It is time to reinvest in quality improvement collaboratives to support Australian general practice

Supporting improved general practice is urgent, and quality improvement collaboratives are an effective Australian strategy

Australia faces serious challenges to the effectiveness and sustainability of its health system, including barriers to access, rising costs, chronic disease rates, an ageing population, and overstretched hospitals.[1,2] High quality primary care is recognised to underpin effective and efficient health systems.[2-4] The coronavirus disease 2019 (COVID-19) pandemic has starkly illuminated the problems and demonstrated the importance of supporting general practice for health care delivery in Australia.

Australian general practice is among the highest quality in the world.[2,5] However, significant stresses have emerged: professional isolation and fragmentation of care persist, and relative funding cuts over many years have constrained the capacity for change and driven inequity of access.[2] Multiple reviews of primary care have culminated in the impending finalisation of the Primary Health Care 10 Year Plan.[6] The final consultation draft of the plan presents a vision of digitally enabled, person-centred and integrated primary care. Embedding continuous quality improvement in general practice is seen as essential to the future needs of the health system. Quality improvement collaboratives, useful in the past, may be an important future strategy.

Quality improvement collaboratives

Collaboratives are designed to achieve large-scale rapid improvement.[7] They bring together teams from multiple organisations to focus on improving a change topic. An expert reference panel determines aims, measures, and change ideas. Teams meet in central workshops to learn about the topic, learn improvement skills, plan changes and share ideas. Between workshops, teams receive local support to carry out rapid improvement cycles and measure change in their own organisations. The dominant model is the Breakthrough Series championed by the Institute for Healthcare Improvement (Box),[7] which has been used in many systems around the world.

Collaboratives have been the subject of a number of systematic reviews.[8-12] Despite noting that the quality of research is limited, reviews conclude that quality improvement collaboratives can be effective in achieving change in targeted topics and can have spillover effects to other clinical areas and team functioning. The few studies of sustainability found it to be variable. It was noted that collaboratives are relatively expensive interventions, raising questions of cost effectiveness. Reviews have drawn literature from all health contexts; however, general practice is a context with unique characteristics and barriers to change. It requires targeted strategies for improvement to which we believe collaboratives are well suited.

We recently completed a qualitative systematic review of the role of collaboratives in general practice. Participants and implementers described generally positive effects on change topics such as diabetes care and childhood immunisation. They reported positive effects in care processes, teamwork and motivation, and described the impacts on regional support and spread of innovations. Collaboratives were credited with enhancing capacity for quality improvement through increased knowledge and skills, systematic data use, and creation of “improvement champions”. It was also found that collaborative participation was challenging in busy general practices and could result in variable change and demotivation if poorly implemented.

The Australian Primary Care Collaboratives program

Australia has deep experience in collaboratives through the Australian Primary Care Collaboratives program (APCC). The APCC (2004–2014) was a national-level Australian implementation of the Breakthrough Series approach (Box) in general practices and Indigenous medical services.[13-15] The program received funding of about $40 million.[15] More than 13 individual collaboratives involved over 1800 primary care services, and 83% of regional primary care organisations recruited practices and provided local support.[15] In 2011, about 400 000 patients were recorded on disease registers in participating practices.[15]

Change topics

The APCC dealt with issues such as diabetes, coronary heart disease, access and care redesign, chronic obstructive pulmonary disease, prevention, patient self-management, and closing the health gap for Indigenous people.[15,16] Positive change was demonstrated in most improvement measures.[15-18] For example, seven diabetes collaborative waves were run between 2004 and 2009, involving 743 practices,[16] and 150 000 patients with diabetes were registered. The main outcome measure (ie, percentage of patients with glycated haemoglobin [HbA_{1C}] ≤ 7) saw overall improvement of 50%.[16]

Practices and teams

Participants reported that the APCC experience could deepen knowledge of the improvement topic. Some participants described increased skills

Andrew W Knight[1,2]

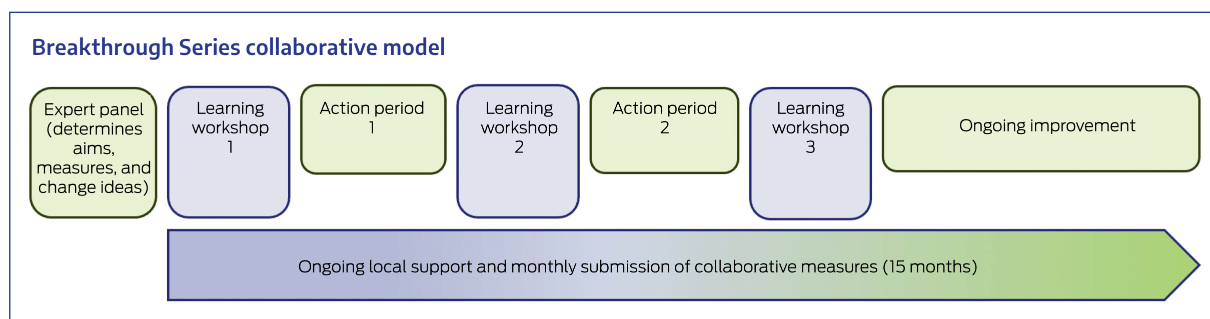
John Fraser[3]
C Dimity Pond[4]

1 South Western Sydney Local Health District, Sydney, NSW.
2 UNSW Sydney, Sydney, NSW.
3 University of New England, Armidale, NSW.
4 University of Newcastle, Newcastle, NSW.

awknight@aapt.net.au

MJA 216 (9) ▪ 16 May 2022

doi: 10.5694/mja2.51502



in disease coding, creation of practice disease registers, and systematic data collection to measure improvement.[14-16] Some teams reported developing a more active, population-based primary care approach. Increased engagement of the practice team including administrative, nursing and allied health staff was described. Peer interaction and learning was a highly valued aspect of participation.[14-16]

APCC involvement reportedly created protected time to do improvement activities and because of this some went on to initiate regular practice clinical meetings. A number of improvement champions emerged who continue to provide primary care leadership in Australia.[14-17]

Impact on health systems

Local recruitment and support of APCC practices were provided by primary care organisations.[14-17] Local collaborative support officers helped practices establish registers, collect outcome data, make changes and submit measures.[14-16] Participants reported that these joint activities could deepen relationships between practices and regional support organisation staff.[14-16] A significant proportion of practices continued to voluntarily share aggregated outcome measures with their local primary care organisation after participation. Other system innovations flowing from the APCC included early practical trials of the Personally Controlled Electronic Health Record, which later became the My Health Record.[17]

Building quality improvement capacity

The APCC helped establish a culture of quality improvement in general practice.[15,17] It provided a foundation for some Primary Health Network (PHN)-led quality improvement initiatives and the national Quality Improvement Practice Incentive Program. Collaboratives were also explicitly used to teach quality improvement methods and coaching to some regional support staff.[18]

A necessary development for the APCC was the creation of effective data extraction tools to support automatic extraction of improvement measures from general practice clinical software.[14-16] These tools have become well established and are increasingly used to support improvement at practice level, to drive regional initiatives, and to inform policy at the national level. Despite progress, there remains considerable opportunity to build continuous quality improvement in Australian general practice.

Looking to the future

The draft Primary Health Care 10 Year Plan provides a vision for the future. Based on the experience of the APCC, together with international evidence of effectiveness, collaboratives should form part of the well resourced change management the Primary Health Reform Steering Group recommends.[2]

National collaboratives

We suggest a limited number of national-level collaboratives be used to develop and evaluate national level general practice policy innovations. Expressions of interest through PHNs would recruit motivated general practices from across the country. Improvement topics aligned with the draft plan[6] include voluntary registration of patients, comprehensive preventive care, national pandemic management, and closing the health gap for Indigenous people. They should be designed to optimise benefits such multidisciplinary team care and effective use of digital innovation. Strong feedback loops between collaboratives and health departments should be established to evaluate and drive realistic, grassroots general practice reform. Well designed evaluations should be published and provided to funders to record implementation lessons and understand system effects.

Expected outcomes of running a limited number of carefully targeted national collaboratives include real-world piloting of national innovations, exemplars of effective change, and informed national policy. A new generation of leaders will emerge with expanded vision for general practice.

Regional collaboratives

We recommend regional collaboratives be supported through PHNs to drive local responses to local problems. Topics should focus on regionally identified system priorities, including integrated care, chronic disease management, avoidable admissions and community-based COVID-19 care.

The expected outcomes of such an investment include improved local care quality and development of general practices in regional areas. Local collaboratives can help create integrated location-based health systems and implement new models of general practice care. They can drive the emergence of a new generation of networked, engaged local champions. Local collaboratives should be designed

to enhance regional relationships and build PHN expertise in practice support. They should aim to further develop quality improvement skills at practice and PHN level.

Barriers

Significant funding for implementation of the Primary Care 10 Year Plan will be essential. This may be challenging as health funding adjusts to post pandemic conditions. However, there is strong evidence that efficient, effective primary care is foundational to improving health system affordability.[3]

Questions have been raised about the sustainability of collaborative interventions. Collaborative literature suggests that well designed and implemented interventions can achieve sustained change.[11] Even though there remains much to be done, the APCC has resulted in sustained improvements in areas such as chronic disease management, primary care data, practice systems, and improvement capacity.[13-18]

The exhaustion experienced in general practices due to the challenges presented by the COVID-19 pandemic may affect the implementation of the Primary Care 10 Year Plan. Approaches such as collaboratives, which can motivate and involve clinicians, may offer an effective strategy for re-engagement.

Conclusion

The COVID-19 pandemic response has underlined the centrality of general practice to an effective, responsive, Australian health care system. Supporting general practice remains a pressing priority for meeting present and future challenges. Evidence from the literature and the Australian experience shows that collaboratives are suited to addressing these continuing challenges. A significant investment in quality improvement collaboratives provides a well tested option for implementing the Primary Care 10 Year Plan.

Acknowledgements: Andrew Knight is a general practitioner who has written about the Australian Primary Care Collaboratives (APCC) as a participant, academic and leader. He is completing a PhD on the impact of the APCC. Dimity Pond is a GP researcher and educator with a special interest in dementia. John Fraser is a rural GP researcher and educator with a special interest in public health. We thank Michael Tam for providing advice on this manuscript.

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.

Competing interests: Andrew Knight received payment from the Improvement Foundation Australia in his role as Chair of the Expert Reference Panel on Access during the Australian Primary Care Collaboratives Program.

Provenance: Not 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 Australian Government Productivity Commission. Innovations in care for chronic health conditions. Productivity reform case study 2021. https://www.pc.gov.au/research/completed/chronic-care-innovations/chronic-care-innovations.pdf (viewed Dec 2021).

2 Primary Health Reform Steering Group. Recommendations on the Australian Government's Primary Health Care 10 Year Plan, September 2021. https://consultations.health.gov.au/primary-care-mental-health-division/draft-primary-health-care-10-year-plan/supporting_documents/Primary%20Health%20Reform%20Steering%20Group%20%20Recommendations%20September%202021.pdf (viewed Dec 2021).

3 Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Q* 2005; 83: 457-502.

4 World Health Organization. Framework on integrated, people-centred health services [15 Apr 2016]. http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_39-en.pdf?ua=1&ua=1 (viewed Dec 2021).

5 Schneider EC, Shah A, Doty MM, et al. Mirror, Mirror 2021. Reflecting poorly: health care in the US compared to other high-income countries. https://www.commonwealthfund.org/sites/default/files/2021-08/Schneider_Mirror_Mirror_2021.pdf (viewed Dec 2021).

6 Australian Government Department of Health. Consultation draft. Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022–2032. https://consultations.health.gov.au/primary-care-mental-health-division/draft-primary-health-care-10-year-plan/supporting_documents/PHC%2010%20Year%20Plan%20%20Consultation%20Draft%20%20October%202021.pdf (viewed Dec 2021).

7 Institute for Healthcare Improvement. The Breakthrough Series: IHI's collaborative model for achieving breakthrough improvement — IHI Innovation Series white paper. Boston: IHI, 2003. http://www.ihi.org/resources/pages/ihiwhitepapers/thebreakthroughseriesihiscollaborativemodelforachievingbreakthroughimprovement.aspx (viewed Dec 2021).

8 Hulscher MEJL, Schouten LMT, Grol RPTM, Buchan H. Determinants of success of quality improvement collaboratives: what does the literature show? *BMJ Qual Saf* 2013; 22: 19-31.

9 Nadeem E, Olin SS, Hill LC, et al. Understanding the components of quality improvement collaboratives: a systematic literature review. *Milbank Q* 2013; 91: 354-394.

10 Schouten LMT, Hulscher MEJL, van Everdingen JJE, et al. Evidence for the impact of quality improvement collaboratives: systematic review. *BMJ* 2008; 336: 1491-1494.

11 Wells S, Tamir O, Gray J, et al. Are quality improvement collaboratives effective? A systematic review. *BMJ Qual Saf* 2018; 27: 226-240.

12 Zamboni K, Baker U, Tyagi M, et al. How and under what circumstances do quality improvement collaboratives lead to better outcomes? A systematic review. *Implement Sci* 2020; 15: 27.

13 Brown V, Fuller JD, Dunbar JA, Ford D. The enablers and barriers for the uptake, use and spread of primary health care collaboratives in Australia. APHCRI Centre of Research Excellence in Primary Health Care Microsystems, University of Queensland; 2014.

14 Hespe C, Rychetnik L, Peiris D, Harris M. Informing implementation of quality improvement in Australian primary care. *BMC Health Serv Res* 2018; 18: 287.

15 Knight AW, Caesar C, Ford D, et al. Improving primary care in Australia through the Australian Primary Care Collaboratives program: a quality improvement report. *BMJ Qual Saf* 2012; 21: 948-955.

16 Knight AW, Ford D, Audehm R, Colagiuri S, Best J. The Australian Primary Care Collaboratives program: improving diabetes care. *BMJ Qual Saf* 2012; 21: 956-963.

17 Knight AW, Szucs C, Dhillon M, et al. The eCollaborative: using a quality improvement collaborative to implement the National eHealth Record System in Australian primary care practices. *Int J Qual Health Care* 2014; 26: 411-417.

18 Knight AW, Dhillon M, Smith C, Johnson J. A quality improvement collaborative to build improvement capacity in regional primary care support organisations. *BMJ Open Qual* 2019; 8: e000684. ■