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Perspective

Should the healthcare compass in Australia point towards value-based primary healthcare?

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Abstract. This paper provides an overview of quality improvement in healthcare in an Australian context. Specifically, the paper considers issues around defining, quantifying, recording and incentivising quality improvement and accountability in primary healthcare. The role of newly emerging Primary Health Networks provides a context for the discussion. The paper draws on international learnings that provide a framework for examining the important elements of quality improvement among reforming primary healthcare organisations in order to support healthcare providers and offer an evidence base for policy makers and peak bodies moving forward.

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Introduction

Health care is both a science and an art, balancing technical care and interpersonal processes. At the heart of improving patient outcomes is the need for assurances that the health care consumers receive is both safe and consistently of high quality, regardless of who, where, when or how they access the healthcare system. As the Australian primary healthcare (PHC) system embarks on an evolving reform agenda, Primary Health Networks (PHNs), Australia's PHC organisations (PHCOs), are charged with the responsibility of increasing the efficiency, effectiveness and coordination of medical services for patients, especially those at risk of poor health outcomes.[1] The approach from PHNs will need to include accountability and quality improvement, the latter being defined as:

. . .the combined and unceasing efforts of everyone – health care professionals, patients and their families, researchers, payers, planners and educators to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning).[2]

This paper outlines the main issues (defining, quantifying, recording, rewarding) and the complexity of quality improvement, accountability and judgement in health care. To put these approaches in context, the role of Australian PHCOs is considered. The paper draws on international learnings, which provide a platform for examining the important elements of quality improvement among reforming PHCOs in order to support healthcare providers and offer an evidence base for policy makers and peak bodies moving forward.

Domains of quality improvement

There are many legitimate interpretations of the term 'quality' relevant to health care. Quality care lies on a continuum from measures that are routinely available and data that are quantifiable (e.g. service usage data) through to aspects that are more difficult to quantify and can only be measured through local approaches, patient feedback and other qualitative methodologies (e.g. patient experience). These largely depend on location in the system and the nature and extent of responsibilities. Donabedian's[3] framework is a commonly used approach that considers how health and the responsibility for it is defined, whether assessment is at the level of performance of health professionals or whether it includes patients and the healthcare system, and finally whether interpersonal processes are included in technical care. The dimensions of care that the framework covers represent three types of information that may be collected and incentivised to understand and influence the quality of care in a given system (Table 1).

Table 1. Types of measures for assessing the quality of care based on Donabedian's framework[5]

Measure type	Description	Targets	Examples	How measured
Structure based	Encompasses all the factors that affect the context in which care is delivered	Structures and systems in place to assure the quality and accountability of an organisation	• Facilities • Equipment • Personnel • Administration • Protocols	Direct observation Supervisory checklists
Process based	The sum of all actions that make up health care	Commonly includes diagnosis, treatment, preventive care and patient education processes	• Clinical guidelines • Care pathways • Management • Records • Diagnosis • Treatment plans • Sequencing	Participant observation Exit interviews Data quality assessment
Outcome based	Contains all the effects of health care on patients or populations	Clinical, physiological and patient-centred outcomes	• Mortality • Quality of life • Patient satisfaction • Health status • Completion of treatment	Patient or population surveys

Policy context in Australia

In Australia, PHC is typically the first health service visited by patients with a health concern. It includes most health services not provided by hospitals and is currently provided by a complex mix of agencies, including state and territory government-managed community health services, publicly and privately funded providers and government and non-government agencies.[4] Hence, the configuration of the policy context in Australian PHC is dynamic. The diversity of population density, composition, geography and multiple jurisdictions in Australia mean that delivering services incurs a variety of challenges. Recently, there has been a shifting emphasis at the macro level to accountability, safety and quality of care, resulting in the development of quality improvement initiatives, in particular the establishment of practice-level indicators to measure the quality of care delivered in PHC settings.[5] These indicators, developed by the Australian Commission on Safety and Quality in HealthCare (ACSQHC) in consultation with a broad range of peak bodies, are intended to support continuous quality improvement. The national set of practice-level indicators include accessibility, appropriateness, acceptability, effectiveness, coordination, continuity of care and safety, all hallmarks of good care.[6] This is a voluntary scheme with PHC services choosing a 'local bundle' of indicators to assess and monitor their service's improvement on different dimensions of quality and particular aspects of care, pathways or conditions relevant to their context.

The publicly funded nature of Australian PHC means the responsibility for achieving, maintaining and incentivising quality in PHC is predominantly the role of governments and regulatory bodies at the macro level. In contrast, the practice of delivering care occurs at the individual practice or practitioner/service provider (micro) level. In the midst is the meso level, where PHCOs carry a dual responsibility: accountability upwards for health outcomes achieved in their regions and facilitating infrastructure and processes for service providers (Fig. 1). Increased emphasis has been placed on emerging PHCOs to conduct meaningful engagement across the health system, to reinstate general practice as a cornerstone, meet performance targets and commission for services.[7] Working closely with Local Hospital Networks (LHNs), PHNs are expected to achieve their objectives through strategies strongly reflecting quality improvement approaches. These include supporting general practices to attain the highest standards in safety and quality through showcasing and disseminating research and evidence of best practice, collecting and reporting data to support continuous improvement, needs assessment and identification of services gaps, practice support services, infrastructure to enable quality care (i.e. eHealth) and working with other funders to commission or purchase services.[1]

Rewarding, recording and data usage in quality improvement approaches

The use of blended payment schemes, including financial incentives, to reward 'quality' is increasing in several countries.[8] These mechanisms are used by governments to achieve target outcomes and concurrently improve the quality and safety of health care. For example, in Australia the Practice Incentives Program (PIP) is available to accredited general practices.[9] Originally developed in the late 1990s, the PIP currently consists of 10 individual incentives that incorporate pay-for-performance (P4P; with sign-on and service incentive payments) and practice-based capacity payments. However, the most recent systematic review of financial incentives and quality of care suggests that within the current literature there is insufficient evidence to support, or not, the use of financial incentives alone to improve the quality of PHC.[8]

Rewarding change in performance or behaviour requires careful consideration of what, how and where service delivery is recorded. A recent policy issue review of quality improvement financial incentives in general practice[10] explored which performance indicators or behaviours were being used to assess and financially incentivise quality. That review found indicators were

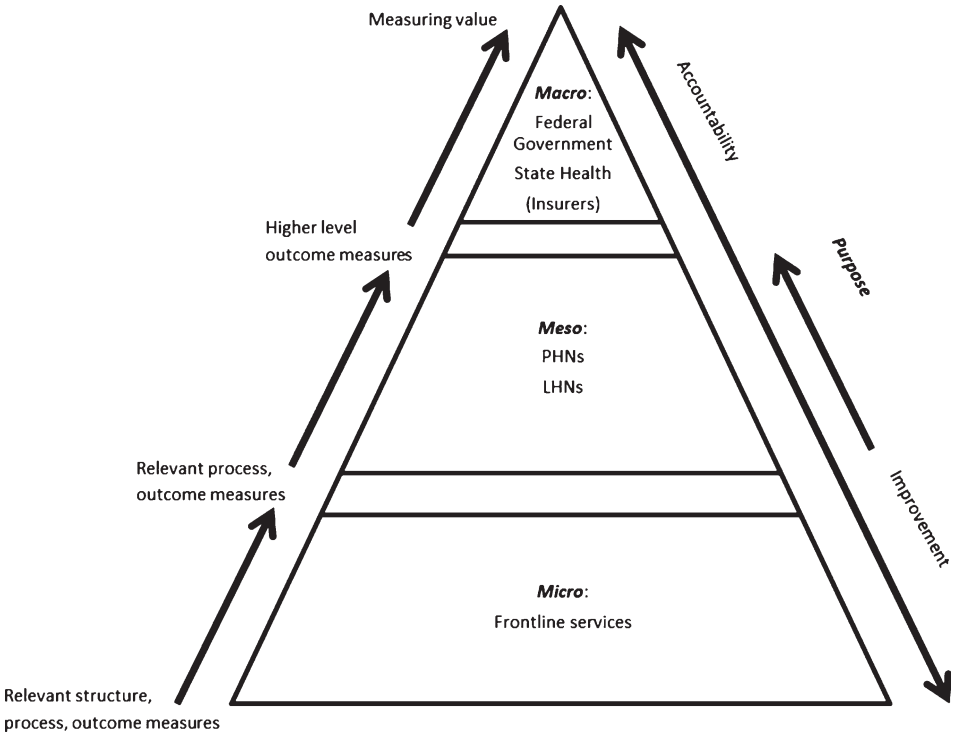

Fig. 1. Australian primary healthcare accountability and quality improvement measurement pyramid. PHNs, primary health networks; LHNs, local hospital networks.

more often process-based; for example, administrative records indicating claims made,[11] recorded diabetes care composite scores,[12] appropriate prescription to diagnosis for defined conditions,[13] timely follow-up and referral,[14] immunisations and screening or provision of specialised services (e.g. obstetrics, palliative services, home visits).[15] As indicated in Table 1, outcomes-based indicators can be considered the desired end result of the medical care. Some authorities seek improvements in proxy outcome measures, such as blood pressure, cholesterol or HbA1c, because the literature has shown that improvement in such metrics can lead to reductions in mortality or morbidity.[16,17] Such outcome indicators have often been criticised because generally they only measure an organisation's or provider's perspectives and often fail to take into account the patient's views.[18] In PHC, where much of the care for chronic conditions occurs, the outcomes that matter are quality of life and freedom from short- or long-term exacerbations and complications. As patients become frail and develop multimorbidity, the outcomes of care change and include freedom from avoidable pain and complications, well being and satisfaction with care. In this latter group, attempting to achieve optimal outcomes-per-condition is actually harmful.[19]

Where record keeping of service delivery occurs is also highly relevant to how data are used and quality subsequently rewarded. Similar to other countries, Australia faces challenges around publicly reported data, large datasets, lack of interfacing data systems and limited formally enrolled populations. The complexity of collecting and collating appropriate data adds significant administrative burden. The integration of data systems is required to facilitate PHNs to undertake regional planning and reduce service gaps and duplications, but is a major technical challenge. Strategies that lead to an improvement in data collection and use will support sustainable improvements in quality. Thus, encouragement and support of practices to undertake accreditation and engage with quality improvement strategies is essential. Previous PHCOs (e.g. Divisions of General Practice, Medicare Locals) have provided support to general practice to improve quality of collection and collation, but this has often required considerable effort. Data are often collected for diverse purposes (i.e. clinical interventions, governance, population-based decision making, policy, research, administration and business).[20] Strategies outside of national incentive programs have been successful in developing recording, data usage capacity and experience in quality improvement.[21] Evidence also exists in support of incentive programs; for example, P4P incentives focused on diabetes cycles of care to general practitioners (GPs) have had some effect on diabetes care, as indicated in Greene's[11] longitudinal sample in which two-thirds signed on to the incentives within the first full year of them becoming available. Despite this, the majority made no incentive claims in the year. This suggests that at the practice level, although signing on to services may demonstrate higher uptake, services are often provided, but not claimed through the incentive program.[11] This may be due to administrative burden. The Australian National Audit Office[9] identified the cost and work effort needed for accreditation to be 'high' or 'very high' and 'red tape' to be a concern. This has resulted in under-representation of smaller practices servicing

remote locations and non-English speaking communities, as well as Aboriginal Medical Services in the program. In order to enable the PHNs to perform effectively, reporting requirements and processes will need to be more efficient, with a major focus on measureable outcomes.[7]

Commissioning for quality and value

Value in health care is defined as health outcomes achieved per dollar spent.[22] The improvement of health outcomes (numerator) is a primary objective of quality improvement programs and in doing so, they may also improve the cost (denominator). As governments strive to improve effectiveness and efficiency, the notion of improving value is paramount and will become a measure of the success of PHNs. In Australia, financial incentives at the practice level have been the main mechanism for bringing about change, whereas in both the UK and New Zealand they have been part of a broader range of reforms, including capitation-based payments and practice-based commissioning.[23] Commissioning is the process of assessing the health needs of a population, then planning, securing and monitoring the best possible range and quality of health services and health improvement services for that population, given the resources available.[24] GP-led commissioning has a >20-year history in the English National Health Service (NHS) and there are also examples in other countries.[25] Every clinical decision, whether it is a prescription or a referral, is in effect a commissioning decision. The engagement and involvement of clinicians is therefore a consistent critical success factor for effective commissioning. In the UK, the involvement of clinicians, in particular GPs, in the various iterations of commissioning has been a consistent theme. This linking of clinical decisions with financial responsibility has delivered some improvements in performance.

The predominant function of Australian PHNs will be as commissioners of care to ensure population needs are met and lead to improved patient outcomes. The interface with research can be mutually beneficial by supporting the translation of evidence into practice, but also providing opportunities to evaluate and learn from service remodelling. The role of general practice is central to PHN objectives and innovative Australian models providing embedded clinical leadership facilitating both the interface with research and broader clinical engagement in implementation show promise.[26] Guidance from the Australian Department of Health has articulated the key objectives for PHNs, including improving effectiveness and efficiency.[1] The Department of Health has explicitly stated that PHNs will have performance frameworks encompassing three tiers: national, local and organisational. The detail will be forthcoming; at present, the only examples offered are at the national tier and include potentially preventable hospitalisations (per 1000 population) and percentage of target population screening for breast, cervical and/or bowel cancer. This is consistent with the approaches of other countries. For example, Commissioning Consortia in the NHS are operating to deliver outcomes against a national framework.[27] In New Zealand, a primary health organisation performance management program has been in place and is transitioning to an integrated performance and incentive framework.[28]

Balanced accountability frameworks

Australia appears to be moving in a similar direction to other developed countries with a quality and safety accountability framework. There are benefits in this approach, but there are also risks. First, an accountability framework is designed for 'judgement' and for performance management. In the Australian context it will be used at the macro level to manage performance at the meso level. Although necessary to provide accountability and transparency, the measurement system for judgement has some real differences to the measurement system for improvement.[29] PHN performance is to be monitored under a PHN performance framework. This framework outlines arrangements for monitoring, assessing and reporting on the performance of PHNs. The framework will encompass three tiers of performance: national, local and organisational. Conflicting indicators may stymie quality improvement efforts (e.g. there is no value in having a target to have X% screened for diabetes without a related target around how many are actually at risk). Sets of indicators need to be given careful contextual consideration. Experience from the UK and New Zealand suggests that the most effective method to engage with GPs is by providing education and information, facilitating peer review, sharing comparative data, providing financial incentives and agreeing on referral pathways and protocols.[30] Although a top-down outcomes framework will result in measurement of those indicators, for those at the front line the purpose of measurement needs to go beyond judgement alone. It needs to be for improvement where measures are locally defined and owned, measured much more frequently and more likely to be process based, and should include a balance of measures and measures of unintended consequences. A failure to balance these competing measures risks unintended consequences if organisations drive towards a singular aim, particularly when it is used for performance measurement.[18]

What matters ultimately is an improvement in outcomes of care. However, in many countries the accountability frameworks have been focused on process rather than outcome measures (e.g. diabetes checks or heart checks). This is understandable because outcomes are difficult to measure, time consuming and do not capture the totality of health care. Nevertheless they are an important component and necessary for a system focusing on effectiveness of care. The frequent changes to the New Zealand health system affect processes, but the primary care outcomes are unknown. Goodyear-Smith *et al.*[31] identified that 'a move from indicators to value-based outcome measures is needed alongside increased trust in professionalism, rather than focusing on select process indicators' (p. S43). Defining outcomes is critical because there is a difference between the health system perspective and the patient perspective. Others have articulated how the NHS outcomes framework falls short of consumers' expectations and understanding.[32,33] They illustrate this with examples in which consumers may rate programs and services highly that helped people to achieve their goals (e.g. weight loss or enhanced mobility), but note that of greater value to them is the manner of service delivery and the degree to which the program allowed them to participate and contribute within the service.

Therefore, accountability and quality frameworks need to be balanced: a balance of carefully selected measures that include clinical outcomes, patient safety, patient experience and cost.

Internationally, health systems are moving towards combining these balanced approaches for value-based health care. This should resonate with policy makers in Australia, where PHNs will be expected to increase effectiveness and efficiency. Such an approach can meet the goals of consumers, providers and commissioners. Yet the challenge in healthcare has been the measurement of quality in itself and the associated cost. Quality needs to focus on outcomes and it is absolutely necessary for it to take into account the patient perspective. The measurement of the true cost of delivering care for conditions is generally relatively crude, and particularly difficult for conditions that traverse provider boundaries. However, it is possible and the approach of measuring value has been well documented for specific condition-based care pathways (e.g. hip replacement or breast cancer). Its use in PHC and population-based health has limited experience. That said, it too is possible but requires a different paradigm, a paradigm where a learning system is created to identify outcomes that matter, datasets that are integrated and linked so cost (and outcomes) for care across the provider boundaries can be measured.[34,35]

Conclusion

Australian PHC system reform presents an opportunity, and the challenge has been set for PHNs. The accountability framework is still to be determined, but the objectives are clear and emphasise value. In order to realise this opportunity, a clear understanding of the different measurement systems and their purpose at every level of the system will be necessary. There will need to be a careful selection of indicators, including structure, process, outcome and balancing measures. These will need to be clearly defined and incorporate both clinical and patient perspectives with the ability to measure cost across the whole care continuum. The framework should be developmental in nature and carefully tread the path towards a value-based model. By taking this approach, Australia joins health systems across the world in navigating the road to quality care.

Competing interests

None declared.

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