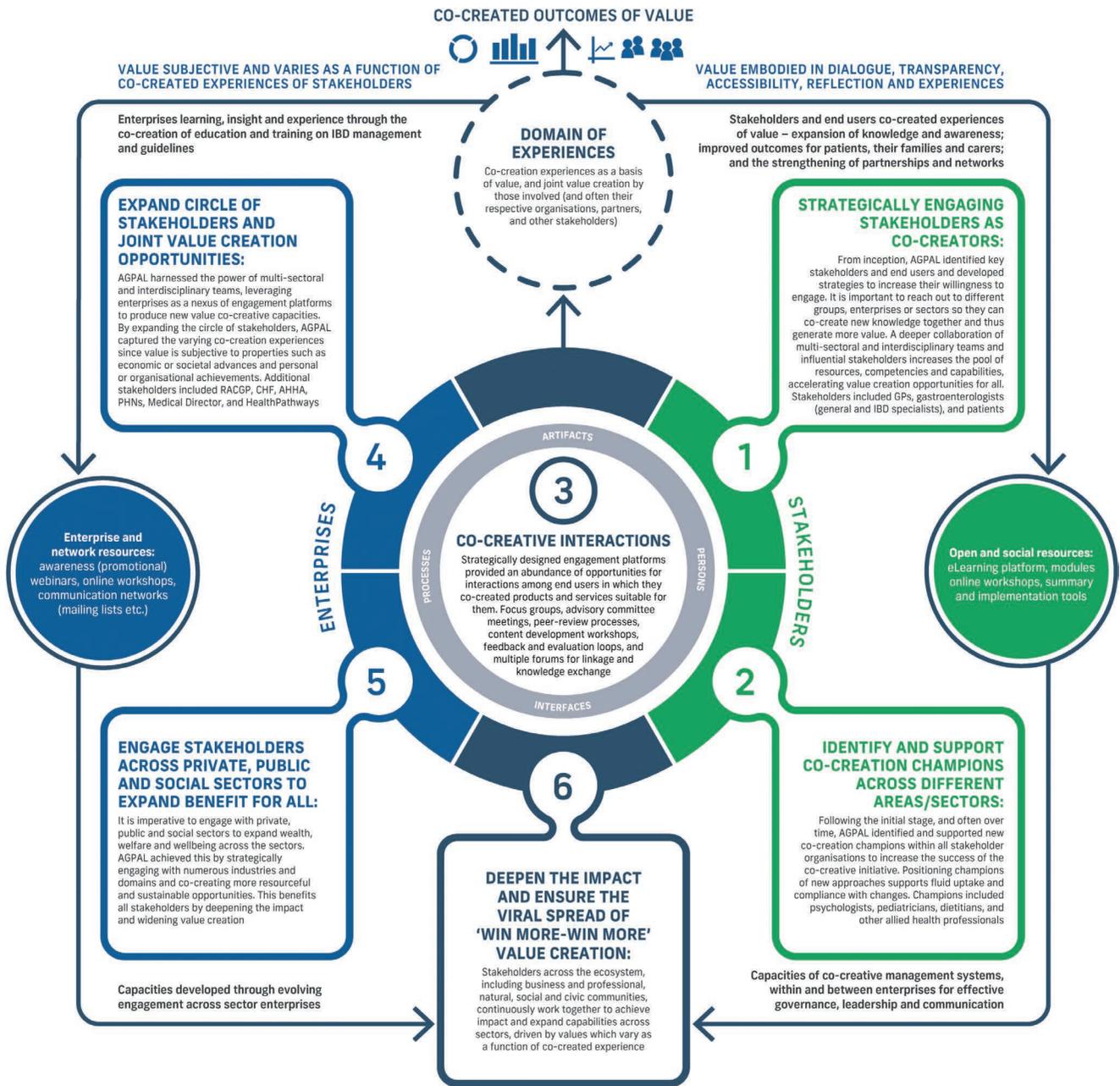
## Case study 1: Inflammatory Bowel Disease GP Aware Project

The Inflammatory Bowel Disease National Action Plan 2019 emphasised the need to improve awareness, management and referral of people living with inflammatory bowel disease (IBD).<sup>23</sup>

<sup>1</sup>Client Focused Evaluation Program Surveys, Brisbane, QLD. <sup>2</sup>University of Queensland, Brisbane, QLD. <sup>3</sup>Prestantia Health, Canberra, ACT. <sup>4</sup>University of Canberra, Canberra, ACT.

<sup>5</sup>Australian General Practice Accreditation Limited, Brisbane, QLD. ✉ [tina.janamian@cfepsurveys.com.au](mailto:tina.janamian@cfepsurveys.com.au) • doi: 10.5694/mja2.51526

1 How Australian General Practice Accreditation Limited co-created education resources and training programs within the six steps of value co-creation\*



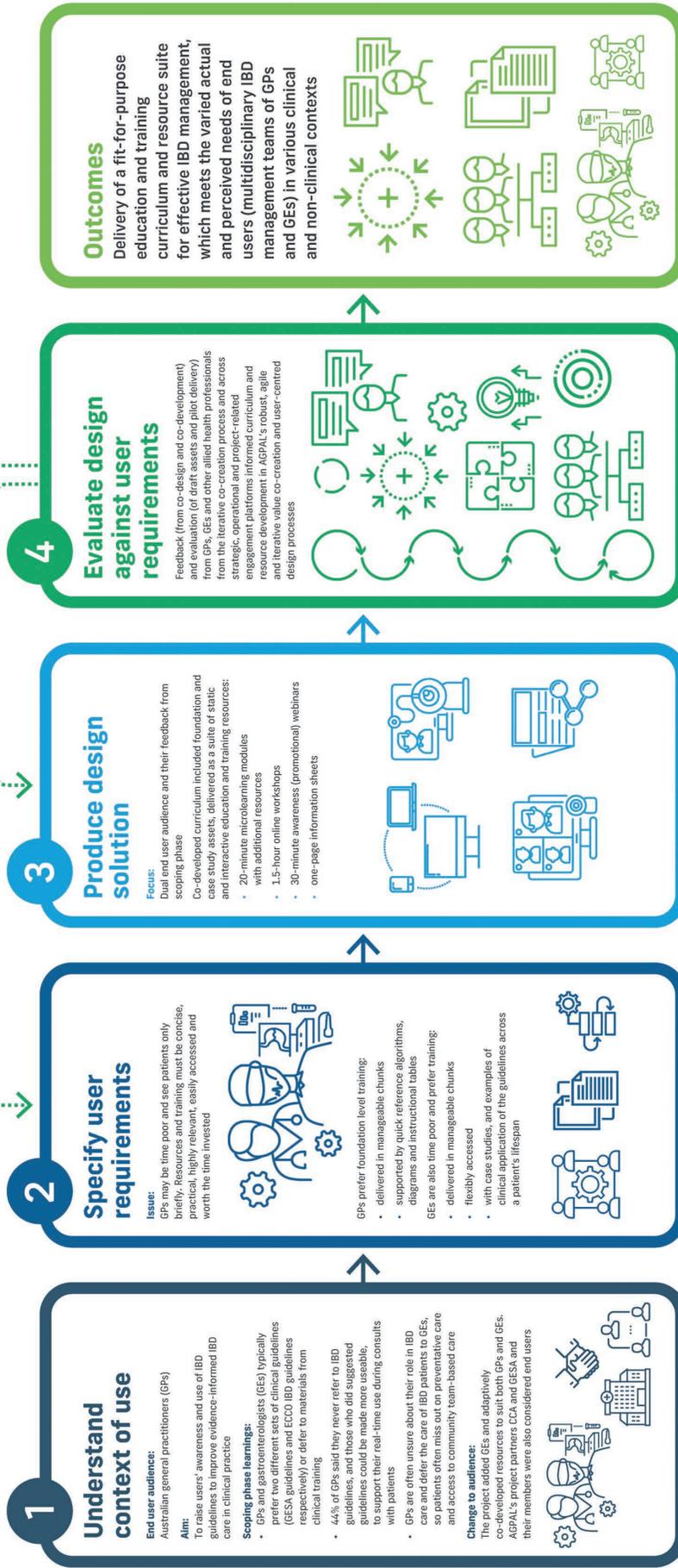
IBD = inflammatory bowel disease. AGPAL = Australian General Practice Accreditation Limited. RACGP = Royal Australian College of General Practitioners. CHF = Consumer Health Forum of Australia. AHHA = Australian Healthcare and Hospitals Association. PHN = Primary Health Network. GP = general practitioner. \* Adapted from Ramaswamy and Ozcan (2014)<sup>2</sup> and Janamian and colleagues (2016).<sup>6</sup> ♦

In response, Crohn's and Colitis Australia, working with the Gastroenterological Society of Australia and AGPAL, secured funding from the Australian Government Department of Health for education and awareness-raising activities that align with recommended actions in the plan — specifically, Priority Area 3, which is to support general practitioners to more effectively participate in IBD management.<sup>23,24</sup>

We purposefully partnered with stakeholders and end users to map knowledge gaps, identify learner needs, ideate, problem solve, transform and mature knowledge, provide context to inform the development of content, and review and revise content.

This resulted in an education and training curriculum, resources, and delivery modes that were co-created with stakeholders and end users, and tailored to end users. The objective was to use awareness raising, education and continuing professional development to improve general practitioner capacity to support IBD patients. AGPAL's application of the six steps of value co-creation to co-design and develop the education and training resources for the Inflammatory Bowel Disease GP Aware Project is described online, along with details on the user-centred design approach that was used to develop the training (adapted from the International Organization for Standardization's standard ISO 9241-210:2019; Box 2),<sup>25</sup> and a description of the

2 The user-centred design approach\*



\* Adapted from ISO 9241-210:2019.<sup>25</sup>

various engagement platforms that were developed to co-create this project (Supporting Information, table 1 and table 2).

Today, the value of the Inflammatory Bowel Disease GP Aware Project extends beyond delivering new knowledge and strategic assets. It is helping to develop capability ecosystems at the frontline of IBD care in Australia, and its educational resources and ongoing engagement platforms are focusing on six evidence-based topics:

- the GP's role in early detection of Crohn's disease and ulcerative colitis;
- early intervention, therapies, referral and triage;
- management of IBD and preventive health;
- multidisciplinary team-based care;
- managing patients with complex conditions — ages and stages; and
- managing complex IBD issues – relapse and comorbidity.

This curriculum is delivered through flexible and fit-for-purpose channels. The first of these is a set of six interactive e-learning modules hosted on a digital platform that was co-designed to optimise the learning experience. The interactive modules, which have continuing professional development endorsement, explore the lifelong journeys of patients “Emma” and “Fred” through a sequential series of animations, infographics, knowledge checks and other supportive assets. The second is a collection of digital workshops and webinars aimed at supporting meaningful engagement with the curriculum. It includes six interactive online workshops (each delivered four times) that are facilitated by subject matter experts and delivered in a manner designed to encourage transformational learning in a supportive peer environment. User analytics, ongoing engagement metrics and stakeholder feedback will inform the next iteration of each asset, ensuring it is fit for purpose and cost effective, and that it meets the actual and perceived audience needs.

### Case study 2: Brisbane South Primary Health Network Person-Centred Care Practice Initiative

The Brisbane South Primary Health Network (PHN) Person-Centred Care Practice Initiative supports general practices to: build their practice team; embed change concepts from the Patient-Centred Medical Homes framework, for a more sustainable practice; and improve patient outcomes. AGPAL was engaged to develop and deliver a multiphase training program of e-learning modules and innovative, practical tools that inform practice transformation<sup>26</sup> in the journey towards higher performing primary health care.<sup>27</sup> This required an education suite that could flexibly meet the needs of the diverse end user audience. PHNs and the primary care teams that they support are excellent examples of the end users of these resources (ie, clinical, non-clinical, operational and administrative staff), who have a range of skill sets and must work together to co-create genuine, informed and measured health care transformation.

The 18-month education program involved co-design, development and delivery of education and training across two tiers of leadership in the Brisbane South PHN region: (i) PHN practice support and optimal care program teams, for whom a train-the-trainer approach to building practice capacity and increasing practice sustainability was used; and (ii) practice leaders, usually practice managers or general practitioners, who would act as agents of change at the general practice level.

Developing education resources that are more fit for purpose and relevant to each end user helps to increase adoption, long-term usability and sustainability of the resources and expand the value for all individuals, organisations and, ultimately, consumers. Details regarding how AGPAL used value co-creation and user-centred design to develop this program, and the various engagement platforms that AGPAL developed to strengthen its co-creation, are provided online (Supporting Information, table 3 and table 4).

### Valuable lessons were learned along the way

Five key lessons were learned across our value co-creation experiences:

- A clear shared purpose and ongoing meaningful dialogue throughout the value co-creation journey, and a demonstrated ability to directly respond to stakeholder and end user needs, lead to a more relational rather than transactional approach. This translates into an optimised user experience, more meaningful engagement for all stakeholders, and a transformation that exceeds stakeholder expectations. The more that stakeholders and end users realise that organisations or health services are committed to listening to, embracing and addressing their requirements, the more they want to be involved with that organisation and their programs.
- The readiness of parties to embrace the commitment, transparency and responsibility of value co-creation can be variable. It is essential to select the right stakeholders and end users to work with, and deepen their capabilities over time, ensuring that they understand their impact on the developmental process, end user perception and sustainability. When engaging new stakeholders and end users, it is best to start on a small project, and support them to learn and grow. In each case study presented, subject matter experts were engaged proportionally to their co-creation experience, with each project acting as an incubator where significant value was both created and experienced by the nascent co-creator on the current project, with value amplified on and for future co-creation projects in which they would be engaged. Developing a coalition of partners over the long term is important for making value co-creation a normal mode of operation.
- Value co-creation is a flexible approach and can be used in combination with other conceptual frameworks to develop and deliver education and other resources, products and services. For instance, we combined user-centred design, experience-based co-design, action learning, adult learning theory, transactional learning, instructional learning theory and e-learning theory to complement value co-creation.
- Be transparent with all parties about the shared purpose and process of value co-creation, the role of each individual and the importance of working together to jointly create value propositions from inception, so that all parties may benefit from the process and co-created outcomes. In our experience, value was realised by each party at different points of the co-creation journey, and individuals and organisations went on to experience value beyond project-specific co-creative interactions and activities.
- Substantial investment in time, resources and planning is required to build co-creation processes with realistic timeframes, suitable management systems (governance, leadership, communication), and appropriate budgets and resources. Be flexible and invest in stakeholder engagement,

networking and collaboration. All this will gradually build a culture of meaningful relationships with those involved and committed to user-centred design principles.

In Australia, there has been continued work towards enabling system drivers that support and grow mature person-centred models of care that deliver value-based care. This requires a collaborative effort from all care providers and a strong role for consumers as active partners in their own care. The use of value co-creation and user-centred design approaches at all levels of the health care system — by policy makers, health care organisations, trainers, care providers, other stakeholders and, of course, patients, their families and their carers — offers us the opportunity to jointly create better value for all.

**Acknowledgements:** The Inflammatory Bowel Disease GP Aware Project is supported by funding to Crohn's and Colitis Australia from the Australian Government Department of Health. The funding covered costs associated with conducting the project, including co-creation of the suite of educational resources. We acknowledge: the important collaboration and partnership with Crohn's and Colitis Australia and the Gastroenterological Society of Australia in this project; the general practitioners and gastroenterologists who were involved in the focus groups and surveys and provided input into co-creation of the educational resources; and the Inflammatory Bowel Disease GP Aware Project Advisory Committee for their leadership, contribution and support. We also acknowledge the contributions of the Brisbane South PHN Person-Centred Care Programs team to the co-creation of the education and training resources — specifically, Suzanne Harvey and Anthony Elliott for their commitment and leadership throughout the program, and Tahni Roberts (the Person-Centred Care Lead) for reviewing the educational resources and supporting their implementation in primary care.

**Open access:** Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

- 1 Ramaswamy V, Ozcan K. What is co-creation? An interactional creation framework and its implications for value creation. *J Bus Res* 2018; 84: 196-205.
- 2 Ramaswamy V, Ozcan K. The co-creation paradigm. Stanford: Stanford University Press, 2014.
- 3 Davey J, Krisjanous J. Integrated health care and value co-creation: a beneficial fusion to improve patient outcomes and service efficacy. *Australas Mark J* 2021; <https://doi.org/10.1177/18393349211030700>.
- 4 Scholz B, Bocking J, Happell B. How do consumer leaders co-create value in mental health organisations? *Aust Health Rev* 2017; 41: 505-510.
- 5 McColl-Kennedy JR, Vargo SL, Danaher TS, et al. Healthcare customer value co-creation practice styles. *J Serv Res* 2012; 15: 370-389.
- 6 Janamian T, Crossland L, Jackson CL. Embracing value co-creation in primary care services research: a framework for success. *Med J Aust* 2016; 204 (7 Suppl): S5-S11. <https://www.mja.com.au/journal/2016/204/7/embracing-value-co-creation-primary-care-services-research-framework-success>
- 7 Greenhalgh T, Jackson C, Shaw S, et al. Achieving research impact through co-creation in community-based health services: literature review and case study. *Milbank Q* 2016; 94: 392-429.
- 8 Janamian T, Jackson CL, Dunbar JA. Co-creating value in research: stakeholders' perspectives. *Med J Aust* 2014; 201 (3 Suppl): S44-S46. <https://www.mja.com.au/journal/2014/201/3/co-creating-value-research-stakeholders-perspectives>
- 9 Gouillart F, Hallett T. Co-creation in government. *Stanford Soc Innovat Rev* 2015; Spring.
- 10 Cook-Sather A, Bovill C, Felten P. Engaging students as partners in teaching and learning: a guide for faculty. San Francisco: Jossey-Bass, 2014.
- 11 Vargo SL, Maglio PP, Akaka MA. On value and value co-creation: a service systems and service logic perspective. *Eur Manag J* 2008; 26: 145-152.
- 12 Galvagno M, Dall'i D. Theory of value co-creation: a systematic literature review. *Manag Serv Qual* 2014; 24: 643-683.
- 13 Ramaswamy V, Gouillart F. The power of co-creation: build it with them to boost growth, productivity, and profits. New York: Free Press, 2010.
- 14 Durall E, Bauters M, Hietala I, et al. Co-creation and co-design in technology-enhanced learning: innovating science learning outside the classroom. *Interact Des Archit J* 2020; 42: 202-226.
- 15 Dopp AR, Parisi KE, Munson SA, et al. Integrating implementation and user-centred design strategies to enhance the impact of health services: protocol from a concept mapping study. *Health Res Policy Syst* 2019; 17: 1.
- 16 Still B, Crane K. Fundamentals of user-centered design: a practical approach. Boca Raton: Routledge, Taylor and Francis Group, 2017.
- 17 Bovill C. A co-creation of learning and teaching typology: what kind of co-creation are you planning or doing? *Int J Stud Part* 2019; 3: 91-98.
- 18 Leoste J, Tammets K, Ley T. Co-creation of learning designs: analyzing knowledge appropriation in teacher training programs. EC-TEL Practitioner Proceedings 2019: 14th European Conference on Technology Enhanced Learning; Delft (The Netherlands), Sept 16-19, 2019. <http://ceur-ws.org/Vol-2437/paper3.pdf> (viewed Apr 2022).
- 19 Bovill C, Cook-Sather A, Felten P, et al. Addressing potential challenges in co-creating learning and teaching: overcoming resistance, navigating institutional norms and ensuring inclusivity in student-staff partnerships. *High Educ* 2016; 71: 195-208.
- 20 van Gemert-Pijnen JE, Nijland N, van Limburg M, et al. A holistic framework to improve the uptake and impact of eHealth technologies. *J Med Internet Res* 2011; 13: e111.
- 21 Shivers-McNair A, Phillips J, Campbell A, et al. User-centered design in and beyond the classroom: toward an accountable practice. *Comput Compos* 2018; 49: 36-47.
- 22 Timmerman JG, Tönis TM, Dekker-van Weering MG, et al. Co-creation of an ICT-supported cancer rehabilitation application for resected lung cancer survivors: design and evaluation. *BMC Health Serv Res* 2016; 16: 155.
- 23 Australian Government Department of Health. Inflammatory Bowel Disease National Action Plan 2019. Canberra: Department of Health, 2019. <https://www.health.gov.au/resources/publications/national-strategic-action-plan-for-inflammatory-bowel-disease> (viewed Apr 2022).
- 24 Crohn's and Colitis Australia. Inflammatory bowel disease National Action Plan: literature review 2018. Melbourne: CCA, 2018.
- 25 International Organization for Standardization. ISO 9241-210:2019. Ergonomics of human-system interaction – part 210: human-centered design for interactive systems. <https://www.iso.org/standard/77520.html> (viewed Apr 2022).
- 26 MacColl Centre for Health Care Innovation; The Commonwealth Fund; Qualis Health. About the Coach Medical Home Project. New York: The Commonwealth Fund, 2013. <https://www.coachmedicalhome.org/about> (viewed Apr 2022).
- 27 Bodenheimer T, Ghorob A, Willard-Grace R, et al. The 10 building blocks of high-performing primary care. *Ann Fam Med* 2014; 12: 166-171. ■

## Supporting Information

Additional Supporting Information is included with the online version of this article.

# Building capacity in those who deliver palliative care services to Aboriginal and Torres Strait Islander peoples

Tina Janamian<sup>1,2</sup>, Paresh Dawda<sup>3,4</sup>, Gregory Crawford<sup>5,6</sup>, Angelene True<sup>3</sup>, Melanie Wentzel<sup>1</sup>, Donald Whaleboat<sup>7</sup>, Tamieka Fraser<sup>8</sup>, Christopher Edwards<sup>8</sup>

**P**alliative care is holistic care that supports people who are facing life-limiting non-curable conditions to live as well as possible, and is broader than end-of-life care.<sup>1</sup> “Good” palliative care requires an integrated approach in a multidisciplinary team environment involving numerous care providers across the health system.<sup>2-4</sup> It is a person-centred, whole-of-person approach and considers the emotional, psychological, spiritual and social aspects of care, which are deeply linked to a person’s cultural identity.<sup>1,5,6</sup>

Most adults in need of palliative care have chronic diseases.<sup>7</sup> Australia faces the challenges of a rapidly growing ageing population that includes Aboriginal and Torres Strait Islander peoples, 19% of whom self-report their health as poor and 20% of whom will be aged over 50 years by 2031.<sup>8</sup> People in this population are significantly more likely than other Australians to experience life-limiting illnesses, including complex, chronic conditions. For example, 35% of older Indigenous Australians are living with diabetes or high blood sugar levels.<sup>8,9</sup>

The role of culture in palliative care for Aboriginal and Torres Strait Islander peoples builds on over 60 000 years of history and includes practices to support a good “finishing up”. Including cultural practice is a key challenge for contemporary health care and a lack of suitable resources is well documented.<sup>6,9,10</sup>

Evidence suggests that Aboriginal and Torres Strait Islander peoples face barriers to these services owing to a lack of awareness of service availability, difficulty accessing culturally trained health professionals, and fear influenced by a history of health service inequality.<sup>11</sup> Aboriginal and Torres Strait Islander peoples, clinicians and academics have consistently identified the need for better and more culturally relevant palliative care services.<sup>11-13</sup> Despite Aboriginal and Torres Strait Islander health workers and practitioners being well placed to act as a cultural connection, they remain under-represented in specialist palliative care settings, and many require further education and training in end-of-life care.<sup>13</sup>

The Gwandalan National Palliative Care Project (NPPC), an initiative of Australian General Practice Accreditation Limited (AGPAL) and Palliative Care South Australia (funded by the Australian Government under the Public Health and Chronic Disease Care Grant, National Palliative Care Projects 2020–2023) addresses these concerns using value co-creation and user-centred design. The aim is being achieved by providing capacity-building education and training to those who deliver palliative care services to Aboriginal and Torres Strait Islander peoples in a range of settings (Box 1).

## Summary

- The role of culture in palliative care for Aboriginal and Torres Strait Islander peoples builds on over 60 000 years of history and includes meaningful practices to support a good “finishing up”.
- The Gwandalan National Palliative Care Project aims to build capacity in those who deliver palliative care to embed culturally responsive care in all end-of-life settings.
- Community consultation, value co-creation and user-centred design ensured that diverse Aboriginal and Torres Strait Islander perspectives informed the Gwandalan curriculum.
- Emerging communities of practice serve as yarning circles where barriers to and enablers of service delivery can be shared and addressed collaboratively.

## Addressing the gaps in palliative care services for Aboriginal and Torres Strait Islander peoples

A scoping review conducted by AGPAL, including publicly available resources (grey literature) and peer-reviewed publications (black literature) published between 2010 and 2021 explored the evidence of gaps in palliative care for Aboriginal and Torres Strait Islander peoples. Search terms used for the review are provided online (Supporting Information, table 1).<sup>14</sup>

The grey literature search identified 324 educational resources, toolkits and government reports. Application of robust inclusion criteria and a review process reduced this to 42 resources for inclusion (Supporting Information, table 2). The search of black literature identified 563 publications, of which 24 met the inclusion criteria and were selected for data extraction and synthesis (Supporting Information, table 3). After screening for eligibility, AGPAL further assessed each resource that met the inclusion criteria to establish an overall theme. Eight key themes emerged from the literature, and these are shown in Box 2.

Most of the reviewed literature indicated an overall lack of resources on Aboriginal peoples’ cultural practices during palliative care and at the end of life, such as the dreaming world view, kinship systems, ceremonial business and responsibilities, the use of bush medicine and the impact of intergenerational trauma associated with death and dying. The literature review also identified a lack of resources about Torres Strait Islander peoples’ beliefs and culture, such as the importance of water, the creation stories of Tagai and how the Tagai constellation informs culture and community, and the role of the Marigeth in the western islands. Of the eight key themes identified in this review, the most noteworthy were those relating to barriers and enablers to access (Theme 1), the role of culture (Theme 2) and communication (Theme 8) (Box 2). The Gwandalan

<sup>1</sup> Client Focused Evaluation Program Surveys, Brisbane, QLD. <sup>2</sup> University of Queensland, Brisbane, QLD. <sup>3</sup> Prestantia Health, Canberra, ACT. <sup>4</sup> University of Canberra, Canberra, ACT. <sup>5</sup> University of Adelaide, Adelaide, SA. <sup>6</sup> Northern Adelaide Local Health Network, Adelaide, SA. <sup>7</sup> James Cook University, Townsville, QLD. <sup>8</sup> Australian General Practice Accreditation Limited, Brisbane, QLD.

✉ tina.janamian@cfepsurveys.com.au • doi: 10.5694/mja2.51528

1 Overview of the Gwandalan National Palliative Care Project (NPCP)



NPCP advisory committee and the content development and review working groups used the literature review findings to design the Gwandalan curriculum.

**Value co-creation and user-centred design to inform a community engagement strategy**

A combination of value co-creation and user-centred design approaches put the end user at the centre of design processes and helped engage them from the beginning and throughout the journey to co-create products and services.<sup>15-18</sup> These flexible and systematic approaches brought together trainers, subject matters experts, stakeholders and end users through iterative facilitated interactions and processes to co-create and co-deliver fit-for-purpose education and training.<sup>19</sup> Details regarding the different engagement platforms that were implemented to co-create the Gwandalan NPCP, steps used to co-create the project’s education and training suite, and the key and jurisdictional stakeholders identified in the project’s communication and engagement strategy are provided online (Supporting Information, table 4, table 5 and table 6, respectively).

Central to the Gwandalan NPCP are the project’s advisory committee members and its subject matter experts in academic and clinical fields (including Aboriginal and Torres Strait Islander health, palliative care and policy development). Committee members add invaluable knowledge and raise awareness of any issues that might hamper engagement or communication with stakeholders, communities or Elders. They also promote the project among existing networks, suggest appropriate avenues for promotion, and provide the project team with contacts and

introductions to communities and other contacts. In line with value co-creation and user-centred design methods, the advisory committee represents Aboriginal and Torres Strait Islander peoples, academic and health professionals, palliative care general practitioners and specialists, peak body organisations, and AGPAL and Palliative Care South Australia.

The Gwandalan NPCP has a robust communication and engagement strategy which ensures that culturally safe and responsive protocols are observed across all engagement platforms and project deliverables. The strategy guides the project team in planning and executing effective community engagement strategies to achieve the project aim and objectives. Strategy implementation includes collaborating with organisations that have existing active engagement in Indigenous health and palliative care settings to co-create resources, workshops and community engagement events.

Various principles and considerations are accounted for when co-designing engagement and communication protocols, including respect for Aboriginal and Torres Strait Islander cultures, informed consent for sharing knowledge with Elders and consumers, building trust and working collaboratively with communities, developing and delivering feasible engagement and communications, applying learnings, and ensuring overarching cultural respect.

The project team worked with the Gwandalan NPCP advisory committee to identify in the communication and engagement strategy the jurisdictional stakeholders that deliver services relevant to the Gwandalan NPCP (Supporting Information, table 6). Identifying key stakeholders means that the project

2 Description of key themes identified in the Gwandalan National Palliative Care Project literature review

<b>Primary theme</b> (Number of black literatures found, number of grey literatures found)	<b>Description</b>
<b>Theme 1:</b> Barriers and enablers to high quality palliative care services (9,3)	Any number of factors may limit or assist access to and quality of palliative care services for Aboriginal and Torres Strait Islander peoples. These include: (i) lack of knowledge and understanding around palliative care, (ii) rural and remote regions, (iii) cultural barriers, and (iv) delay in receiving palliative care.
<b>Theme 2:</b> The role of culture in palliative care for Aboriginal and Torres Strait Islander peoples (6,6)	Culture considers all ideas, customs and social behaviour of Aboriginal and Torres Strait Islander peoples which may play a role in end-of-life care.
<b>Theme 3:</b> Models of care for delivering effective and culturally appropriate palliative care (5,7)	A model of care broadly describes the method by which a health service is delivered. In this instance, a model of care describes an innovative and culturally appropriate way of delivering palliative care to Aboriginal and Torres Strait Islander peoples.
<b>Theme 4:</b> The palliative care workforce (4,6)	Workforce refers to any aspect of the health and community workforce that may play a role in delivering palliative care services to Aboriginal and Torres Strait Islander peoples.
<b>Theme 5:</b> Advance care planning and the Aboriginal health worker or health practitioner (3,4)	Advance care planning refers to planning for an individual's future end-of-life care. This theme also emphasises the significant role of the Aboriginal health worker or health practitioner in engaging with and promoting services to Aboriginal and Torres Strait Islander communities.
<b>Theme 6:</b> The knowledge gaps or efforts to increase knowledge in palliative care for Aboriginal and Torres Strait Islander peoples (3,7)	A knowledge gap refers to an area within the peer-reviewed research that has not been explored or is underexplored. Within grey literature, knowledge refers to sources that aim to provide the intended audience with information about palliative care for Aboriginal and Torres Strait Islander peoples.
<b>Theme 7:</b> Children and young people of Aboriginal and/or Torres Strait Islander descent (1,1)	This theme refers to information that is directly relevant to the palliative care of children and young people of Aboriginal and/or Torres Strait Islander descent.
<b>Theme 8:</b> Culturally appropriate communication (0,9)	Communication is fundamentally necessary for health professionals and their patients undergoing care. The literature about palliative care for Aboriginal and Torres Strait Islander peoples emphasises: (i) culturally appropriate communication in healthcare, (ii) appropriate language and behaviours, (iii) principles for staff to engage with Aboriginal and Torres Strait Islander peoples, (iv) communication of choices, and (v) effective and appropriate engagement.

can reach a national audience, and that it can be effectively and meaningfully promoted and delivered to Aboriginal and Torres Strait Islander palliative care audiences for whom ongoing value can be created.

**Co-created deliverables**

A series of resources released throughout 2021 and 2022, and ongoing engagement platforms, were co-designed to be used in a flexible

manner. They enable learners, and those who would co-create value in their own communities and organisations by extending the training forward, to select those topics and training modalities relevant to their context. One of the main platforms is a set of 15 interactive microlearning modules on an informative and easy-to-navigate e-learning platform; the modules are 15 minutes long, they feature animation, video, images and voiceovers (in English and traditional language), and they invite learners to respond to stimuli and complete onscreen activities as they progress through the curriculum. Another key resource is a digital dillybag of tools and resources to support implementation; this is a highly useful curation of more than 150 existing and newly developed resources designed for use at the frontline of Aboriginal and Torres Strait Islander palliative care, including fact sheets, booklets, conversation starter cards, animations, advance care planning documents, videos and checklists. Other deliverables and ongoing engagement platforms include:

- in-person train-the-trainer workshops;
- digital workshops and webinars;
- *Yaama* — a quarterly newsletter;
- delivery networks led by regional champions; and
- ongoing engagement platforms within and between the Gwandalan NPCP network of stakeholders and end users.

## Targeting strategies to reach end users

To maximise the learner audience, and ensure education and training material can be accessed and implemented across the geographic and cultural diversity of Aboriginal and Torres Strait Islander communities, the Gwandalan NPCP consulted on, co-designed and implemented reach strategies addressing known barriers to uptake:

- in-person reach — workshops and community events in a range of metropolitan, regional, rural and remote locations;
- digital reach — a user-friendly and free digital e-learning platform on which all resources are housed;
- physical reach — hard copy resources available for distribution to services and communities with limited access to technology; and
- temporal reach — capturing the intangible capacity built in for end users throughout the project.

Using this model, we expect lessons, knowledge and practices will be spread throughout respective communities, supporting an even wider and more diverse national audience over time — a viral spread of “win more–win more” value co-creation.<sup>19</sup> Ongoing feedback and evaluation mechanisms continue throughout the project lifespan, informing continual quality improvement and ensuring a culturally responsive approach to project deliverables and implementation. These include the collection of both qualitative and quantitative data through formal and informal feedback, the collation and synthesis of data, action planning for improvement, and ensuring that improvements are reflected in the content and delivery of resources and well communicated to those engaged with the project.

Other engagement, promotional and distribution strategies captured in the community engagement strategy (which were informed by individuals and organisations working in palliative care or with

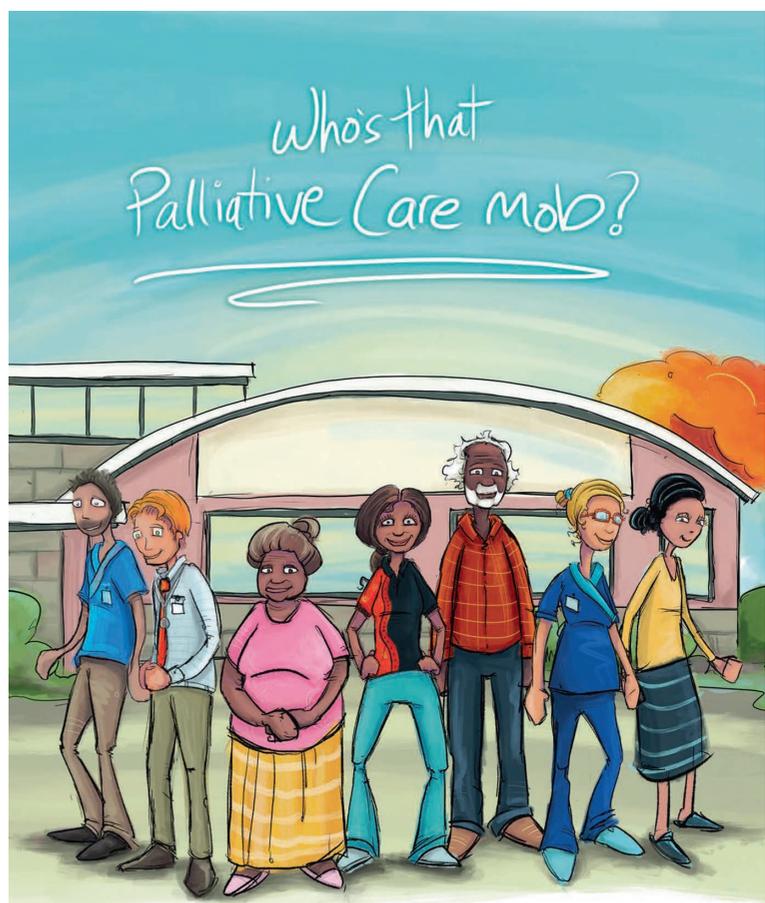
Aboriginal and Torres Strait Islander peoples, Aboriginal Community Controlled Health Organisations, peak bodies and government departments at all levels) include:

- leverage — leveraging primary health centres and Aboriginal medical services to distribute promotional and project material;
- relationships — using existing relationships between AGPAL and Palliative Care South Australia (eg, AGPAL’s extensive network of 31 Primary Health Networks, and Palliative Care South Australia’s links with Aboriginal Community Controlled Health Organisations and palliative care associations nationally); and
- networks — strategically recruiting training participants and reaching an expansive network, so that promotional materials and notifications are sent through appropriate avenues.

## Developing networks to ensure adaptable resources respond to local need

The project team consulted with relevant stakeholders to engage appropriate local teams of champions, comprising Indigenous and non-Indigenous members of the health workforce who could

3 Image from *Who’s that palliative care mob?* — a Gwandalan National Palliative Care Project training resource



### Cultural sensitivity warning

Aboriginal and Torres Strait Islander peoples should be aware that this resource contains materials of a sensitive nature and discusses finishing up, Sorry Business and Sad News.

facilitate and deliver Gwandalan workshops and yarning circles in their region. This localised approach, whereby the Gwandalan curriculum and resources are adapted to local context, cultural practice and engagement protocols, is strengthening partnerships (a key project aim). It is also in line with responsive community engagement that is respectful of culture and customs of the local nation. For example, a Bundjalung facilitator (and their non-Indigenous counterpart) would deliver training on Bundjalung Country, creating ongoing value and supporting deep engagement in this region. In addition, diverse visual and audio representations of Aboriginal and Torres Strait Islander people and communities were carefully and respectfully included in the resources. An example is provided in Box 3.

## Conclusion

The importance of reducing health inequity for Aboriginal and Torres Strait Islander peoples, and the complexity of factors contributing to gaps in service provision, cannot be overstated. The Gwandalan NPCP places Aboriginal and Torres Strait Islander peoples, families and communities at the centre of program design. It actively engages diverse co-creation champions to collaboratively co-design fit-for-purpose resources to build capacity in the contemporary Australian health care workforce, with a view to reducing health inequity for Aboriginal and Torres Strait Islander peoples.

By co-designing resources that are culturally safe and flexible, and respond to a diverse and far-reaching audience, the Gwandalan NPCP co-creates value for all frontline workers delivering palliative and end-of-life care (and others working with Aboriginal and Torres Strait Islander peoples in a range of settings). The Gwandalan NPCP contributes a practical and engaging curriculum, and resources that will continue to emerge and evolve as value spreads across the sector when each new health service, community, academic, clinician, student or other person engages with, responds to and shares the resources (freely available at [www.gwandalanpalliativecare.com.au](http://www.gwandalanpalliativecare.com.au)).

The project intends that continually emerging communities of practice between Indigenous and non-Indigenous frontline staff, within and between care teams and broader organisations, will serve as yarning circles, where barriers to and enablers of culturally responsive palliative and end-of-life care will be shared and addressed collaboratively using a strengths-based approach. The goal is that Indigenous palliative care patients, their families and their communities, as well as frontline staff and their own networks, will all “win more–win more” as relationships are strengthened and capacity is continually built for sustained and accumulative effect.

**Acknowledgements:** The Gwandalan National Palliative Care Project is supported by funding from the Australian Government under the Public Health and Chronic Disease Care Grant, National Palliative Care Projects 2020–2023. We acknowledge the Traditional Custodians of the land on which we live and work and recognise the continuing connection to land, waters and culture. We pay our respects to Elders, past, present and emerging, and acknowledge Elders as the holders of knowledge, lore and wisdom. We acknowledge the following key stakeholders for their support in making this project a success: our partner organisation Palliative Care South Australia; Darkinjung Local Aboriginal Land Council; Palliative Care Australia; and Indigenous Program of Experience in the Palliative Approach. We acknowledge the contribution, guidance and support of the Gwandalan National Palliative Care Project Advisory Committee in the co-creation of educational resources. We acknowledge Eliza Munro, the Indigenous Project Coordinator, for her passion and invaluable contribution to the project and in engaging with Aboriginal and Torres Strait Islander communities nationally and other key stakeholders. We also acknowledge the immense contribution of the members of the Gwandalan Project content development and review working groups who guided the co-creation of the suite of educational resources to ensure they were culturally safe and responsive for Aboriginal and Torres Strait Islander communities nationally.

**Open access:** Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

- 1 Australian Government Department of Health. National Palliative Care Strategy 2018. Canberra: Department of Health, 2019. <https://www.health.gov.au/sites/default/files/the-national-palliative-care-strategy-2018-national-palliative-care-strategy-2018.pdf> (viewed Apr 2022).
- 2 Palliative Care Australia. What is palliative care? Canberra: PCA, 2020. <https://palliativecare.org.au/what-is-palliative-care> (viewed Apr 2022).
- 3 Gómez-Batiste X, Murray SA, Thomas K, et al. Comprehensive and integrated palliative care for people with advanced chronic conditions: an update from several European initiatives and recommendations for policy. *J Pain Symptom Manage* 2017; 53: 509–517.
- 4 den Herder-van der Eerden M, van Wijngaarden J, Payne S, et al. Integrated palliative care is about professional networking rather than standardisation of care: a qualitative study with healthcare professionals in 19 integrated palliative care initiatives in five European countries. *Palliat Med* 2018; 32: 1091–1102.
- 5 Health Foundation. Person-centred care made simple: what everyone should know about person-centred care. London: Health Foundation, 2016. <https://www.health.org.uk/publications/person-centred-care-made-simple> (viewed Apr 2022).
- 6 National Palliative Care Program. Providing culturally appropriate palliative care to Indigenous Australians. Canberra: Australian Government Department of Health and Ageing, 2004. <https://healthinfonet.ecu.edu.au/key-resources/resources/15232/?title=Providing+culturally+appropriate+palliative+care+to+Indigenous+Australians> (viewed Apr 2022).
- 7 World Health Organization. Integrating palliative care and symptom relief into primary health care: a WHO guide for planners, implementers and managers. Geneva: WHO, 2018.
- 8 Australian Institute of Health and Welfare. Older Australians (AIHW Cat. No. AGE 87). Canberra: AIHW, 2021. <https://www.aihw.gov.au/reports/older-people/older-australians/contents/about> (viewed Apr 2022).
- 9 Shahid S, Bessarab D, van Schaik KD, et al. Improving palliative care outcomes for Aboriginal Australians: service providers' perspectives. *BMC Palliat Care* 2013; 12: 26.
- 10 Indigenous Program of Experience in the Palliative Approach Project Team. Cultural considerations: providing end-of-life care for Aboriginal peoples and Torres Strait Islander peoples. Brisbane: Queensland University of Technology, 2020. [https://pepaeducation.com/wp-content/uploads/2020/12/PEPA\\_CulturalConsiderationsFlipbook\\_Web.pdf](https://pepaeducation.com/wp-content/uploads/2020/12/PEPA_CulturalConsiderationsFlipbook_Web.pdf) (viewed Apr 2022).
- 11 O'Brien AP, Bloomer MJ, McGrath P, et al. Considering Aboriginal palliative care models: the challenges for mainstream services. *Rural Remote Health* 2013; 13: 2339.
- 12 McGrath P. The living model: an Australian model for Aboriginal palliative care service delivery with international implications. *J Palliat Care* 2010; 26: 59–64.
- 13 Shahid S, Ekberg S, Holloway M, et al. Experiential learning to increase palliative care competence among the Indigenous workforce: an Australian experience. *BMJ Support Palliat Care* 2019; 9: 158–163.
- 14 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *Int J Soc Res Methodol* 2005; 8: 19–32.
- 15 Ramaswamy V, Ozcan K. The co-creation paradigm. Stanford: Stanford University Press, 2014.
- 16 Galvagno M, Dalli D. Theory of value co-creation: a systematic literature review. *Manag Serv Qual* 2014; 24: 643–683.
- 17 Dopp AR, Parisi KE, Munson SA, et al. Integrating implementation and user-centred design strategies to enhance the impact of health services: protocol from a concept mapping study. *Health Res Policy Syst* 2019; 17: 1.
- 18 Ratwani RM, Fairbanks RJ, Hettinger AZ, et al. Electronic health record usability: analysis of the user-centered design processes of eleven electronic health record vendors. *J Am Med Inform Assoc* 2015; 22: 1179–1182.
- 19 Janamian T, True A, Dawda P, et al. Co-creating education and training programs to build workforce capacity to support the implementation of integrated health care initiatives. *Med J Aust* 2022; 216 (10 Suppl): S9–S13. ■

## Supporting Information

Additional Supporting Information is included with the online version of this article.

# Lessons from the implementation of the Health Care Homes program

Angelene True<sup>1</sup>, Tina Janamian<sup>2,3</sup>, Paresh Dawda<sup>1,4</sup>, Tracey Johnson<sup>5</sup>, Gary Smith<sup>6</sup>

The centrepiece of the Australian Government's Healthier Medicare package in 2016 was to introduce the Health Care Homes model.<sup>1</sup> The model adopted the evidence-informed person-centred medical home approach,<sup>2</sup> which encompasses the ten building blocks of higher performing primary health care described by Bodenheimer and colleagues:<sup>3</sup> engaged leadership, data-driven improvement, empanelment, team-based care, the patient–team partnership, population management, continuity of care, prompt access to care, comprehensiveness and care coordination, and a template of the future.

Health Care Homes are practices that provide better coordinated and flexible care for Australians with chronic and complex health conditions — person-centred care. They achieve this ideal by promoting innovation in service delivery and efficiencies in the health system.<sup>4</sup> Key features include voluntary patient enrolment, risk stratification, a bundled payment per enrolled patient based on complexity, shared-care planning, and team-based care. Health Care Home practices were supported by education and training in the model and related change activities, and regional and national facilitation to strengthen transformation and data sharing.

The Australian Government trialled Health Care Homes from June 2016 to June 2021. Predisposing activity and recruitment of participating practices occurred until December 2017, recruitment of patients took place through to June 2019, and implementation concluded in June 2021. By 31 August 2019, 10 161 patients had been successfully enrolled across 131 Health Care Homes (mainstream general practices and Aboriginal Community Controlled Health Services) within ten selected Primary Health Network regions. Stakeholders included patients, their families and carers, general practice business owners and teams, allied health providers, specialists, hospital services, community agencies, Primary Health Networks, education and training providers, national facilitation leadership and support agencies, health care payers, software vendors, and evaluation partners.

## Three key lessons from the trial

Australian General Practice Accreditation Limited was commissioned to provide education and training for all Health Care Homes, provide national facilitation support to Primary Health Networks, and document outcomes from the national forum held in November 2019. Results of the forum, input from subject matter experts and the program evaluation results<sup>5-7</sup> identified three key lessons.

### Health Care Homes is a preferred model of care

While implementation was variable, Health Care Homes that recruited a larger number of patients and adopted a whole-of-practice approach optimised the model of care more successfully than others.<sup>5-7</sup> Practices that recruited small numbers of patients,

## Summary

- Australia's primary health care system works well for most Australians, but 20% of people live with multimorbidity, often receiving fragmented care in a complex system.
- Australia's 10-year plan for primary health care recognises that person-centred care is essential to securing universal health coverage, improving health outcomes and achieving an integrated sustainable health system.
- The Health Care Homes trial tested a new model of person-centred care for people with chronic and complex health conditions.
- This model demonstrated that change can be achieved with dedicated transformational support and highlighted the importance of enablers and reform streams that are now established in the 10-year plan.

had high staff turnover, or had less staff buy-in or leadership were less successful in implementing the model.<sup>5-7</sup>

Recognised as the most underutilised resources in the health care system,<sup>8</sup> patients and carers are considered core members of the care delivery team in a Health Care Home. While approaches to patient enablement have traditionally adopted a one-size-fits-all approach, the Health Care Homes model adopts a person-centred and team-based care approach in pursuit of value-based health care: better health outcomes, better consumer and provider experience, improved efficiency, and increased value per dollar spent.<sup>9</sup>

Patients, carers, practice staff and other delivery partners have been surveyed in multiple rounds across the program duration.<sup>10,11</sup> Where implementation was successful, feedback from enrolled patients and practice staff alike suggested that the model is preferred by and for patients with chronic and complex conditions.<sup>5-7</sup>

Patients reported: greater and more timely access to practice staff, clinical advice and services; greater involvement in shared-care planning, planned care and reviews; greater access to practice nurses, medical assistants or care coordinators; enhanced access to allied health services, health education and coaching; and increased confidence in self-management capability. Carer feedback highlighted similar benefits of the model. Challenges included limited awareness of the trial itself and a lack of trust or ability to use shared-care planning tools.

Many practices were able to strengthen team-based care through enhancing the contribution of nursing staff and introducing new roles such as medical assistants or care coordinators, who provided personalised care to patients through enhanced monitoring, care management, review and recall, health education and coaching, and pastoral care. Practices that had in-house allied health before the trial began found it easier to enhance shared-care planning and team-based care.<sup>5-7</sup>

Practice challenges included managing patient expectations to always see a general practitioner. Case studies on patient-reported

health outcomes and experiences of care were collected by the evaluation team, participating practices and Primary Health Networks; while many of these reported positive outcomes for physical and mental health, it was difficult to demonstrate clinical health benefits due to the short implementation phase.

### Practice facilitation supports practice transformation

Changing the model of care in general practice and Aboriginal Community Controlled Health Services is complex. For example, it takes new workforce models and behaviours, coordinated team-based care, and streamlined care processes to create the authorising environment in which staff can operate at their full scope of practice and as part of an effective team.<sup>12,13</sup>

The practice facilitation model is an evidence-based approach to supporting clinicians and health service providers to transform models of care and drive practice improvement.<sup>14,15</sup> Practice facilitators were employed by participating Primary Health Networks to support practice staff in implementing and retaining fidelity to the Health Care Home model. This included: fostering close working relationships with key stakeholders; establishing regional communities of practice; building capacity and capability through information, education, advice and guidance; linking and leveraging both program-wide and system-wide assets and resources; facilitating and supporting practice change activity and transformation; and monitoring and reporting on progress, challenges and successes.<sup>4</sup> Four core competencies of practice facilitation are: robust quality improvement and change management methods; data-driven improvement; health technology optimisation; and facilitative interpersonal skills.<sup>12,13</sup> In addition, a national practice facilitation role was fulfilled by Australian General Practice Accreditation Limited, which provided educational materials and resources to Health Care Home practices, and educated, coached and supported practice facilitators across the program duration.<sup>4</sup>

A key challenge of the Health Care Homes trial was recruiting and retaining appropriately experienced practice facilitation staff, which required multiple education and capability-building rounds.<sup>4,6</sup> Some practices reported frustration with practice facilitation staff turnover, yet practices were largely positive and recognised that external facilitators were critical to transformation and welcomed the support of this upskilled workforce.

The trial demonstrated that, when applied with concerted effort, practice facilitation can help general practices make and sustain change, and enhance their leadership and adaptive reserve, which can improve their ability to respond to changing requirements such as those resulting from the COVID-19 pandemic. Moving forward, enhancing system capability requires careful consideration of how practice facilitation is implemented, particularly in terms of: an appropriate remuneration, recruitment, training and retention strategy; a robust accountability framework to demonstrate impact; and a long-term, well supported national development plan that builds and sustains practice transformation capability.

### Health Care Homes system enablers are prerequisites to value-based health care

System enablers such as workforce development, digital technologies, integrated information systems, quality data and alternative payment mechanisms are prerequisites to value-based health care.<sup>16</sup> Enhanced digital technologies and asynchronous communication modes stimulate consumer

activation, engagement, self-care and care monitoring. Integrated clinical information systems encompassing risk stratification, shared-care planning and communication mechanisms, patient monitoring and outcome tracking are necessary for realising team-based care that is safe, person centred and effective.

Many challenges in introducing these system enablers were experienced, but they were not insurmountable.<sup>5-7</sup> For example, teething problems with the risk stratification tool were addressed before patient enrolment. Also, limitations of shared-care planning tools (such as the lack of interoperability with general practice software) were noted, yet many practices and allied health providers recognised the value in trialling these innovations. In addition, feedback from trialling such innovations provided software vendors with valuable insights for progressing development of these tools.

While there were mixed views on the implementation and financial effect of the bundled payment, there were two notable positives. First, there was an enhanced focus on the quality of data collected in general practice as a by-product and driver of higher performing primary health care. Second, some practices reported that they broke even or were better off under the payment model than under the Medicare Benefits Schedule, demonstrating that a bundled payment may be a feasible alternative.<sup>5-7</sup> While final evaluation results are pending, feedback suggested that this alternative payment model could be enhanced by expanding tiers to accommodate patients for whom costs are higher, increasing the level of funding by tier, or weighting the payment to account for patient, practice or regional factors.<sup>6</sup>

### Health Care Homes as pioneers of change

The Health Care Homes trial incorporated insights and lessons from implementation of the person-centred medical home model that has been used overseas.<sup>1-3</sup> Health Care Homes have, to some extent, proven that this model of care can be successfully implemented over time with general practice commitment to person-centred and team-based care, effective practice facilitation, and investment in appropriate system enablers and supports.

While Australia's Primary Health Care 10 Year Plan contains key components of the Health Care Homes model and system enablers,<sup>17</sup> successful implementation will be challenging. However, the Health Care Homes model and its education and facilitation resources continue to provide a framework for practice transformation for Primary Health Networks, and system enablers provide mechanisms for reform.

However, large scale system reform requires more than a short term program approach: it demands sustained commitment and investment (emotional, practical and financial) that cascades through all levels of the system. Fundamentally, general practice transformation and system reform requires a longer term commitment. To achieve this, investment in person-centred and team-based care, as well as practice facilitation and system enablers, is essential.

**Acknowledgements:** The Health Care Homes initiative was a national primary health care reform program funded by the Australian Government Department of Health. The funding covered costs associated with the development, predisposing activity, implementation and cessation of the Health Care Home model.

**Open access:** Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

- 1 Australian Government Department of Health. Healthier Medicare. Canberra: Department of Health, 2016. <https://www1.health.gov.au/internet/main/publishing.nsf/Content/healthiermedicare> (viewed Apr 2022).
- 2 O'Dell M. What is a patient-centered medical home? *Mo Med* 2016; 113: 301-304.
- 3 Bodenheimer T, Ghorob A, Willard-Grace R, Grumbach K. The 10 building blocks of high-performing primary care. *Ann Fam Med* 2014; 12: 166-171.
- 4 Australian Government Department of Health. Health Care Homes. Canberra: Department of Health, 2016. <https://www1.health.gov.au/internet/main/publishing.nsf/content/health-care-homes> (viewed Apr 2022).
- 5 Health Policy Analysis. Evaluation of the Health Care Homes program – interim evaluation report 2019, volume 1: summary report. Canberra: Department of Health, 2019. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/C7F870EAD1883B57CA2585F40005AAC8/\\$File/Evaluation%20of%20the%20HCH%20program%20-%20Interim%20evaluation%20report%202019.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/C7F870EAD1883B57CA2585F40005AAC8/$File/Evaluation%20of%20the%20HCH%20program%20-%20Interim%20evaluation%20report%202019.pdf) (viewed Apr 2022).
- 6 Health Policy Analysis. Evaluation of the Health Care Homes program – interim evaluation report 2020, volume 1: summary report. Canberra: Department of Health, 2020. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/C7F870EAD1883B57CA2585F40005AAC8/\\$File/HCH%20Interim%20eval%20report%202020%20Vol%201%20Summary%20report%20\(Final\).pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/C7F870EAD1883B57CA2585F40005AAC8/$File/HCH%20Interim%20eval%20report%202020%20Vol%201%20Summary%20report%20(Final).pdf) (viewed Apr 2022).
- 7 Health Policy Analysis. Evaluation of the Health Care Homes program – interim evaluation report 2020, volume 2: main report. Canberra: Department of Health, 2020. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/AD51EBE397452EF5CA2580F700164BAD/\\$File/Interim%20eval%20report%202020%20Vol%202.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/AD51EBE397452EF5CA2580F700164BAD/$File/Interim%20eval%20report%202020%20Vol%202.pdf) (viewed Apr 2022).
- 8 Safran C. Statement of Charles Safran, M.D., President, American Medical Informatics Association, Bethesda, Maryland. In: Hearing before the Subcommittee on Health of the Committee on Ways and Means. U.S. House of Representatives one hundred eighth congress, second session, 17 June 2004 (Serial No. 108-55). Washington: U.S. Government Printing Office, 2005. <https://www.congress.gov/108/chr/CHRG-108hrg99674/CHRG-108hrg99674.pdf> (viewed Apr 2022).
- 9 Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med* 2014; 12: 573-576.
- 10 Health Policy Analysis. Evaluation of the Health Care Homes program – evaluation plan. Canberra: Department of Health, 2019. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/C7F870EAD1883B57CA2585F40005AAC8/\\$File/HCH\\_Evaluation\\_plan\\_29\\_Oct\\_19.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/C7F870EAD1883B57CA2585F40005AAC8/$File/HCH_Evaluation_plan_29_Oct_19.pdf) (viewed Apr 2022).
- 11 Health Policy Analysis. Evaluation of the Health Care Homes program – interim evaluation report 2020, volume 3: evaluation progress. Canberra: Department of Health, 2020. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/AD51EBE397452EF5CA2580F700164BAD/\\$File/Interim%20eval%20report%202020%20Vol%203.pdf](https://www1.health.gov.au/internet/main/publishing.nsf/Content/AD51EBE397452EF5CA2580F700164BAD/$File/Interim%20eval%20report%202020%20Vol%203.pdf) (viewed Apr 2022).
- 12 MacColl Centre for Health Care Innovation; Qualis Health. Coach Medical Home: a practice facilitator's guide to medical home transformation. New York: The Commonwealth Fund, 2013.
- 13 Knox L, Brach C. The practice facilitation handbook: training modules for new facilitators and their trainers (AHRQ Publication No. 13-0046-EF). Rockville: Agency for Healthcare Research and Quality, 2013.
- 14 Nagykaldi Z, Mold J, Aspy C. Practice facilitators: a review of the literature. *Fam Med* 2005; 37: 581-588.
- 15 Baskerville N, Liddy C, Hogg W. Systematic review and meta-analysis of practice facilitation within primary care settings. *Ann Fam Med* 2012; 10: 63-74.
- 16 NSW Health. Value based health care. Sydney: NSW Health, 2021. <https://www.health.nsw.gov.au/Value/Pages/default.aspx> (viewed Apr 2022).
- 17 Australian Government Department of Health. Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022-2032. Canberra: Department of Health, 2022. <https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032> (viewed Apr 2022). ■

# Value in primary care clinics: a service ecosystem perspective

Janet R McColl-Kennedy , Teegan Green, Mieke L van Driel

**H**igh quality primary care is the foundation of a high-functioning health care system and is critical for achieving health care's Quadruple Aim (enhancing patient experience, improving population health, reducing costs, and improving the health care team experience).<sup>1</sup> Although Australia's health care system can be regarded as being among the best in the world,<sup>2</sup> primary care clinics, which are the front door of the health system in Australia,<sup>3</sup> currently face significant pressures from technological advances,<sup>4</sup> increasing patient demands, resource constraints, workforce shortages (including general practitioners),<sup>5</sup> and increasing shareholder expectations.<sup>6</sup> The global coronavirus pandemic puts further strain on clinics, creating a turbulent time for service provision.<sup>7,8</sup> Despite continued calls for a greater focus on the Quadruple Aim,<sup>9</sup> much work remains to be done to operationalise the concept in practice. One way to refocus on the Quadruple Aim is through understanding value from a service ecosystem perspective.

There is growing recognition of the importance of a service ecosystem approach.<sup>10</sup> Service ecosystems are relatively self-contained, self-adjusting systems where actors integrate resources for mutual value creation through their activities and interactions.<sup>11</sup> Taking a service ecosystem perspective requires understanding the different actors' perspectives and seeing how value can be co-created by actors within the ecosystem.<sup>11</sup>

Moving from a fee-for-service (volume orientation) model to more patient-centred care<sup>12,13</sup> (value orientation) is expected to facilitate greater value for all stakeholders in a health care ecosystem,<sup>14,15</sup> and provides a means for clinics to be sustainable in a turbulent environment. Further, a more patient-centred approach appears well aligned with the Quadruple Aim. We define the Quadruple Aim as consistent with the established work of Bodenheimer and Sinsky,<sup>9</sup> which highlights that care of the patient requires care of the service provider(s), in addition to enhancing the patient experience, improving population health, and reducing costs. Despite continued calls for a focus on the Quadruple Aim, much remains to be done in operationalising the approach in Australia.

Fundamental to achieving the Quadruple Aim is to understand what value means to the various actors in the clinic service ecosystem. That is, what patients, patients' family members/carers, medical practitioners (doctors), practice managers, nurses, allied health workers, receptionists and owners value; and how value can be co-created through activities and interactions within the primary care clinic.<sup>13</sup>

Value has been viewed in a number of ways in health care. These include a finance-first focus,<sup>16</sup> a patient-first focus,<sup>17</sup> or some element of balancing these two goals. The potential tension between care of the patient and running a financially viable clinic, in our view, underscores the criticality of taking a broader view and understanding the components of the Quadruple Aim. Key questions to resolve include:

## Summary

- In this article, we propose that value is a multidimensional construct, highlighting the need for a multi-actor service ecosystem perspective of value in primary care clinics.
- We argue that different actors in the service ecosystem — for example, patients, their family members and carers, medical practitioners, practice managers, nurses, allied health workers, receptionists and practice owners — may value different aspects of health service delivery more highly than others.
- We describe ways in which value is perceived among actors in primary care, and highlight the need for a greater focus on a broader view of value involving the various stakeholders to realise better outcomes.

- How can reducing costs be balanced with care of the patient?
- How can patient experience at the clinic level be enhanced while at the same time enhancing wellbeing of the providers?
- How can population health at the overall system level be improved?

Traditionally, value has been defined using economic perspectives and based on neoclassical, dyadic, linear evaluations of costs and benefits, specifically health outcomes per dollars spent.<sup>16</sup> A seminal study<sup>18</sup> found five different styles of value creation among cancer patients linked to patient self-reports of wellbeing, highlighting the importance of viewing value from the different actors' perspectives. In line with the evolution of the patient-centred medical home model, Rollow and Cucchiara<sup>17</sup> highlight the importance of taking into account the patient's view of value in primary care. They define patient-centred value as what patients want from care and what they or their payers will pay for. Specifically, they observe that different patients, depending on their journeys and health conditions, value five components in different ways: health-related expertise and functioning; cure – experience and functioning; healing; pre-conditions of health, such as support for food and housing; and the patient's experience of care in terms of access, their relationship with their care providers, technical excellence and amenities.

Rollow and Cucchiara argue that value creation in primary care can be achieved through three tiers of activities. At the most fundamental level are activities related to the organisation's mission and customer values, the clinic's business model, the organisational structure, and information technology. Next are activities around direct care, including access, relationships between the patient and provider, evidence-based diagnosis and treatment, and care planning. At the third level are coordination activities, including, for example, self-management support, coordination with other providers, and integration.

Taking into account the patient's view of value in primary care is a critical step in the right direction, rather than thinking that

value is created by providers for patients (as in a finance-first perspective). However, it is also essential to understand that value is co-created with and by others in primary care clinics. A considerable body of literature now articulates value as a multidimensional construct, derived from definitions based on utility, function, emotional appeal, perceived benefits and costs, and acquisition factors.<sup>18</sup> A growing consensus informed by developments in service-dominant logic, suggests that value is an active process where a range of multiple actors in the service ecosystem work together to co-create benefits for themselves and others through the integration of resources.<sup>13,19</sup> Rather than being delivered by providers *for* patients, value is co-created through multiparty interactions within service ecosystems,<sup>18</sup> that is, between patients, practitioners and other members of the health care networks within which they interact. At the micro level of the ecosystem, this is the primary care clinic.<sup>11</sup> If health care is a science and an art,<sup>20</sup> in keeping with this view, we argue that embracing a multi-actor perspective requires exploring commonalities and differences in how different health care ecosystem actors understand value, and how these commonalities and differences influence the value that is co-created as a result.

Currently, in the Australian primary care landscape, this is not yet well understood. Concerns have already been raised from the perspective of quality improvement and accountability in primary care over whether the discussion of value in the Australian primary health care context needs to be better addressed, and the role of the Primary Health Networks for driving this transformation.<sup>20</sup> Several years on, the literature is relatively fragmented in terms of whether the goals of the Quadruple Aim have been achieved. Understanding value as perceived by the different actors is fundamental to the transformation process. As turbulent times continue, the key challenges for each primary care clinic are:

- truly understanding the importance of co-creating value;
- recognising that all actors have responsibility for co-creating value, not just with patients, but with all actors in the clinic's service ecosystem;
- understanding that the different actors will perceive value in different ways; and
- promoting interaction among and between actor groups to enhance experiences for all — patients, clinic employees and owners.

**Open access:** Open access publishing facilitated by The University of Queensland, as part of the Wiley - The University of Queensland agreement via the Council of Australian University Librarians.

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

- 1 National Academies of Sciences, Engineering, and Medicine. Implementing high-quality primary care: rebuilding the foundation of health care. Washington, DC: The National Academies Press, 2021.
- 2 CSIRO Futures. Future of health: shifting Australia's focus from illness treatment to health and wellbeing management. Canberra: CSIRO, 2018. <https://www.csiro.au/en/work-with-us/industries/health/health> (viewed Mar 2022).]
- 3 Australian Institute of Health and Welfare. Australia's health 2018 (AIHW Series No. 16; Cat. No. AUS 221). Canberra: AIHW, 2018. <https://www.aihw.gov.au/reports/australias-health/australias-health-2018/contents/overview> (viewed Apr 2022).
- 4 Agarwal R, Dugas M, Gao G, Kannan PK. Emerging technologies and analytics for a new era of value-centered marketing in healthcare. *J Acad Mark Sci* 2019; 48: 9-23.
- 5 Young L, Peel R, O'Sullivan B, Reeve C. Building general practice training capacity in rural and remote Australia with underserved primary care services: qualitative investigation. *BMC Health Serv Res* 2019; 19: 338-338.
- 6 Moel-Mandel C, Sundararajan V. The impact of practice size and ownership on general practice care in Australia. *Med J Aust* 2021; 214: 408-410. <https://www.mja.com.au/journal/2021/214/9/impact-practice-size-and-ownership-general-practice-care-australia>
- 7 Van Hattem NE, Silven AV, Bonten TN, Chavannes NH. COVID-19's impact on the future of digital health technology in primary care. *Fam Pract* 2021; 38: 845-847.
- 8 Berry LL, Attai DJ, Scammon DL, et al. When the aims and the ends of health care misalign. *J Serv Res* 2020; 25: 160-184.
- 9 Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med* 2014; 12: 573-576.
- 10 Mustak M, Plé L. A critical analysis of service ecosystems research: rethinking its premises to move forward. *J Serv Mar* 2020, 34: 399-413.
- 11 Frow P, McColl-Kennedy JR, Payne A, et al. Service ecosystem well-being: conceptualization and implications for theory and practice. *Eur J Mark* 2019; 53: 2657-2691.
- 12 McClellan M, Leavitt M. Competencies and tools to shift payments from volume to value. *J Am Med Assoc* 2016; 316: 1655-1656.
- 13 McColl-Kennedy JR, Hogan SJ, Witell L, et al. Cocreative customer practices: effects of health care customer value cocreation practices on well-being. *J Bus Res* 2017; 70: 55-66.
- 14 Berry LL. Service innovation is urgent in healthcare. *AMS Rev* 2019; 9: 78-92.
- 15 Vink J, Koskela-Huotari K, Tronvoll B, et al. Service ecosystem design: propositions, process model, and future research agenda. *J Serv Res* 2021; 24: 168-186.
- 16 Porter ME, Teisberg EO. Redefining health care: creating value-based competition on results. Harvard Business School Press, 2006.
- 17 Rollow W, Cucchiara P. The primary care value model. *Ann Fam Med* 2016; 14: 159-165.
- 18 McColl-Kennedy JR, Vargo SL, Dagger TS, et al. Health care customer value cocreation practice styles. *J Serv Res* 2012; 15: 370-389.
- 19 Boksberger PE, Melsen L. Perceived value: a critical examination of definitions, concepts and measures for the service industry. *J Serv Mark* 2011; 25: 229-240.
- 20 Oliver-Baxter J, Brown L, Dawda P. Should the healthcare compass in Australia point towards value-based primary healthcare? *Aust Health Rev* 2017; 41: 98-103. ■

# Value-based primary care in Australia: how far have we travelled?

Paresh Dawda<sup>1,2</sup>, Angelene True<sup>2</sup>, Helen Dickinson<sup>3</sup>, Tina Janamian<sup>4</sup>, Tracey Johnson<sup>5</sup>

**H**ealth care systems across the developed world face a similar challenge: determining how to maximise value for their population. Value can be captured in various ways. Early definitions of value-based health care typically combined measures of effectiveness and efficiency with value defined as health outcomes per dollar spent.<sup>1</sup> Since then, the definition of value has broadened to include personal value (appropriate care to achieve patients' personal goals) and societal value (contribution of health care to social participation and connectedness). The Economist Intelligence Unit evaluated value-based health care across 25 countries against four domains: enabling context, policies and institutions; measuring outcomes and costs; integrated and patient-focused care; and outcome-based payment approaches.<sup>2</sup> These domains identify the enabling units from experiential learning during value-based health care implementation. We use them in this article as the evidence base required for enabling value-based health care.

In 2016, Oliver-Baxter and colleagues argued that Australia should orient its primary health care services towards a value-based approach to measurement and accountability.<sup>3</sup> In this article, we explore the subsequent progress against this aspiration. We conducted PubMed and Google searches with a combination of search strings and synonyms for value-based health care in primary care and attempted to identify relevant Australian articles (by limiting via PubMed medical subject headings and/or review of abstracts) that were published during the period 2016–2021. In doing so, we noted a lack of peer-reviewed accounts of value-based health care in primary care, but also some progress captured in reports and practice-based accounts identified through our own personal knowledge and signposting by opinion leaders in the field. To critically consider how far value-based health care in Australian primary care has travelled, we consider 11 initiatives and programs that we identified (Supporting Information). We chose these initiatives for three reasons: they incorporate Australian primary care, they meet the strategic intent to provide value-based health care, and they relate to the four domains used by The Economist Intelligence Unit.

## Enabling context, policies and institutions

For value-based health care to be realised, it needs to be supported by aligning structures and processes and buy-in from policymakers, clinicians and managers. There are many overseas examples of its implementation, including in primary care.<sup>4,5</sup> We identified that while Australia lacks a strategic national framework, some more local initiatives have started to develop. We consider a selection of these here.

### New South Wales value-based health care initiative

NSW Health has progressed a value-based health care initiative at scale,<sup>6</sup> aimed at achieving the Quadruple Aim — improving health outcomes, enhancing efficiency, and improving patient

## Summary

- In this article, we discuss how the value-based health care concept has matured across recent years, and consider how it can be achieved in the primary health care sector.
- We provide illustrations of related initiatives across the four domains of value-based health care, highlight the need for cultural transformation and reorientation of the system, and call for a national framework and agreed plan of action.

and provider satisfaction.<sup>7</sup> This approach seeks to not only enhance patient experience and population health while reducing costs, but to do it in a way that helps the workforce avoid burnout and dissatisfaction. The NSW initiative has four programs — leading better value care, integrated care, commissioning for better value, and collaborative commissioning — and provides a whole-system context and a state-level policy to support value-based health care.<sup>8</sup>

## Collaborative commissioning

Collaborative commissioning is broadly described as a program of initiatives that brings together health care funders, to partner in efforts that incentivise local autonomy and accountability to deliver community outcomes that matter to consumers.<sup>9</sup> It is a whole-of-system approach involving Local Health Districts and Primary Health Networks that are responsible, via new structures called patient-centred co-commissioning groups, for improving health outcomes for the local community and balancing high priority population needs with appropriate care across all populations. Collaborative commissioning seeks to pool funds to support an integrated care pathway across all levels of health care and all sectors. Examples of the models of care include: cardiology in the community, addressing poorly managed diabetes, and urgent care for frail and older people.<sup>8</sup>

## HealthPathways

A key facet of value-based health care is using evidence-based pathways of care. HealthPathways (<https://www.healthpathwayscommunity.org>) is an online evidence-informed clinical and referral information portal for general practitioners to use at the point of care. Early adopter sites evaluated HealthPathways as having positive effects on system integration.<sup>10</sup> It is now accessible by primary care across Australia, although publicly available data on its utility are not available.

## Measuring outcomes and costs

To measure outcomes and costs, disease registries, processes and systems are fundamental to value-based health care. These require connected and interoperable electronic health records.

Australia generally lacks data to measure the effectiveness of quality and safety in primary care.<sup>11</sup> The Australian Institute of Health and Welfare is responsible for creating a national

data asset but, while foundational work is underway, there is limited reporting in the public domain. More specifically, a quality improvement incentive program for general practice (the Practice Incentives Program Quality Improvement [PIP QI] Incentive) was introduced in 2019.<sup>12</sup> It captures ten national measures that are largely focused on smoking, cardiovascular disease and diabetes. The limited focus of these measures and the small pool of funding provided to practices mean that the PIP QI Incentive is yet to incentivise practices to clean up data and use coding.

MedicineInsight (<https://www.nps.org.au/medicine-insight>) is a longitudinal general practice data platform supporting quality improvement and post-marketing surveillance of medicines. It has strengths and weaknesses, and opportunities identified for the future direction of this program include linkages to other databases.

Many Primary Health Networks have agreed to participate in forming Primary Health Insights (<https://www.primaryhealthinsights.org.au>), a collaborative data warehouse for PIP QI Incentive data. However, each Primary Health Network retains control of its own data, meaning that even this solution is not a true national archive of relevant data. Without enrolment or other key patient identifiers, data collected on patients attending multiple practices will be stored in data repositories and a detailed national picture will remain a far-off aspiration.

A subset of Primary Health Networks has adopted POLAR (<https://polargp.org.au>) as their preferred data extraction tool. They have used the system's epidemiological tools to produce insights and reports, for example, on risk of emergency department presentation,<sup>13</sup> the impact of the bushfires that ravaged much of Australia in the summer of 2019–2020, and the impact of COVID-19 on medication use, mental health and practice attendance. With fewer than a third of Primary Health Networks using POLAR, this remains a significant but non-representative data source.

Delivering value-based health care critically involves achieving outcomes that matter to patients. Patient-reported measures can be condition specific or population specific, and may help to address social determinants of care such as loneliness. Patient-reported measures are increasingly being used in tertiary care,<sup>14</sup> but there is limited use in general practice other than some very specific condition-specific measures relating to mental health. That said, the health system is beginning to expand utility and support the entire system to implement patient-reported measures which should be clinically led.

Lumos (<https://www.health.nsw.gov.au/lumos>) is a more ambitious program of work that links anonymised general practice data to secondary care and tertiary care datasets to provide insights into patient journeys across the care pathway. These insights are translated into knowledge and interventions aimed at improving outcomes for people with undiagnosed chronic conditions.<sup>15</sup>

The initiatives that we have explored here are promising early enablers of value-based health care, but the health system still lacks some important registries, processes and systems. These include: national disease registries; a systematised collection of outcome measures (with standardisation) to facilitate meaningful understanding of unwarranted variation; and a means of costing care pathways across the health system, including out-of-pocket costs incurred by consumers and other hidden costs.

## Integrated and patient-focused care

A key component of value-based health care is to move away from silos and the fee-for-service provision that is typically organised around medical specialties.<sup>2</sup> Instead, value-based health care aims to create integrated systems that focus on the patient as the organising principle of service delivery.<sup>16</sup> Truly achieving integrated and patient-focused care requires authentic consumer engagement. The system recognises this, and the number of tools and guides to support co-design is growing, but significant barriers and challenges remain.<sup>17</sup>

National health reform agreements have ensured that all states and territories have set aside small budgets for pilot programs of integrated care which are managed at the state level.<sup>18</sup> Some pilot programs, such as those centred on the Gold Coast and in Ipswich in Queensland, have attempted to create a continuum of care between general practice and secondary care systems. Despite an intention to drive primary and secondary systems closer together, many of the pilot programs have funded state public health providers to develop models of care to address challenges with frequent attenders or early discharge of patients with complex care needs. Multidisciplinary teams were established to oversee patients with escalating risk, and care pathways were developed to reduce chances of hospital admissions. These steps have better met the needs of high-cost frequent hospital attenders. Progress has also been made in generating algorithms to detect patients with rising risk of hospital admission, but these investments have not addressed longstanding gaps in communication between primary and tertiary care.<sup>19</sup> Primary care's lack of access, under current funding models, to allied health, specialist physician and nursing support required to stabilise patients at home means that these trials have created more hospital employment rather than draw in primary care expertise. Calculation of savings and returns from these pilot programs is underway. Risk sharing of any returns with those who have contributed to such savings is not yet on the drawing board.

Dental Health Services Victoria, a public health service, has implemented a value-based health care framework and identified five key lessons on the transition to value-based health care.<sup>20</sup> One of these was to understand why value-based health care is necessary from a provider perspective to engage the workforce for change. Clinicians had a drive and desire to improve outcomes, but frustrations included the feeling of not being enabled to make change and seeing repeated interventions that do not translate into improvement.<sup>21</sup> Clinicians were engaged through an authentic co-design approach with consumers.<sup>20</sup>

## Health Care Homes

The federal government ran the Health Care Homes trial. This program recruited patients with complex and chronic conditions into an intervention that included enrolment, shared care planning, and a payment model based on patient risk stratification with the intent to stimulate team-based care and remove limitations of fee-for-service funding. The trial's interventions were based on the principles of patient-centred medical homes that were central to North America's shift towards value-based health care. The lessons are reported in another article in this Supplement.<sup>22</sup>

## Workforce innovation

A coordinated team-based approach to care delivery is a component of value-based health care.<sup>23</sup> A national medical

workforce strategy has been developed<sup>24</sup> but a comprehensive health workforce strategy is lacking and specific issues for rural and regional areas are yet to be addressed. Practice nursing has been established and grown since the start of the new millennium, but barriers remain in permitting practice nurses to work to the top of their licence and concerns exist about the future capacity of the nursing workforce in general practice.<sup>25</sup> Some primary care providers have adopted nurse practitioners, but competition for these roles means their rate of pay is not commensurate with Medicare rebates offered, leaving most general practices out of the race when looking to secure such positions.

New roles emerging in Australian general practice include the medical practice assistant and the non-dispensing pharmacist in general practice. Some Primary Health Networks have introduced non-dispensing pharmacists in pilot programs, and evaluation reports show promising results, but sustainable business models to employ pharmacists under the current fee-for-service funding model are needed.<sup>26</sup> Workforce engagement with and acceptability of value-based health care is achievable with authentic co-design processes, as identified in the example from Dental Health Services Victoria that we have discussed.

### Outcome-based payment approaches

Apportioning budgets and resources in an equitable manner to different populations that require diverse services is one mechanism of achieving value-based health care. In this type of approach, services are funded based on outcomes achieved rather than activity performed. In such models, appropriateness and coordination of care are incentivised and low value care is disincentivised. Various bodies, including the Royal Commission into Aged Care Quality and Safety, have called for changes to primary care funding towards an approach more aligned with value-based health care.<sup>27</sup> Alternative payment models are seen as an opportunity to support primary care in rural and remote Australia and were a feature of the Health Care Homes trial that we have described.

The Coordinated Care Trials were a series of experiments testing coordination of care for people with multiple service needs, using individual care plans purchased through capped funds that were pooled from existing programs. They improved health and wellbeing within existing resources and demonstrated that: pooling of funds between governments is possible, and providers can cooperate at a local level to design and develop a radically new approach to health care in Australia; the Australian health care system can develop and implement world-class information management and care planning systems; and major cultural shifts away from the traditional rivalry between players and towards cooperation are possible.<sup>28</sup>

The Diabetes Care Project was a trial in which one of the interventions studied was flexible funding based on risk stratification and payments for quality improvement support.<sup>29</sup> Intermediate clinical indicators, adherence to recommended clinical process, and patient satisfaction were better and more patient centred, but there were no statistically significant changes in affordability or out-of-pocket costs for patients.

All funding models have advantages and disadvantages. The way forward is a blended payment that incorporates a mix of payment mechanisms — a model that balances the desired benefits of the different approaches and minimises the risk of unintended consequences.<sup>30</sup>

### The next steps in the value-based health care journey

Australia's health care system performs well when compared with other countries,<sup>31</sup> but when viewed through the value-based health care lens of outcome per capita cost it ranks as the third most expensive country after the United States and the Netherlands.<sup>2</sup> The primary care sector has made only small advances towards value-based health care and evidence in the Australian context is lacking. The implementation of value-based health care in Australia needs to be considered and, in doing so, evidence on its benefits and information on its implementation needs to be collated. Frameworks for implementation describe the need to firstly understand the shared needs of a population, and then employ solution design, integration of learning teams, measurement of outcomes and costs, and expanding partnerships.<sup>32</sup> Other health systems have also described the need for a common language for value-based health care, and for building capacity and capability in the workforce.<sup>33</sup> We have seen various initiatives across the four domains of value-based health care, and the 10-year primary care plan incorporates elements of value-based health care (eg, by supporting nurses and pharmacists in primary care, and expanding the use of telehealth and genomics) but lacks a clear implementation plan.<sup>34</sup>

Ultimately, a shift towards value-based health care needs a cultural transformation and re-orientation of the whole system, which is possible and achievable. We are seeing elements of this in some jurisdictions, including NSW, but Australia needs to adopt a value-based health care primary care strategy that incorporates lessons from NSW and overseas. Australia needs to use a value-based health care framework to identify strengths and gaps, and then align policy frameworks towards value-based health care. It also needs a strong implementation plan to strengthen primary care and thereby support value-based health care for the whole health system.

**Open access:** Open access publishing facilitated by University of Canberra, as part of the Wiley - University of Canberra agreement via the Council of Australian University Librarians.

**Competing interests:** No relevant disclosures.

**Provenance:** Commissioned; externally peer reviewed. ■

© 2022 The Authors. *Medical Journal of Australia* published by John Wiley & Sons Australia, Ltd on behalf of AMPCo Pty Ltd.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

- Porter ME, Teisberg EO. Redefining health care: creating value-based competition on results. Boston: Harvard Business School Press, 2006.
- The Economist Intelligence Unit. Value-based healthcare: a global assessment. London: The Economist Intelligence Unit, 2016. <https://eiupeerspectives.economist.com/healthcare/value-based-healthcare-global-assessment-1> (viewed Apr 2022).
- Oliver-Baxter J, Brown L, Dawda P. Should the healthcare compass in Australia point towards value-based primary healthcare? *Aust Health Rev* 2016; 41: 98-103.
- PwC. Value based healthcare. London: PwC, 2021. <https://www.pwc.com/m1/en/publications/documents/value-based-healthcare.pdf> (viewed Apr 2022).
- Mjaset C, Ikram U, Nagra NS, Feeley TW. Value-based health care in four different health care systems. *NEJM Catal Innov Care Deliv* 2020; 10 Nov. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0530> (viewed Apr 2022).
- Koff E, Lyons N. Implementing value-based health care at scale: the NSW experience. *Med J Aust* 2020; 212: 104-106.e1. <https://www.mja.com.au/journal/2020/212/3/implementing-value-based-health-care-scale-nsw-experience>
- Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. *Ann Fam Med* 2014; 12: 573-576.

- 8 NSW Health. Value based healthcare. Sydney: NSW Health, 2021. <https://www.health.nsw.gov.au/Value> (viewed Apr 2022).
- 9 NSW Health. Collaborative commissioning. Sydney: NSW Health, 2021. <https://www.health.nsw.gov.au/Value/Pages/collaborative-commissioning.aspx> (viewed Aug 2021).
- 10 Gray JS, Swan JR, Lynch MA, et al. Hunter and New England HealthPathways: a 4-year journey of integrated care. *Aust Health Rev* 2018; 42: 66-71.
- 11 Russell LM, Dawda P. Patient safety in primary care: more data and more action needed. *Med J Aust* 2015; 202: 72-73. <https://www.mja.com.au/journal/2015/202/2/patient-safety-primary-care-more-data-and-more-action-needed>
- 12 Australian Government Department of Health. PIP QI Incentive guidance. Canberra: Department of Health, 2019. [https://www1.health.gov.au/internet/main/publishing.nsf/Content/PIP-QI\\_Incentive\\_guidance](https://www1.health.gov.au/internet/main/publishing.nsf/Content/PIP-QI_Incentive_guidance) (viewed Aug 2021).
- 13 Pearce C, McLeod A, Rinehart N, et al. POLAR Diversion: using general practice data to calculate risk of emergency department presentation at the time of consultation. *Appl Clin Inform* 2019; 10: 151-157.
- 14 NSW Agency for Clinical Innovation. Patient reported measures: formative evaluation 2017. Sydney: ACI, 2018.
- 15 Correll P, Feyer A-M, Phan P-T, et al. Lumos: a statewide linkage programme in Australia integrating general practice data to guide system redesign. *Integr Healthc J* 2021; 3: e000074.
- 16 Shaw S, Rosen R, Rumbold B. What is integrated care: an overview of integrated care in the NHS. London: Nuffield Trust, 2011. <https://www.nuffieldtrust.org.uk/research/what-is-integrated-care> (viewed Apr 2022).
- 17 Dimopoulos-Bick T, Dawda P, Maher L, et al. Experience-based co-design: tackling common challenges. *J Health Des* 2018; 3: 86-93.
- 18 Council on Federal Financial Relations. Addendum to National Health Reform Agreement 2020–2025. Canberra: Commonwealth of Australia, 2020. [https://federalfinancialrelations.gov.au/sites/federalfinancialrelations.gov.au/files/2021-07/NHRA\\_2020-25\\_Addendum\\_consolidated.pdf](https://federalfinancialrelations.gov.au/sites/federalfinancialrelations.gov.au/files/2021-07/NHRA_2020-25_Addendum_consolidated.pdf) (viewed Jan 2022).
- 19 Russell LM, Doggett J, Dawda P, Wells R. Patient safety — handover of care between primary and acute care. Policy review and analysis. Canberra: Commonwealth of Australia, 2013. <https://prestantiahealth.com/extranet/sites/default/files/2018-11/handover-of-care-between-primary-and-acute-care-report.pdf> (viewed Jan 2022).
- 20 Raymond K, Hedge S. Dental Health Services Victoria: journey to value based healthcare. Canberra: Deeble Institute for Health Policy Research, 2020. [https://ahha.asn.au/sites/default/files/docs/policy-issue/perspectives\\_brief\\_no\\_7\\_dhsv\\_journey\\_to\\_value\\_based\\_health\\_care\\_3.pdf](https://ahha.asn.au/sites/default/files/docs/policy-issue/perspectives_brief_no_7_dhsv_journey_to_value_based_health_care_3.pdf) (viewed Apr 2022).
- 21 Cole D, McKee S. Case study on value based health care — how Dental Health Services Victoria is transforming oral healthcare [webinar]. <https://www.youtube.com/watch?v=rbPI4GLQdkM&feature=youtu.be> (viewed Jan 2022).
- 22 True A, Janamian T, Dawda P, et al. Lessons from the implementation of the Health Care Homes program. *Med J Aust* 2022; 216 (10 Suppl): S19-S21.
- 23 Porter ME, Lee TH. Integrated practice units: a playbook for health care leaders. *NEJM Catal Innov Care Deliv* 2021; 1 Jan. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0237> (viewed Apr 2022).
- 24 Australian Government Department of Health. National Medical Workforce Strategy 2021-2031. Canberra: Commonwealth of Australia, 2022. <https://www.health.gov.au/sites/default/files/documents/2022/03/national-medical-workforce-strategy-2021-2031.pdf> (viewed May 2022).
- 25 Heywood T, Laurence C. The general practice nurse workforce: estimating future supply. *Aust J Gen Pract* 2018; 47: 788-795.
- 26 Kosari S, Deeks LS, Naunton M, et al. Funding pharmacists in general practice: a feasibility study to inform the design of future economic evaluations. *Res Social Adm Pharm* 2021; 17: 1012-1016.
- 27 Royal Commission into Aged Care Quality and Safety. Final report: care, dignity and respect. Volume 1: summary and recommendations. Canberra: Commonwealth of Australia, 2021. [https://agedcare.royalcommission.gov.au/sites/default/files/2021-03/final-report-volume-1\\_0.pdf](https://agedcare.royalcommission.gov.au/sites/default/files/2021-03/final-report-volume-1_0.pdf) (viewed Apr 2022).
- 28 Esterman AJ, Ben-Tovim DI. The Australian coordinated care trials: success or failure? *Med J Aust* 2002; 177: 469-470. <https://www.mja.com.au/journal/2002/177/9/australian-coordinated-care-trials-success-or-failure>
- 29 Leach MJ, Segal L, Esterman A, et al. The Diabetes Care Project: an Australian multicentre, cluster randomised controlled trial [study protocol]. *BMC Public Health* 2013; 13: 1212.
- 30 Dawda P. Bundled payments: their role in Australian primary health care. Canberra: Australian Healthcare and Hospitals Association, 2015. [https://ahha.asn.au/sites/default/files/docs/policy-issue/bundled\\_payments\\_role\\_in\\_australian\\_primary\\_health\\_care\\_1.pdf](https://ahha.asn.au/sites/default/files/docs/policy-issue/bundled_payments_role_in_australian_primary_health_care_1.pdf) (viewed Jan 2022).
- 31 Schneider E, Shah A, Doty MM, et al. Mirror, mirror 2021: reflecting poorly. Health care in the U.S. compared to other high-income countries. Washington: The Commonwealth Fund, 2021. <https://www.commonwealthfund.org/publications/fund-reports/2021/aug/mirror-mirror-2021-reflecting-poorly> (viewed Jan 2022).
- 32 Teisberg E, Wallace S, O'Hara S. Defining and implementing value-based health care: a strategic framework. *Acad Med* 2020; 95: 682-685.
- 33 Hurst L, Mahtani K, Pluddemann A, et al. Defining value-based healthcare in the NHS: CEBM report. Oxford: University of Oxford, 2019. <https://www.cebm.ox.ac.uk/resources/reports/defining-value-based-healthcare-in-the-nhs> (viewed Apr 2022).
- 34 Australian Government Department of Health. Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022–2032. Canberra: Department of Health, 2022. <https://www.health.gov.au/resources/publications/australias-primary-health-care-10-year-plan-2022-2032> (viewed Apr 2022). ■

## Supporting Information

Additional Supporting Information is included with the online version of this article.







---

**MJA**  
The Medical Journal of Australia

AMPCo

Australasian Medical Publishing Company Proprietary Limited • ABN 20 000 005 854

Suite 1 Level 19, Town Hall House, 456 Kent Street, Sydney, NSW 2000 Australia

Telephone: 02 9562 6666 • International: +61 2 9562 6666 • Facsimile: 02 9562 6600 • Email: [mja@mja.com.au](mailto:mja@mja.com.au)

© Australasian Medical Publishing Company Proprietary Limited