Quality improvement activities associated with organisational capacity in general practice

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BACKGROUND
Clinical audit is recognised worldwide as a useful tool for quality improvement.

METHODS
A feedback report profiling capacity for chronic disease care was sent to 97 general practices. These practices were invited to complete a clinical audit activity based on that feedback. Data were analysed quantitatively and case studies were developed based on the free text responses.

RESULTS
Eighty-two (33%) of 247 general practitioners participated in the clinical audit process, representing 57 (59%) of 97 general practices. From the data in their feedback report, 37 (65%) of the 57 practices recognised the area most in need of improvement. This was most likely where the need related to clinical practice or teamwork, and least likely where the need related to linkages with other services, and business and finance. Only 25 practices (46%) developed an action plan related to their recognised area for improvement, and 22 (39%) practices implemented their chosen activity. Participating GPs judged that change activity focused on teamwork was most successful.

DISCUSSION
The clinical audit process offered participating GPs and practices an opportunity to reflect on their performance across a number of key areas and to implement change to enhance the practice's capacity for quality chronic disease care. The relationship between need and action was weak, suggesting a need for greater support to overcome barriers.

Quality assurance and continuing professional development (QA&CPD) programs are well recognised educational pathways through which health professionals can enhance knowledge and produce behaviour change leading to improved quality of care.[1–3] Clinical audit is a cyclical process that consists of evaluating current activity against standards, identifying a problem, and taking action to address the problem.[1] Factors that increase the impact of the audit process include the presence of a supportive organisational culture and management, teamwork, democratic decision making and uncomplicated data collection.[4–6]

It has been suggested that practitioners are more likely to change their practices if there are fewer new skills and organisational changes needed to follow the recommendations. Audit is most effective in combination with other interventions such as reminders and education.[7]

During 2004–2005, a large cross sectional study was conducted in Australia, measuring the impact of the organisational capacity of general practices on the quality of care delivered to patients with type 2 diabetes, ischaemic heart disease, hypertension and moderate to severe asthma.[8] The aim of this study was to measure four areas of organisational capacity shown by research in other countries to have an impact on quality of care, and to determine the relationship between these capacity areas and clinical care in the context of Australian general practice. Participating general practices were offered the opportunity to conduct a clinical audit based on a practice level feedback report produced from the information collected.

Methods

As part of the Practice Capacity for Chronic Disease Management Research Study, eight general practitioners, practice staff and patients completed surveys and interviews which were used to create organisational and clinical profiles of the practice. Information regarding organisational capacity was collected via visits to the practice to distribute surveys to practice staff and undertake interviews with the practice principal and manager, while clinical care information was collected through GP interviews and patient surveys (*Table 1*).

Table 1. Practice variables measured and reported to practices in the Practice Capacity for Chronic Disease Management Research Study

Variable measured	Participant	Format
IM/IT maturity	Practice principal and practice manager	Interview
Business and financial management	Practice principal and practice manager	Interview
Linkages with external service providers and organisations	Practice principal and practice manager	Interview
Staff roles and teamwork	Practice principal and practice manager	Interview
Team climate	All practice staff	Survey
Staff job satisfaction	All practice staff	Survey
Quality of care delivered to patients with type 2 diabetes, ischaemic heart disease, hypertension, moderate to severe asthma	All GPs (individually)	Interview
Patients assessment of the practice	Patients with chronic disease	Survey
Patient self reported health status	Patients with chronic disease	Survey

Practice variables were detailed in a 40 page feedback report sent to participating practices 6–11 months after initial interviews. The report included a practice score for each variable, benchmarked against practices of similar size and the national average.

The study was approved by The Royal Australian College of General Practitioners and Australian College of Rural and Remote Medicine as a practice based clinical audit activity that attracted CPD points. The 247 GPs who took part in the research study were invited to complete the audit cycle. Completing the cycle involved the identification of learning needs, description of the factors motivating participation in the clinical audit process, reflection on research feedback and the development of an action plan. General practitioners were also asked to assess the impact of the change activity they implemented. Divisions of general practice were encouraged to assist practices who implemented this QA&CPD activity.

Although the colleges' rules regarding clinical audits required each GP to complete the proforma individually, the majority of the audit results were reported for the practice as a whole. General practitioner audit responses were added or averaged to the practice level, which also prevented the responses from larger practices being weighted more heavily than responses from smaller practices with regard to activities undertaken. Some GPs chose to complete the forms with the other GPs in the practice while others did not. The majority of quality improvement activities focused on the practice. Therefore if one GP focused their clinical audit on the practice's information management and information technology (IM/IT), and another GP from the same practice focused on organisational linkages, this particular practice's audit activity would be recorded as being focused on both IM/IT and organisational linkages. We were, however, unable to determine the extent to which the audit results represented a consensus within the practice. Because the decision to participate in the study and audit activity was made by the individual, the question concerning motivation for participation was analysed at the individual GP level.

Results

Demographic characteristics

Eighty-two (33%) of the 247 GPs who took part in the research project also participated in the clinical audit. They were a representative sample of the Australian GP workforce in terms of gender, years of experience in general practice, overseas training, size and location of practice.[9]

Participating GPs were from 57 (59%) of the 97 practices that took part in the research study and 25 (92%) of the 27 participating divisions. Forty-two practices (72%) of the 57 were in a metropolitan area. Twenty-one practices (36%) had four or more GPs, 22 (38%) had 2–3 GPs, and 14 (24%) were

Table 2. Clinical audit cycle: identification, recognition and action toward the 'area of most potential for improvement'

Main practice capacity areas	Lowest score when compared against other practices of similar size		Recognition of 'area of most potential for improvement'		Activities planned or undertaken in relation to the area of most potential for improvement		Quality improvement achieved	
	N	%	N	%	N	%	N	%
IM/IT	12	21.1	8	14.0	5	8.8	4	7.0
Business and financial management	9	15.8	3	5.2	2	3.5	1	1.8
Practice linkages	11	19.3	4	7.0	2	3.5	2	3.5
Multidisciplinary team working	15	26.3	13	22.8	13	22.8	12	21.0
Clinical care	7	12.3	6	10.5	2	3.5	2	3.5
Total	57	100	37	(64.91)	25	(45.61)	22	(38.59)

solo practices. Twenty-six (46%) practices had a practice nurse, and 33 (58%) had a practice manager.

Motivation to participate in the QA&CPD activity

Thirty-six GPs (44%) were motivated to participate in the activity by the opportunity to assess their practice's ability to manage chronic disease and to explore areas of weakness. A typical reason cited by this group was: 'To gain an indepth insight to our capacity for chronic disease quality of care, to identify our present performance, to identify our strengths and weaknesses areas.'

Twelve GPs (15%) indicated that their main reason for taking part was to compare their performance with their peers, other practices and standards ('I have spent many hours thinking about and implementing procedures in the practice and wanted to see how we compared to other practices').

Ten GPs (12%) reported that they had participated in the process because it was a decision made by all practice GPs, or by the practice owner. Eight GPs (10%) indicated that their primary motivation was to identify patient needs and receive their feedback ('I desire particularly to hear some patients' feedback and their perceptions of their treatment'). Six GPs (7%) indicated that they participated primarily for CPD points, four GPs (5%) identified the audit as a learning experience, and six GPs (7%) gave other reasons.

Recognition of the 'area of most potential for improvement'

General practitioners in 37 (65%) of the 57 participating practices identified the area with the lowest score in their feedback report relative to similar practices as the area most in need of improvement in their practice (*Table 2*). The concordance was highest where the identified need related to clinical care or multidisciplinary teamwork. There was least concordance where the need related to linkages between the practice and other services or business and financial management. Information management had intermediate concordance. General practitioners in the other 20 practices (35%) did not identify their lowest scoring area as being the area most in need of improvement.

Completing the audit cycle

Information was missing for 11 (19%) practices regarding completed change activities. Twenty-four (52%) practices out of the 46 with complete data undertook change activities unrelated to the area they had identified as being most in need of improvement. The presence of a practice manager or nurse and the size and location of the practice were unrelated to the reported achievement of the planned quality improvement. Practices reported improvements in the use of medical records systems, interprofessional communication, multidisciplinary approach to chronic disease care and the use of care plans in the management of chronically ill patients. Practices that addressed multidisciplinary teamwork were most likely to view the activity as successful.

Barriers to change identified

Barriers were encountered to implementing change activities by GPs from 42 (73%) of the 57 practices participating in the audit. The most common barriers to change identified were time constraints, limited staff and resistance to change (*Table 3*).

Change activities and additional resources needed

Additional changes and resources in order to achieve quality improvements were reported by GPs from 36 (63%) of the 57 practices (*Table 4*).

Discussion

The purpose of the clinical audit was to assist GPs and practices to engage in a quality improvement activity based on research data and feedback regarding their organisational capacity for chronic disease care.

That participating practices tended to focus on clinical care when, for example, organisational linkages or business and finance were nominated as areas in need of improvement, suggests that GPs might have felt more confident implementing activities they viewed as being more closely related to their own role without involving the practice team. Perceived difficulty in making changes to organisational capacity, inability to recognise barriers to change, and reluctance to be involved in areas such as financial planning may have dissuaded GPs from attempting improvements at the practice level.

Low rates of participation or completion of practice focused improvement activities may also be explained by the autonomous nature of GPs' work, a reluctance to discuss performance level data, and scepticism about the likelihood of change in practices.[5,6] External support for the audit process may be required to assist in overcoming some of the barriers to identifying areas of need as well as implementing changes and completing the audit cycle. Divisions may be appropriate agents to provide such support.

A limitation of this study was that only 59% of the practices that received data profiling their

Table 3. Barriers to implementing change activities encountered by practices

Patient level	• High expectations • Compliance • Resistance to change • Attitude
GP level	• Lack of time for nonclinical tasks • Apathy • Resistance to change • Individual approach rather than team • Lack of computer skills • Workload
Practice level	• Time • Cost • Limited staff • Resource availability • Distance of facilities, remoteness • Inconsistency in data entry • Lack of adequate recall system • Resistance to change • Poor team communication

Table 4. Additional changes and resources needed for practices to achieve quality improvement

Area	Resources or change activities needed
IM/IT	• Better data extraction • Better use of software • Set up of register/recall system • Computer training for staff • Increased division support for use of IM/IT
Business and financial management	• Regular review and audit of activities • Better scheduling system • More doctors • Time management • Practice procedures manual • Develop management skills in doctors • More continuing medical education and learning material
Practice linkages	• Engagement with resources from division • More involvement with division • Better directories of health services and Centrelink resources
Multidisciplinary teamworking	• Team approach, manual to address this • Receptionist staff, managers and nurses educated in CDM • Hire a practice nurse or manager • Review of staff progress • Team training
Team climate	• Team building • Staff motivation
Clinical care	• Implementation of chronic diseases clinics • All clinicians following same clinical guidelines • Patient education materials and/or groups • Change in clinical attitudes

organisational capacity for chronic disease care participated in the clinical audit process. The low participation rate may have been related to the fact that the audit took place at the end of the 2002–2004 RACGP triennium for CPD points and the beginning of the current triennium. It may also explain why 10 GPs did not complete the final reassessment stage of the audit cycle, because this was not required in the 2002–2004 triennium. The measurement and monitoring of outcomes was subjectively reported by the GPs, which may have been inaccurate.

Previous work has indicated that the implementation of change is the stage of the audit cycle least likely to be carried out.[10] While there is some evidence that larger practices are more likely to generate change,[5] we did not find this in our study. It is also possible that the process of individual clinical audit is ill suited for this sort of organisational change, especially in larger practices, and that a whole of practice approach may be required.

Barriers to completion of the audit cycle identified in other studies include time constraints, limited staff, patient resistance to change, lack of resources, lack of finances or expertise, absence of strategic planning, organisational impediments and negative attitudes.[4–6,10] Change in practice has been shown to require interventions to be targeted at multiple levels of the health system.[7]

Implications for general practice

What we already know:

- Learning activities require motivation and active participation.
- The clinical audit is a commonly used tool for quality improvement.
- Comparing against standards of general practice is an excellent method to assess performance and promote change.

What this study shows:

- Practices are not always focused on implementing change where it is most needed.
- General practices encounter barriers to addressing organisational capacity.
- General practices require varying resources and support to make changes to improve their capacity for chronic disease management.

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