

title Health Care Homes: principles and enablers for their implementation in Australia

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Table of Contents

1	Background	1
2	The Australian Government Department of Health’s model for Health Care Homes.....	2
3	Shared principles for patient-centred team-based care in Health Care Homes.....	4
3.1	Principle 1: a holistic view of health and well being	5
3.2	Principle 2: patient and family centred healthcare	5
3.3	Principle 3: continuous and collaborative relationships.....	6
3.4	Principle 4: a comprehensive team-based approach to healthcare	6
3.5	Principle 5: shared decision making, patient activation and engagement	7
3.6	Principle 6: coordinated care across the care system	8
3.7	Principle 7: accessible, affordable, equitable and appropriate care	8
3.8	Principle 8: high value, evidence-based, safe and quality care	9
3.9	Principle 9: well-supported health care workforce and workplace environment.....	9
3.10	Principle 10: sustainable funding to support principles, implementation and practices	10
4	What needs to change in Australia to achieve these shared principles?	11
4.1	Institutional and professional leadership from all levels of the healthcare system.....	11
4.2	A mutually shared understanding of principles and objectives.....	11
4.3	Collaborative, sector-led planning and change management	12
4.4	Appropriate funding and incentives	12
	Estimated impact on general practice income	13
4.5	Broad workforce engagement	14
4.6	Patient-centred, co-designed care.....	14
4.7	Outcomes-focused data and technology to support innovation.....	14
4.8	Models of coordinated care adapted to local circumstances.....	15
4.9	Operational and equity considerations, balanced with risk stratification.....	15
5	What can be learned from other experiences of coordinated care?	16
5.1	Aboriginal Community Controlled Health Services.....	16
5.2	The Coordinated Veterans’ Care program.....	18
5.3	Diabetes Care Project.....	19
5.4	Inala Primary Care: caring for people with complex diabetes in the community	20
5.5	National Health Co-operative	22
5.6	Which of these case studies demonstrate the principles outlined in this paper?	23

5.6	Recent reviews of US, NZ medical home models	24
6	Conclusion.....	25
7	References	26
8	Acknowledgements.....	28
9	Contact.....	29

Executive summary

The rising prevalence of chronic disease requires a concerted focus to better integrate care and to achieve better health outcomes and greater system efficiencies. Achieving and evaluating these improved patient outcomes and system efficiencies will take both time and investment, and will challenge existing models of care.

This paper examines the Health Care Home program being developed by the Australian Government Department of Health. It proposes that the model should be patient-centred, flexible and delivered according to local needs and local system capacity, but must also be built on shared principles and values, and must acknowledge the need to address both the business model and the care model. Without shared principles, the capacity to achieve substantial system change and acceptance from funders, providers and patients will be compromised.

A workshop held at the 2016 National Primary Care Conference, building on Australian participation in a similar workshop hosted by the US Patient-Centered Primary Care Collaborative, considered shared principles for Health Care Homes in Australia. From this process, the following principles were identified as key to successful implementation of Health Care Homes:

- a holistic view of health and well being
- patient and family centred healthcare
- continuous and collaborative relationships
- a comprehensive-team based approach to healthcare
- shared decision making, patient activation and engagement
- coordinated care across the care system
- accessible, affordable, equitable and appropriate care
- high value, evidence-based, safe and quality care
- well-supported health care workforce and workplace environment
- sustainable funding to support principles, implementation and practices

To achieve change organised around these principles, the following enablers must be part of the Health Care Home model:

- institutional and professional leadership from all levels of the healthcare system
- a mutually shared understanding of principles and objectives
- collaborative, sector-led planning and change management
- appropriate funding and incentives
- broad workforce engagement
- patient-centred, co-designed care
- outcomes-focused data and technology to support innovation
- models of coordinated care adapted to local circumstances
- operational and equity considerations, balanced with risk stratification

The opportunity for reform and the associated potential for failure are significant. Public and expert debate must be fostered to ensure that the model to be more broadly implemented is accepted by funders, providers and consumers. Shared principles are proposed to inform this debate, and to contribute to the change management required for successful implementation of Health Care Homes in Australia.

While Health Care Homes are new to the Australian health system, there are many examples where health organisations have trialled or implemented models of coordinated care. A number of examples are examined, in the context of the shared principles outlined in this paper, as case studies which may serve to inform the development of Health Care Homes.

1 Background

In March 2016, the Australian Government announced that it would conduct a two year trial of Health Care Homes, to provide a coordinated approach to care for people with chronic disease. This would be rolled out from 1 July 2017 across seven regions, subsequently amended to ten Primary Health Network (PHN) regions, and include 200 practices and 65,000 patients who will voluntarily enrol in the program. An evaluation strategy is included in the design of the program.

This announcement drew on the recommendations of the 2015 Primary Health Care Advisory Group report, builds on work led by a number of PHNs and was influenced by similar developments in the provision of primary health care internationally.

Leading health organisations including the Australian Healthcare and Hospitals Association (AHHA), the Royal Australian College of General Practitioners, Consumers Health Forum and the George Institute have supported development of Health Care Homes, and there has been support from all political parties as well as the states and territories, albeit with some varied views on funding levels, and roles and responsibilities of various stakeholders and professional groups.

In the Australian context, in addition to various small-scale trial programs already underway, much can be learned from the approach to primary health adopted by Aboriginal Community-Controlled Health Organisations and through the Department of Veterans' Affairs Coordinated Veterans Care program.

This paper will report on the outcomes of a workshop held at the National Primary Health Conference in Melbourne in November 2016 examining the principles and values that should be associated with establishing Health Care Homes in Australia.

The paper also briefly consolidates the available Australian evidence around coordinated care initiatives, and complements work previously reported in the AHHA paper, *Bundled payments: Their role in Australian primary health care* (Dawda 2015).

2 The Australian Government Department of Health's model for Health Care Homes

The Australian Government Department of Health has provided the following description of Health Care Homes to be trialled in Australia:

“The Health Care Home is an existing general practice or ACCHS (Aboriginal Community Controlled Health Services) that commits to a systematic approach to chronic disease management in primary care, which supports accountability for ongoing high-quality patient care. It uses an evidence-based, coordinated, multi-disciplinary model of care that aims to improve efficiencies and promote innovation in primary care services.” (DoH 2016a, page 3).

The Department of Health (2016a) further identifies the following characteristics of Health Care Homes¹:

- patients, families and their carers are partners in their care
- patient enrolment is voluntary
- care should be provided with enhanced access for patients and flexibility in care models
- patients are able to nominate their preferred treating clinician
- there is a commitment to high quality and safe patient care
- team-based care for each patient
- there will be data collection and sharing to benchmark performance and improve the quality of care.

A key feature of the Health Care Home trial is the use of a new payment approach that moves from fee-for-service to bundled payments paid monthly in arrears. As part of this approach, patients will be allocated to one of three tiers depending on their level of complexity and need, with the amount of the bundled payments varying accordingly. Patients can also be charged out-of-pocket costs beyond the bundled payment received by the practice. Specialists, allied health professionals, diagnostic and imaging services are not included in the bundled payment. General practices and ACCHSs that participate in the initiative will also receive a one-off upfront grant of \$10,000 to support the practice changes required to operate as a Health Care Home.

¹ These characteristics are based on a selection of recommendations from Primary Health Care Advisory Group (2016).

The three tiers of complexity and need are as follows (DoH 2016a, 2016b):

- Tier 1 for patients with multiple chronic conditions but are largely self-managing. Patients in this tier will attract an annual payment of \$591 (\$49.25 per month). It is estimated that 46 per cent of trial patients will be enrolled in Tier 1.
- Tier 2 for patients with multi-morbidity and moderate needs requiring clinical coordination, non-clinical coordination and supported self-care. Patients in this tier will attract an annual payment of \$1,267 (\$105.58 per month). It is estimated that 45 per cent of trial patients will be enrolled in Tier 2.
- Tier 3 for patients with high risk chronic and complex needs requiring a high level of clinical coordinated care with perhaps one fifth of this group supported with palliative care. Patients in this tier will attract an annual payment of \$1,795 (\$149.58 per month). It is estimated that 9.5 per cent of trial patients will be enrolled in Tier 3.

The monthly bundled payment contrasts to a standard consultation lasting less than 20 minutes that has a schedule fee of \$37.05, a GP chronic disease management plan that has a schedule fee of \$144.25 and the coordination of team care arrangements that has a schedule fee of \$114.30.²

The Department of Health (2016a) notes that the bundled payment only relates to the chronic condition being treated with other unrelated episodes of care still able to be charged on a fee-for-service basis, “but it is assumed this need will be minimal” (DoH 2016a, page 7).

² Medicare Benefits Schedule Book, 1 November 2016, available at <http://www.health.gov.au/internet/mbsonline/publishing.nsf/Content/Downloads-201611>.

3 Shared principles for patient-centred team-based care in Health Care Homes

Establishing shared principles for Health Care Homes is an articulation of the values that underpin this reform in primary healthcare. Having such shared principles and an understanding of the characteristics underpinning them may be useful in guiding the work of both Health Care Home trial sites, and other PHNs and primary care providers interested in adopting Health Care Home models.

The set of shared principles that follow were initially developed by a group of PHN and other primary care leaders who participated in a Patient-Centered Primary Care Collaborative workshop in Washington DC in November 2016. This was informed by the United States experience over the past decade in developing and implementing medical homes in primary healthcare.

These principles were then subsequently examined at a workshop held at the 2016 National Primary Health Care Conference facilitated by PHN leaders who had participated in the US workshop. The aim of the Melbourne workshop was to identify and develop a consensus around shared principles and values that should be embodied in person-centred and team-based care such as is being proposed with the Health Care Home program in Australia.

The principles to emerge from this process are as follows:

- Principle 1: a holistic view of health and well being
- Principle 2: patient and family centred healthcare
- Principle 3: continuous and collaborative relationships
- Principle 4: a comprehensive team-based approach to healthcare
- Principle 5: shared decision making, patient activation and engagement
- Principle 6: coordinated care across the care system
- Principle 7: accessible, affordable, equitable and appropriate care
- Principle 8: high value, evidence-based, safe and quality care
- Principle 9: well-supported health care workforce and workplace environment
- Principle 10: sustainable funding to support principles, implementation and practices

The following summarises the principles that were identified, some of their defining characteristics, and issues that emerged in discussing the practical application of these principles.

3.1 Principle 1: a holistic view of health and well being

There is a fundamental opportunity in providing better coordinated primary healthcare to adopt a more holistic view of meeting individuals' life course healthcare needs. This first principle of person-centred and team-based care reflects that a person's healthcare should extend beyond any immediate presenting concern(s) and instead take a broader view of their health and wellbeing. Some of the characteristics of this principle are that healthcare should:

- include physical, emotional, spiritual, social and cultural attributes
- be centred on the community and take a practice-population approach
- build on the Aboriginal and Torres Strait Islander concepts of health and wellbeing
- give explicit consideration to cross-sectoral relationships.

Some nuances that were discussed around the delivery of holistic healthcare and a focus on wellbeing included:

- the notion of "community" as it relates to coordinated healthcare needs to be clearly defined as there can be significant differences in the interpretation of this concept
- the importance of a preventive approach to healthcare, including the use of both outreach and in-reach activities
- the importance of the social determinants of health, incorporating social and welfare supports and noting that this would require added resources to provide linkages to services or supports
- cross-sector and the social determinants of health considerations will require identification of external impacting factors, which may be outside the scope of Health Care Homes as they are currently being developed and funded.

3.2 Principle 2: patient and family centred healthcare

Patient and family centred care is an approach to healthcare based on a partnership between a patient and their healthcare providers, families and carers. Some of the characteristics of this principle include:

- healthcare should be whole-person oriented, and should acknowledge and support cultural and social needs
- understanding and respecting patients' preferences, values, goals, experiences and expectations
- patients should be engaged as partners in care planning and design
- patients should be supported as partners at the centre of the care team, with recognition of the role their families and carers play in their care.

The Australian Commission on Safety and Quality in Health Care *National Safety and Quality Health Service Standard 2: Partnering with Consumers* could be used to help inform this principle.

3.3 Principle 3: continuous and collaborative relationships

A more holistic approach to a patient's healthcare needs and the provision of more integrated healthcare should be based on continuous and collaborative relationships. Some of the characteristics of this principle are:

- the patient should have a first contact healthcare provider designated for when a healthcare need arises
- the relationship between the patient and their healthcare team should be longitudinal in nature with a commitment to the patient's care being a collaboration over an extended period of time
- relationships of trust between the patient and their healthcare providers should be developed and maintained over time
- technology should be in place to support the exchange of information among the patient care team.

Additional observations made with respect to this continuous and collaborative care principle include:

- while having a first contact for when a healthcare need arises is appropriate, this should not compromise steps towards effective preventive care. That is, care should be both proactive and responsive
- while sustained ongoing relationships can produce effective healthcare partnerships, patient choice must always be respected
- continuity of care may be achieved through a team-based approach to care, which takes into account relationship continuity and management continuity (and incorporated within that, enablers such as longitudinal continuity and informational continuity).³

3.4 Principle 4: a comprehensive team-based approach to healthcare

A comprehensive team-based approach to healthcare is integral to being able to effectively deliver on the previous principles. A comprehensive team-based approach should:

- be accountable for a large majority of the physical and mental health needs of a patient, including transitions in care
- provide acute, chronic and preventive care

³ See, for example, the work of George Freeman, summarised in:

https://www.kingsfund.org.uk/sites/files/kf/field/field_document/continuity-care-patient-experience-gp-inquiry-research-paper-mar11.pdf

- provide care in a culturally respectful manner, including cultural competence and humility
- be interdisciplinary, including community-based organisations, mental health and other clinicians and professionals where appropriate
- ensure team members understand, respect and utilise the diverse roles and responsibilities of each member, with the services being provided being collectively greater than the sum of their parts
- have an initial patient contact point that is known by the patient.

Some issues identified for consideration in the delivery of this principle include:

- the importance of workforce issues in being able to offer broad team-based care
- complexity is increased when contemplating a team-based approach to healthcare, requiring particular attention to clinical governance standards
- the importance of technology and data in enabling effective and comprehensive team based-care.

3.5 Principle 5: shared decision making, patient activation and engagement

This principle acknowledges the need to:

- invest in the capacity of the patient to be able to communicate effectively
- ensure the patient understands the cost of their care
- ensure patients have access to their health records, which may include access through a "patient portal"
- invest to create health literate environments that enables informed patient choice.

To support achievement of this principle:

- consideration needs to be given to supporting consumer enablement, both in the architecture of the Health Care Home program, and more broadly across the health system
- practice-level leadership, supported by PHNs and the Australian Government Department of Health, will be critical; and could include, for example, patient feedback tools, practice support tools and accreditation processes
- an open and transparent approach to care delivery and patient safety may include shared records at an individual level; shared decision-making at point of care (including information to assist patient choices e.g. cost, provider choice, wait times, technical aspects); safety and quality reporting at population level; and development and implementation of open disclosure policies.

3.6 Principle 6: coordinated care across the care system

This principle addresses the current silo approach to care giving—both within the healthcare system and through interactions with the aged care and disability care sectors. The aim is to reduce fragmentation and improve coordination of patient care through their care journey. It includes:

- a commitment to taking proactive responsibility for coordination of care
- developing an interconnectedness across all settings and services, including coordinating with family members, community organisations, oral health, mental health and other clinicians and professionals
- helping patients manage all the recommendations they receive from other clinicians and professionals, including reconciling differences when recommendations conflict or contradict, and closing the loop between the patient and their care providers.

3.7 Principle 7: accessible, affordable, equitable and appropriate care

The qualities identified in this principle flow from the universal healthcare system that Medicare is intended to provide. However, there is also a recognition that out-of-pocket costs are charged in some circumstances and that the care provided must be focused on what is effective and not merely what is possible. This principle recognises that:

- equity is a key attribute of the Australian healthcare system
- patient care should be provided in a timely and responsive manner
- patients know how and are able to access services easily when and where needed
- multiple channels and delivery methods, such as face-to-face consultations, telehealth, phone and online support etc, should be developed and be available to patients.

This principle captures the core intended ethos of Australia's universal healthcare system, but some further observations made in this area acknowledge Australia's mixed public-private system which includes:

- there may be an appropriate place for out-of-pocket costs in some circumstances, but this should not be viewed as a source of funds to merely cost shift from government to individuals
- a private system of healthcare operating alongside a public system of healthcare provides consumer choice
- the provision of healthcare in Australia must be financially sustainable for individual practitioners, patients, services and the system as a whole
- providing appropriate care includes a concept of the right care, at the right time, in the right place.

3.8 Principle 8: high value, evidence-based, safe and quality care

While there are a range of healthcare services and treatments that can be provided, it is important for patient care and system sustainability that only those that are the most appropriate services and treatments in the circumstances are provided. This principle characterises the qualities of the healthcare services that should be provided in a sustainable healthcare system including that it should:

- demonstrate positive, equitable outcomes and experiences for patients, families and providers
- routinely use a systematic approach to safety, quality and value improvement initiatives
- be cost and resource aware recognising that potential care does not necessarily represent valuable care
- deliver safe, high quality experiences for patients, families, staff and clinicians
- be transparent and measurable with respect to cost (including out-of-pocket costs), outcomes, quality and timeliness of care.

Further observations on this principle include:

- what is considered high value care can depend on the individual perspectives of the consumer or the service provider
- accountability measures and reports should be transparent to the community
- patients need to have access to outcomes and other data.

3.9 Principle 9: well-supported health care workforce and workplace environment

While the focus of the preceding principles are on the patient, their care and how the healthcare system should deliver this, this principle addresses the workforce and workplace issues that sustain the delivery of appropriate healthcare. To effectively deliver patient-centred and team-based healthcare, there is a need to:

- ensure funding mechanisms are appropriate to support sustainable business models, both in private and public sector services
- identify workforce requirements, including building workforce capability and capacity, which may include the development of new workforce roles and scope of practice
- adapt work place practices and models of care to ensure all practitioners work to their full scope of practice
- maximise use of information and communication technology systems to share information, streamline clinical management of patients and fully utilise the skills of the healthcare workforce
- aim to reduce overall complexity for both patients and providers.

3.10 Principle 10: sustainable funding to support principles, implementation and practices

While the focus of healthcare is on meeting the needs of patients, the funds and related healthcare infrastructure required to supply these services need to be secure—both in the short term and sustainably into the future. To effectively deliver patient-centred and team-based healthcare:

- the ongoing viability of general practices and other healthcare providers is critical
- PHNs have a role in assisting general practice with change readiness, with the ten building blocks of high-performing primary care developed by Bodenheimer *et al* (2014) providing a framework to assist with this transition
- a financially sustainable model of healthcare that looks beyond exclusively immediate healthcare needs must be established
- there is a need for appropriate infrastructure support including information and communication technology, and change readiness
- key business functions, including financial, management and information systems, need to be modified to support changing requirements for accountability and decision-making as the Health Care Home model is implemented (Valentijn *et al* 2013).

4 What needs to change in Australia to achieve these shared principles?

To achieve a change in the system of healthcare organised around the principles outlined above, necessary enablers to bring about change were considered by participants at the 2016 National Primary Health Care Conference workshop. It is also important to recognise that for Health Care Homes to be successfully implemented, this needs to be achieved across the twin domains of better patient care and a viable business model for participating practices. The common themes that emerged are described in this section.

4.1 Institutional and professional leadership from all levels of the healthcare system

The importance of leadership across the healthcare system was consistently identified as critical to achieving the principles of patient-centred and team-based healthcare in Australia.

There is a need for political leadership, both between tiers of government and within the professions, to lead institutional and cultural change to overcome system inertia and entrenched business and care, models and practices. The importance of the Commonwealth's overall role as steward of the health system, and the various care systems more generally, was discussed. It was acknowledged that this must also involve strong state, territory and regional engagement, the latter through PHNs. This inclusive approach should include shared responsibilities related to funding, planning, evaluation and accountability.

There is also the opportunity to learn from the experience of local integrated care initiatives that have been developed across Australia (some of which are discussed briefly in the following section of this paper). This is particularly relevant for the pending first stage of implementation of Health Care Homes.

A unified approach to advocacy for patient-centred and team-based healthcare would also be beneficial in providing direction and to assist in overcoming any reluctance to change within the healthcare system.

4.2 A mutually shared understanding of principles and objectives

The objectives of patient-centred and team-based healthcare flow from the previously discussed principles. To achieve sustainable patient-centred and team-based healthcare in Australia, it is vital that there is a shared understanding by all of the principles, objectives and expected outcomes of this model of care. This includes recognition of the varying roles some may have in the delivery of patient care. Cross-sector communication and care planning are crucial.

Accountability for patient care and clinical governance will also need to be reconsidered to recognise the team-based approach to patient care. While fee-for-service care can produce clear boundaries of accountability for individual episodes of care, there may be a lack of accountability for the healthcare of a person overall. A patient-centred and team-based model of healthcare also points to the importance of a longer term approach to an individual's healthcare, including preventive health measures and the moderation of disease risk factors.

4.3 Collaborative, sector-led planning and change management

The introduction of a patient-centred and team-based approach to the delivery of healthcare represents a significant change in the model of primary healthcare in Australia. Planning for this change needs to be strategic with incremental change from a chronic disease model to an entire population model. As part of this transition, consideration could be given to a stepped-model of health service delivery where patients are seen by members of the healthcare team other than the general practitioner and elevated as required when the patient needs exceed their scope of practice.

To be successfully implemented, there needs to be an effective cultural change management program that supports the transition of general practices and other healthcare providers to this new model of care. Benchmarking performance with meaningful metrics would assist in this process.

4.4 Appropriate funding and incentives

Patient-centred and team-based healthcare must be appropriately funded. There are concerns that the current funding arrangements for the first stage of implementation of Health Care Homes will not be sufficient for the level of care needed and for the sustainability of general practices. This is particularly relevant given the first implementation phase is occurring in an environment where there has been a freeze on Medicare bulk-billing rebates for several years, and noting that only a limited proportion of a practice's patients will be involved in the program, thus requiring parallel business models to be put in place in the practice.

To be most effective, there should be payments and incentives to encourage connectivity between practices and service providers. By contrast, the current fee-for-service model of care does not cover healthcare team meetings as has been recently observed, for example, in some United States primary healthcare settings. Incentives may be required to encourage change to clinical practices.

Some businesses may need support and assistance in moving to the new business model required to support patient-centred and team-based healthcare. Likewise, the tension

between patient choice and the advantages of having a patient enrolled with a single practice will need to be addressed through a communications strategy aimed at providing information and education to consumers who are eligible to enrol in Health Care Homes.

Purposeful collaboration with state and territory governments will also be necessary, as foreshadowed by the Council of Australian Governments Heads of Agreement of 1 April 2016. This should include opportunities to consider pooling of funding, particularly to address preventable hospitalisations and to promote innovative models of care. Any savings achieved should then be shared between both levels of government to provide appropriate financial incentives.

Well-delivered coordinated care typically involves larger upfront costs, while the large gains from the mitigation and better management of chronic disease may only be realised over the longer term. Balanced against this, the recent CSIRO report by Cellar *et al* (2016) on the *Home Monitoring of Chronic Disease for Aged Care* trial found that large savings were realised from reduced hospital admissions and reduced length of stay.

Estimated impact on general practice income

The Australian Government Department of Health has estimated that for those practices operating as a Health Care Home, “a fully operational model of clinical services is expected to provide an additional 10 percent in funding for clinical services above current MBS expenditure for these patients” (DoH 2016b, page 2). However, the documentation to this costing process is silent on the assumptions made on the proportion of patients being bulk-billed, the amount collected from patients who are not bulk-billed and the change in business costs from delivering the Health Care Home alternative model of care. This statement also assumes homogeneity with respect to clientele and the business operating environment among those general practices and ACCHSs that participate in the first stage of the Health Care Home initiative. Yet the program is intended to, “ensure the benefits of the flexible approach can be tailored to local services and patients’ needs” (DoH 2016a, page 6).

While the Health Care Homes initiative is focused on better patient care, this will not be sustainable unless the business model for participating general practices and ACCHSs is also sustainable. In order to assess the business and financial implications of participating in the initiative, a tool which enables prospective practices to assess the overall revenue impact from moving to bundled payments for a cohort of their patients may be useful.

Community-Owned Primary Health Enterprises (COPHE) has developed a model that enables individual practices to enter parameters as they relate to their mix of patient complexity and billing practices to assess the relative revenue impact if they were to

participate in the Health Care Homes initiative.⁴ This tool both quantifies revenue impacts and enables sensitivity analysis to be performed around relevant parameters as they relate to the distribution of patient complexity, the number of times patients are seen on average and the billing practices for patients enrolled in the Health Care Home. In one hypothetical example, lower and upper bounds on the revenue impact of bundled payments conditioned on patient complexity and billing practices has been developed.

4.5 Broad workforce engagement

A new workforce model is required to enable healthcare practitioners to work collaboratively to their full scope of practice. Primary healthcare tasks and roles need to be re-evaluated to identify the appropriate healthcare professionals to deliver particular primary healthcare services. This necessarily implies both a change in work practices and the distribution of chargeable activities, as well as having appropriate funding models in place. This should be tailored to local needs and capacities, in addition to rewarding quality and safety, as well as access and service.

4.6 Patient-centred, co-designed care

The role of the patient must be explicitly recognised in any model of patient-centred and team-based healthcare. Changes in the delivery of healthcare should include patients in the co-design of the delivery of healthcare services. While patients rely on the training and experience of their clinician, this needs to be coupled with increased patient health literacy such that they are able to understand and meaningfully engage in their healthcare treatment.

4.7 Outcomes-focused data and technology to support innovation

To facilitate and sustain patient-centred and team-based healthcare, it is vital that information technology enablers are deployed to enable the appropriate flow of information as it relates to overall healthcare of patients. This would facilitate coordination within and across healthcare silos and enable innovative models of healthcare to be provided. Developments in this area include interoperability across information technology infrastructure, common data standards, an increasing use of mobile technology in m-health, and portability of patient data in near real-time.

A purpose-built national minimum data set for primary healthcare is essential. The use of proxy indicators and data that are not fit for purpose is sub-optimal. This must be implemented as a matter of urgency. It will be difficult to evaluate the first phase of the Health Care Homes implementation without this. It is also an important step towards health

⁴ COPHE works with local community groups and non-government organisations to increase access to and affordability of primary healthcare (<http://www.cophe.com/about-cophe/>).

reforms which reward performance and the achievement of optimal outcomes, as opposed to paying for occasions of service.

Alternative methods of consultation and communication with patients should be funded and implemented, such as telemedicine, emailing of results and SMS communications. Data about an individual's health and the care they have received should be portable and comprehensive. The measurement of efficacy of healthcare must move from throughput measures to be primarily focused on the health outcomes achieved.

4.8 Models of coordinated care adapted to local circumstances

Models of coordinated care must be responsive to local need and local capacity with flexibility to respond according to the broader objective of better patient care. PHNs should have a key role in leading this work, guided by their Clinical Councils and Community Advisory Committees, in partnership with general practices, Aboriginal Community Controlled Health Services, allied health providers and hospital networks.

4.9 Operational and equity considerations, balanced with risk stratification

Risk stratification is required to ensure those who can most benefit from coordinated care are enrolled in Health Care Homes. There is a tension between this paradigm and the current model of voluntary enrolment. Depending on the form of implementation, this could also lead to adverse selection and an increase in health inequalities. There may also be impacts on the viability of the business model which will need to be considered.

5 What can be learned from other experiences of coordinated care?

While Health Care Homes are new to the Australian health system, there are many examples where health organisations have trialled or implemented models of coordinated care which share some of the features of Health Care Homes. Some are examined below, in the context of the shared principles outlined in this paper, as case studies which may serve to inform the development of Health Care Homes.

5.1 Aboriginal Community Controlled Health Services

The model by which primary healthcare is provided for Aboriginal and Torres Strait Islander people through Aboriginal Community Controlled Health Services (ACCHSs) is considered by many to be the prototype for Health Care Homes, encompassing all of the shared principles for patient-centred team-based care identified in this Issues Brief.

While “there are no well-considered standards for performance or weighting models to enable comparison between services and sectors in Australian primary healthcare”, the “limited information available suggests that performance in the ACCHS sector on some key care activities is at a higher level than for mainstream general practice providers” (Panaretto 2013).

There are significant features in the approach taken by ACCHSs that are important to consider in the Health Care Home model that is implemented more broadly in the future:

- **Co-design and service governance.** The fundamental concept behind each ACCHS is the establishment of a primary healthcare facility that is both built and run by the local Aboriginal people. In an ACCHO, a majority Aboriginal board leads the organisation’s strategic development and reform and oversees service performance. Directors are commonly users of the service and also members of the Aboriginal community. The Health Care Home model is currently silent about any requirements for the engagement of patients as partners in service planning and design.
- **The comprehensiveness and flexibility in the primary healthcare approach.** The approach adopted in ACCHSs is broader in scope than the Health Care Home model. In addition to primary clinical care and preventive and health promotion activity, ACCHSs usually include education and development in relation to workforce training, and governance and community capacity building (Lowitja Institute 2015). Care coordination and navigation extends beyond integrating such things as allied health, mental health, visiting specialists and dentistry, also providing assistance to access care such as transport services, crèche and medication subsidies. The empowerment of Aboriginal health workers, performing many clinical tasks that would be provided by a medical

professional in mainstream health services, has ensured that communities where there is an absence of medical practitioners are not denied the chance to receive healthcare. The Health Care Home model currently does not support such a comprehensive and flexible approach.

- **A population health approach.** In the first instance, the Health Care Home model will only focus on people with chronic conditions. While this may be a necessary focus at a ‘proof of concept’ stage, it is hoped that in the future all patients will have access to a Health Care Home. This would align with the population health approach pursued in ACCHSs, as well as being an element for successful implementation identified in the report ‘Patient-centred healthcare homes in Australia: towards successful implementation’ (Consumers Health Forum of Australia 2016).
- **Data-driven healthcare improvement.** ACCHSs have been reported to be leading the primary healthcare sector in monitoring clinical performance (Panaretto 2014), benchmarking through national and jurisdictional key performance indicators for the purpose of continuous quality improvement. Reporting goes beyond service activity, with health outcome data also collected and reported in a manner that is immediate and robust to support continuous quality improvement (AIHW 2013). These data-driven approaches to healthcare improvement have strengthened collaboration between ACCHSs to tackle common challenges and the clinical governance of services provided.

ACCHSs have operated successfully under blended funding arrangements. However, it has been identified that the remoteness of some communities makes service delivery challenging (Weightman 2013). The cost of delivering comprehensive primary healthcare in remote areas of Australia is much higher than in urban areas. While technology such as telemedicine can assist, it cannot replace all face-to-face contact that is vital to build the continuity and relationships that underpin health gains. The funding in the current Health Care Home model does not provide any weightings for remoteness.

5.2 Coordinated Veterans' Care program

The Department of Veterans' Affairs (DVA) Coordinated Veterans' Care (CVC) Program was initiated in 2011 for veterans, war widows, war widowers and dependants who are Gold Card holders at risk of being admitted or readmitted to hospital.

The program supports a proactive approach in improving the management of participants' chronic diseases and quality of care. The model of care is based on a core team, which includes the veteran, the veteran's carer (if applicable), their general practitioner and a nurse coordinator, who may be a practice nurse, Aboriginal health worker or community nurse. The team use care planning, coordination and review as the tool to focus on better management and self-management of the veteran's health and to incorporate the multidisciplinary team (including pharmacists, allied health providers, discharge planners, social assistance, community health providers, specialists). Keys to the success of this model of care have been identified as regular communication, empowerment and coaching (DVA 2014).

Quarterly care payments that can be claimed by general practitioners are \$442.65 (with a practice nurse) or \$198.80 (without a practice nurse), effective 1 July 2014 (DVA 2014).

It has been reported that, as of 30 June 2016, more than 33,000 Gold Card holders have been enrolled in the program, with approximately 23,000 currently enrolled (DVA 2016).

DVA reports that:

- participants report feeling more confident to manage their chronic disease through health literacy, support and coordination of their health conditions
- in a survey of general practices, 90% of respondents indicate a high level of satisfaction with the program and they intend to continue to provide these services (DVA 2016).

Budget estimates from 2010–11 indicated an investment of \$152.7 million over five years would be expected to reduce hospital costs by \$245.4 million over five years by reducing veteran hospital admissions, resulting in net savings of \$92.8 million over five years (Treasury 2010).

It is reported that a number of evaluations have been undertaken on the program objectives and performance. While not publicly available, it is reported that the reviews confirm that the overall implementation of the program has been successful and the data from the reports show the program design reflects evidence-based best practice for chronic disease management (DVA 2016).

5.3 Diabetes Care Project

Funded by the Australian Government Department of Health, the Diabetes Care Project was conducted between 2011 and 2014 to pilot coordinated models of primary care for diabetes. The pilot implemented and evaluated many components that contribute to the shared principles for patient-centred team-based care identified in this Issues Brief, specifically:

- an integrated information platform for general practitioners, allied health professionals and patients
- continuous quality improvement processes informed by data-driven feedback
- flexible funding, allocated based on patient risk stratification
- quality improvement support payments linked with a range of patient population outcomes
- funding for care facilitation, provided by dedicated Care Facilitators (DoH 2016c).

The project also provided an opportunity to examine the impact of care planning and annual cycle of care activities on clinical outcomes.

The evaluation of the project reported that “improved information technology and continuous quality improvement processes were not, on their own, sufficient to improve health outcomes. However combining these changes with a new funding model did make a significant difference” (DoH 2016c).

Funding flexibility was identified as being critical to allowing care to be more innovative and patient centred; the broader range of allied health professionals seen in this model of care reflected that care packages were being tailored to individual needs (DoH 2016c).

Funding for Care Facilitators was also identified as a key enabler of care innovation. One example in a remote area saw the Care Facilitator being monitoring across multiple practices and identifying demand for a particular allied health professional that was not available in the local area. With the flexible funding, they could then pool demand and arrange a visiting allied health professional (DoH 2016c).

However, the model of care used in the project was not deemed to be cost-effective, and it was recommended:

- funding would need to be targeted more precisely to those patients who were most likely to benefit (e.g. through risk stratification)
- funding for providers would need to be optimised
- clinical outcomes that are incentivised be expanded (DoH 2016c).

The problems of operational complexity, having to learn and manage multiple programs in order to manage different chronic diseases, were also noted. It was recommended that unified models of care be applied across diseases would enable economies of scale in many of the components (e.g. patient registration, information technology, care facilitation, continuous quality improvement processes, and the funding model principles) (DoH 2016c).

Finally, a focus on better integrating primary and secondary care and reducing avoidable hospital costs was identified as an important aspect of improving the financial sustainability of the system. It was noted that it was possible to predict who was at risk of potentially preventable hospitalisations from the project, with these costs being highly concentrated in a relatively small portion of the cohort. While this project was not designed to specifically reduce such hospitalisations (which may take several years to see an effect), there are several examples of primary care interventions achieving 'downstream' reductions in hospital costs. Commonwealth and state and territory governments need to cooperate to align incentives to achieve better integration between hospitals and primary care.

5.4 Inala Primary Care: caring for people with complex diabetes in the community

In 2006, the University of Queensland (UQ) and Queensland Health collaborated to implement the Primary Care Amplification Model in an existing Queensland Health-funded, UQ-staffed general practice in Inala. Inala Primary Care is now a private, not-for-profit company limited by guarantee that has a mission to deliver and evaluate the new model of primary care for the optimal health benefit of its underprivileged community in Brisbane South (Jackson 2007).

The Primary Care Amplification Model implemented in Inala builds primary care capacity by uniting local general practices around a central 'beacon' practice. The 'beacon' practice supports and extends the capacity of local general practices in areas of local population clinical need, undergraduate and post-graduate teaching (medical, nursing and allied health), relevant local clinical research, and improved integration with local secondary, tertiary and other state-funded health care (Jackson 2008).

Core elements of the model are that it provides care to populations undifferentiated by gender, disease or organ system that is:

- first contact
- continuous
- comprehensive; and
- coordinated (Jackson 2008).

Additional key characteristics of the model are that there is:

- support for primary care within and external to the practice;
- an expanded clinical model of care;
- a governance approach that meets the specific needs of the community it serves; and
- technical and physical infrastructure to deliver the expanded scope of practice (Jackson 2008).

Between 2007 and 2009, in partnership with the Endocrinology Department outpatient clinic at Princess Alexandra Hospital, Inala Primary Care piloted a novel model of diabetes care in the community that involved multidisciplinary collaboration and integration across the primary and secondary interface. The model was based around enhanced primary care capacity building, integrated care protocols and ‘virtual’ tertiary support, working with local general practices, Indigenous health services, community health and the hospital outpatient department to improve the quality of life for local patients with diabetes (Jackson 2007). Patients receiving the integrated model of care were shown to have a reduction in the number of hospitalisations when the principal diagnosis for admission was a diabetes-related complication (Zhang 2015). Most patients found it an enabling experience which included convenience, flexibility and prompt communication back to the referring GPs and valued this model of care (Burridge 2017). All revenue for Inala Primary Care is derived from Medicare bulk-billing, Practice Incentives Program and Service Incentive Payments, and teaching subsidies (Jackson 2007).

The University of Queensland is further progressing implementation and evaluation of the staged devolution of diabetes services to GPs and primary care for patients. Four hospitals (Princess Alexandra Hospital, Redland Hospital, Logan Hospital and Mater Adult Hospital) and three community-based services (Inala Primary Care, UQ Health Care (Annerley) and UQ Health Care (Meadowbrook)) are involved. Integral to this community-based, multidisciplinary, coordinated model are: an endocrinologist; advanced-skilled GPs (Clinical Fellows) who are experienced local GPs and have undertaken additional postgraduate education in advanced diabetes care; and a credentialed diabetes nurse educator. Allied health staff (podiatrist, dietician, and psychologist) are accessed on referral depending on patient need (UQ 2017).

5.5 National Health Co-operative

The National Health Co-operative was launched in Canberra in 2010.⁵ It is a not-for-profit, non-distributing, member owned co-operative that aims to provide affordable medical and healthcare services to the communities where it operates.

The model incorporates some of the shared principles for patient-centred team-based care identified in this Issues Brief:

- Medical centres are established as a community-driven solution to address shortcomings in affordable and accessible healthcare services in the local area, in particular, the books of locally-based GPs being closed to new patients, involving significant waiting times or not bulk billing. Patients are the members, supporting the direction of the co-operative through participation in the Annual General Meeting (AGM).
- A holistic and integrated approach to health is pursued through a range of primary healthcare services available to members, including general practitioners, diabetes educators, dietitians, exercise physiologists, nurses, obstetrician/gynaecologists, clinical pharmacists, psychologists and social workers. Targeted education sessions are held regularly to lessen the personal and societal impact of chronic conditions. A lifestyle modification program that runs over 6 or 12 weeks is available to provide individuals with tools to help manage chronic disease and maintain a healthy lifestyle.
- The co-operative monitors for emerging clinical needs within the community, and invests resources to ensure an encompassing level of care, e.g. hiring dietitians when incidences of diabetes increase.
- A blended funding model is used to maintain accessible, affordable, equitable and appropriate care with transparent out-of-pocket costs:
 - Annual membership of the co-operative is available for individuals at \$10 per month or \$100 annually. Commonwealth concession card receive a 50% discount and children under 18 years of age receive free cover under their parent or guardian's membership.
 - Education sessions and the Lifestyle Modification Program are offered at no cost to members.
 - All GP services are bulk billed for members. Allied health services can be accessed by members under bulk billing arrangements (with appropriate referral from a doctor).

⁵ See www.nhc.coop/

- Where private consultations are conducted, these are paid by the member. Consultations may also be covered by private health rebates or other insurance claim coverage.
- The co-operative has a model to ensure a sustainable GP workforce. Non-vocationally registered doctors are recruited to avoid competition for registered GPs, assisting them to achieve general registration on their way to completing their fellowship and providing them with opportunities to achieve specialist qualifications. GPs are supported to participate in weekly 2-hourly meetings for professional development and to debrief on current patient trends.

5.6 Which of these case studies demonstrate the principles outlined in this paper?

Principles	Aboriginal Community Controlled Health Services	Coordinated Veterans' Care program	Diabetes Care Project	Inala Primary Care	National Health Co-operative
1. A holistic view of health and well being	+	?	?	?	?
2. Patient and family centred healthcare	+	+	+	+	+
3. Continuous and collaborative relationships	+	+	+	+	?
4. A comprehensive team based approach to healthcare	+	+	+	+	+
5. Shared decision making, patient activation and engagement	+	+	+	+	?
6. Coordinated care across the care system	+	+	+	+	?
7. Accessible, affordable, equitable and appropriate care	+	+	+	+	+
8. High value, evidence-based, safe and quality care	+	+	+	+	?
9. Well-supported health care workforce and workplace environment	+	?	?	+	?
10. Sustainable funding to support principles, implementation and practices	Many learnings	?	Many learnings	+	+

5.6 Recent reviews of US, NZ medical home models

While much has been published on the implementation of medical home models in the United States and New Zealand, the findings of two recent reviews are instructive as Health Care Homes are introduced in Australia.

In a meta-analysis of findings from 11 evaluations of US patient-centered medical homes (PCMH), Sinaiko *et al* (2017) found that PCMH led to a 4.2 percent reduction in total spending (excluding pharmacy cost) and a 1.4 percent increase in breast cancer screening among high-needs patients. There were also small but significant improvements in cervical cancer screening and a 1.5 percent reduction in specialist consultations among all patients. However the authors cautioned that the context in which a PCMH is implemented, and the process of implementation, are critical to the achievement of desired impacts. They note, as an example, that “choosing to emphasize efforts to increase patient access to care would likely result in changes in utilization that are different than if a PCMH practice instead emphasized care coordination efforts.”

An independent evaluation by Ernst & Young of the Health Care Home model which commenced in New Zealand in 2011 is reported to have found there are measurable and positive benefits to patient experience, clinician satisfaction and care delivery, although there has not been a significant effect on levels of hospital admissions (McDonald 2017). The New Zealand model includes use of telephone triage and a web-based patient portal which allows patients to access their health information and communicate with their care team. New workforce models are being used in one Health Care Home, including medical centre assistants, clinical pharmacists, and social and community workers. It was noted that sustained investment over five years was required to support successful implementation; however there is reported evidence of increased clinical capacity within existing operational funding as a result of implementing the Health Care Home model. The evaluation also found that all sites had maintained or slightly improved their financial performance, as lower income and higher costs were largely offset through increased flexible funding and some increase in co-payments (from virtual care and nursing income).

Both reports noted that robust change management processes, including ongoing monitoring and support, were critical to building and embedding a sustainable model; and that time and effort were required for this.

6 Conclusion

The rising prevalence of chronic disease requires a concerted focus to better integrate care across the preventive, community, primary, acute, aged and disability care sectors, and to achieve better health outcomes and greater system efficiencies. Achieving and evaluating these improved patient outcomes and system efficiencies will take both time and investment, and will challenge existing models of care.

The Health Care Home model must be patient-centred, flexible and delivered according to local needs and local system capacity. But at its heart, it must be built on shared principles and values, and must acknowledge the need to address both the business model and the care model. Without shared principles, the capacity to achieve substantial system change and acceptance from funders, providers and patients will be compromised.

The design and roll-out of the first phase of Health Care Homes is already under way and will be evaluated in due course. However, the opportunity for reform and the change management requirements around this reform are so significant (and the associated potential for failure also great) that public and expert debate must now be fostered to ensure that any future model to be more broadly implemented is accepted by funders, providers and consumers.

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