Research papers

Quality improvement in general practice: the perspective of the primary healthcare team

Pip Dean PhD

Research Psychologist, Department of Health Sciences, Division of General Practice and Primary Health Care, University of Leicester, Leicester General Hospital, UK

Azhar Farooqi FRCGP

Research Fellow and General Practitioner, Department of Health Sciences, Division of General Practice and Primary Health Care, University of Leicester, Leicester General Hospital, UK and Leicestershire Primary Care Audit Group, Leicestershire Health Authority, UK

Robert K McKinley MD MRCGP FRCGP

Senior Lecturer and General Practitioner, Department of Health Sciences, Division of General Practice and Primary Health Care, University of Leicester, Leicester General Hospital, UK

ABSTRACT

Objectives To explore and describe the perceptions and attitudes of primary healthcare team members to quality improvement initiatives and to identify potential obstacles to their adoption and effective implementation.

Participants Members of 17 primary healthcare teams participating in a facilitated quality improvement initiative.

Design Questionnaire survey using open-ended questions to capture perceptions of confidence, benefits and anxieties related to initiating and carrying out quality improvement. Written responses were transcribed and analysed through inductive content analysis.

Results Of the 327 team members surveyed, 166 responded; 56 general practitioners (GPs), 26 nurses, 25 members of professions allied to medicine and 59 managerial, administration and reception staff. Initial exploration of responses revealed generally favourable views but with conditional statements and anxieties frequently attached. Further exploration revealed deficiencies in teamwork and understanding of and involvement in the quality initiative

to be evident constraints to its adoption and implementation. Concerns were raised about the impact of initiatives on individuals and teams, and anxieties expressed that quality improvement may be a waste of effort and resources. All team members, especially GPs, were concerned about time and resources. General practitioners and administrative staff expressed concern about the understanding and implementation of the quality process, whereas nurses and members of professions allied to medicine expressed more concerns about teamwork.

Conclusion Primary Care Trusts face two major challenges with implementing quality improvement and clinical governance. The first is the perceived gap between their potential and what can be achieved. The second is the need to promote team understanding of and involvement in both. Failure to address either issue will prejudice the implementation of quality improvement and clinical governance in primary care.

Keywords: attitudes, clinical governance, primary care team, quality improvement, questionnaire

Background

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The modernisation of the National Health Service (NHS), is a priority for the United Kingdom Government.¹ Success will be dependent on whether the constituent organisations of the NHS can effectively implement change, especially systems for continuous quality improvement, a key component of clinical governance. Although such systems have been adapted and effectively implemented in secondary healthcare organisations for many years investigation of their potential in UK general practice is more recent.^{2,3}

Effective implementation of quality improvement systems is dependent on an organisation's staff. In general practice this will involve all primary healthcare team members, i.e. nurses, professions allied to medicine and managerial, administrative and clerical support staff as well as general practitioners (GPs). Research has tended to concentrate on GPs and has identified lack of time, knowledge and skills and a perceived lack of benefit from quality improvement as barriers to participation.^{4,5} Such concentration on GPs may be a reflection of their presumed role as 'team leaders'.⁶ Quality improvement is critically dependent on the function of the whole team and the leadership role need not be adopted by a GP.⁷ The need for effective teamwork is demonstrated by the failure of doctor led quality improvement initiatives because of deficiencies in teamwork. It seems critical therefore to explore the perceptions and attitudes of the whole primary care team to quality improvement to determine the issues that most need to be addressed for future implementation.

As part of a study on facilitating and implementing quality improvement in primary care we surveyed members of 17 primary healthcare teams in Leicestershire to explore their views of quality improvement. This work was informed by previous studies of the confidence people have in quality improvement activity, the benefit they perceive such activity may bring and the anxieties they experience which may impede its adoption, implementation and maintenance.^{4,5,8} We now report participants' perceptions of the adoption and maintenance of quality improvement activity in primary care and highlight reported barriers to its successful implementation.

Method

Participants

Participants were the associated primary healthcare team staff from 17 Leicestershire general practices taking part in a health authority funded facilitated quality improvement project. Eleven of these practices were city and six rural or market town practices, six were teaching/training practices and six were singlehanded or two partner practices. Three practices had an average deprivation score of more than 30.⁹

The study questionnaire and its free response items were developed in pilot studies in a primary healthcare team that did not participate in this project. Guided by previous studies, the free response items were developed to explore perceptions of confidence in undertaking quality improvement, benefits and anxieties which also have theoretical relevance (see Box 1).^{4,5,8} The questionnaire was sent to every member of each primary healthcare team.

Analysis

The written responses were transcribed and analysed through inductive content analysis.^{10,11} All responses were considered in the analysis. To enhance reliability units of text were independently coded by all three authors (PD, research psychologist; RKM, senior lecturer and practising GP; AF, research fellow and practising GP). A unit of text was defined as a group of words constituting a discrete idea. Coded units with similar meanings or connotations were grouped into more inclusive sub-categories. We generated similar systems of coding and categorisation and, after discussion, three major categories were identified which were considered to incorporate relevant issues. A final index with agreed definitions of the codes and categories was developed and independently applied to the original text by all authors. Reliability between pairs was good (inter-rater reliability; Kappa 0.75-0.90). The original transcripts were reviewed (by PD) to verify that codes, categories and sub-categories accurately reflected the content and that views of all respondents were represented. The frequency of occurrence of each category and the number of respondents represented (number of cases in total) was recorded during verification for illustrative purposes.

Box 1 Open-ended items in questionnaire

- Have you confidence in the ability of your practice to carry out quality improvement initiatives? Why do you feel like this?
- Do you feel quality improvement initiatives in general practice are beneficial or not? In what way are they beneficial, or not beneficial?
- What, if any, are your personal anxieties about carrying out quality improvement initiatives in this practice?

RESULTS

Response rate and respondent profiles

Of the 327 questionnaires sent 202 were returned (61% response rate) and 192 were usable (59% overall; range 40–80% between the 17 practices, median 70%). At least one item from the free response section was completed by 166 team members (51% item response rate). Of these, 56 GPs (77% of 73), 26 nurses (46% of 57), 25 members of professions allied to medicine (49% of 51) and 59 administration and reception staff (40% of 146) responded.

Summary of general responses

The initial stage of analysis explored general responses to each item using simple coding conventions: 'positive', 'negative', 'conditional' or where respondents stated, 'don't know'. 'Conditional' responses were propositional phrases for example, 'no, unless we sack ...', 'yes, if implemented and adhered to ...' and 'only ... if staffing are consulted ...'

Table 1 shows aggregate results and a break down by occupational group of the proportions of general

responses as positive, negative, conditional, and don't know.

Respondents expressed confidence in their practice's ability to take part in and to benefit from quality initiatives although both were often conditional. While 17% of responses were negative about 'confidence', only 1% were negative about the benefits. Members of all primary healthcare team disciplines expressed anxieties and made conditional statements. Further exploration of these conditional statements revealed that they could be represented by three emergent categories; 'Team work', 'Quality initiatives', and 'Practical issues' (see Box 2).

Table 2 summarises the three categories (a), the professional groups (b), the total frequency of coded citations (= 436; c), respondents represented in each category (d), frequency of these issues reported as conditions or anxieties (= 237, 54%; e), and number of respondents reporting these (f). A majority of comments from all groups in the primary healthcare team reflected concerns about or constraints upon general team and practical issues. A smaller proportion of comments about initiation and implementation of quality improvement reflected concerns or perceived constraints. The content of these categories is discussed below with text illustrations drawn from the responses from members of all 17 teams.

		Positive n* (%)	Conditional n* (%)	Negative n* (%)	Don't know n* (%)	Total n* (%)
Confidence		101 (63)	29 (18)	25 (17)	5 (3)	160
	GPs	39 (70)	9 (16)	6 (11)	2 (4)	56
	Nursing	11 (46)	5 (21)	8 (33)		24
	PAMs	10 (42)	10 (42)	4 (17)		24
	Admin. reception	41 (73)	5 (9)	7 (12)	3 (5)	56
Benefits		108 (69)	41 (26)	1(1)	7 (4)	157
	GPs	36 (64)	18 (32)		2 (4)	56
	Nursing	14 (58)	10 (42)			24
	PAMs	19 (79)	4 (17)		1(4)	24
	Admin. reception	39 (74)	9 (17)	1 (2)	4 (8)	53
Anxieties		70 (54)	19 (15)	36 (28)	4 (3)	129
	GPs	28 (61)	7 (15)	10 (22)	1 (2)	46
	Nursing	12 (57)	3 (14)	6 (29)		21
	PAMs	10 (5)	3 (15)	5 (25)	2 (10)	20
	Admin. reception	20 (48)	6 (14)	15 (36)	1 (2)	42
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Table 1 Aggregate number of general responses to items by occupational group

* There was more than one response from many participants so totals are greater than 166.

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Box 2 Issues about which constraints and concerns were expressed

- General team issues: comments related to perceptions of general team functioning incorporating co-operation, communication, enthusiasm and management issues.
- Issues around initiating and implementing quality improvement: comments related specifically to the initiation and implementation of quality improvement incorporating general views, appropriateness and relevance of initiatives, knowledge and understanding, processes of implementation and incidental outcomes.
- **Practical issues**: comments related to practical issues including systems, time and finance.

General team issues

Participants were not specifically asked about teamwork yet it was frequently cited (58% of all respondents) and represented a recurring theme affecting confidence (C), perceptions of benefits (B) and anxieties (A) around quality improvement initiatives.

It was recognised that good team processes such as communication, co-operation, enthusiasm and resolution of conflict were prerequisites for successful quality improvement and confidence in the team's ability was reduced because of poor team function.

'No. There is generally poor communication between practice members. I think that if it [quality improvement] is to be carried out, it requires co-operation and good communication of all members of the team.' [Professions allied to medicine (PAM); C]

(a) Major category	(b) Group	(c) Total frequency of citations <i>n</i> (%)	(d) Respondents citing (from total <i>n</i> = 166)* <i>n</i> (%)	(e) Frequency of citations as conditional statements or concern <i>n</i> (% of (c))	(f) Respondents citing conditional statements or concerns (from total $n = 166$)* n (%)
Total citations/ respondents		436 (100)		237 (54)	
General team issues	All GP Nurses PAMs Reception/ Admin.	155 (36)	97 (58) 31 (55) 18 (69) 18 (72) 30 (51)	106 (68)	62 (37) 18 (32) 13 (50) 12 (48) 19 (32)
Initiating and implementing quality improvement	All GP Nurse	211 (48)	97 (58) 35 (62) 11 (42)	65 (31)	36 (22) 9 (16) 6 (23)
	PAMs Reception/ Admin.		11 (44) 39 (66)		5 (20) 16 (27)
Practical issues	All GP Nurse PAMs Reception/ Admin.	70 (16)	59 (36) 28 (50) 6 (23) 5 (20) 20 (34)	66 (94)	59 (36) 28 (50) 6 (23) 5 (20) 20 (34)

Table 2 Emergent categories: Frequency of citations and respondent representation in total(c,d) and as condition or concern (e,f)

* There was more than one response from many participants so totals of columns (d) and (f) are greater 166.

'I do not have much confidence because there is too much tension and conflict going on at higher levels. What one person says is then changed by another.' [Administrative or reception (Admin); C]

'... constraints may be present because there is not 100% enthusiasm' [General practitioner (GP); C]

'Very doubtful, lack of communication, lack of enthusiasm to work as a team for the benefit of the patients' [Nurse; C]

Initiating and implementing quality improvement

Many respondents described benefits to patients, staff and the workplace from quality improvement (Table 1) but also made conditional statements or described anxieties in respect to processes of initiating and implementing quality improvement.

General perceptions of team functioning constraining confidence were echoed by the perceived importance of selecting appropriate or relevant initiatives to motivate the team, and the need for greater understanding or sharing information about quality improvement.

'constraints: ... appropriate initiative to encourage ownership, [to] bring complete team on board' [GP; C]

'the information [must be] passed to all members of the practice [so] ... we are all aware of the initiatives' [Nurse; C]

'... Everyone needs to understand fully what they are required to do' [Admin; B]

Team members wanted to be involved in both carrying out quality improvement and implementing any changes but had anxieties about whether this would happen.

'As long as all members are involved in the decision making and accept a new initiative, hopefully initiatives will be beneficial. They will not be beneficial if thrust upon us without involvement or discussion.' [PAM; B]

'My only fears are if the staff are not consulted about improvements before they are implemented.' [Admin; A]

'... [attached staff] won't be asked to join in or be encouraged to undertake audit of [target population] care in the practice and that decisions taken will not have involved opinions from others in the practice' [PAM; A]

' they may be hijacked by any one of two partners and not involve others.' [GP; A]

These perceptions may impede implementation and promote anxieties that quality improvement will not fulfil its potential or may even be a waste of effort.

'That initiatives are not implemented or followed through adequately' [GP; A]

'... whether they [quality improvements] would be seen as valuable and worthwhile or costly' [PAM; A]

'they will be ignored if improvements are not agreed by whoever has to implement them!' [Admin; A]

'It will be ignored after all the work is done' [Nurse; A]

As noted above some felt initiatives needed to be appropriate to motivate the team. Others described potential consequences of and concerns about inappropriate initiatives to both individuals and teams.

'If they [quality improvements] are introduced to a real, identified problem, then yes. It must result in either better care for patients and/or less hassle for staff. If externally imposed and not relevant to particular practice, then it just antagonises.' [GP; B]

'Depends on the initiative, will quality improvement benefit patients and staff? Or will it cause members of the team to become isolated and threatened, demoralised?' [Nurse; B]

'Quality improvement initiatives can be beneficial sometimes, as long as benefit to patients/clients is balanced with benefit and effect of change on working practice to team members and practicality of any such change.' [PAM; B]

'Beneficial in that they may pinpoint areas for improvement and maybe ways to implement improvements. Not beneficial in that they could make staff feel a little "inadequate".' [Admin; B]

'I do not wish quality improvement to harm the good relations we have within the team, possibly through misunderstanding the reasons behind it all.' [Admin; A]

Practical issues

Practical constraints on implementing systems of quality improvement were identified (36% of respondents). In common with previous studies issues concerning systems, funds and time were identified. Two respondents perceived success as being conditional on appropriate systems or that current system deficiencies could prejudice quality improvement.

'good organisational systems [computing] in position' [GP; C] 206

'admin and filing problems could seriously hinder our efforts in efficiency' [Admin; C]

Financial and time issues were evidently important for the GPs.

'time constraints/man power constraints/financial constraints' [GP; C]

'There is no supportive funding to bring in locums to allow time to do the work necessary.' [GP; A]

Other team members were concerned about time, both global time available and time required for specific activities such as meetings, quality initiative related activities and immediate and long-term workload implications:

'time is always a problem – to get quality time set aside to meet within constraints of own working practice' [PAM; A]

'... The vast majority of staff are already working "flat out" to do everything right I am intrigued to know what more can be done.' [Admin; A]

'More and more meetings – more time expected outside of normal working hours' [Admin; A]

'... None of us readily volunteer for additional work relating to quality improvement due to time constraints' [GP; C]

'... the worry about expecting staff to cope with even more work/changes etc' [Admin; A]

'May increase workload.' [Nurse; A]

'Extra work caused by findings' [GP; A]

DISCUSSION

The participants in this study had confidence in their team's ability to implement quality improvement and perceived quality improvement as being beneficial but their confidence and any perceptions of benefits were often conditional or constrained. Constraints reflected doubts about team functioning, the relevance of initiatives adopted and consequent wasted effort with particular anxieties about the adequacy of practice resources, especially time. Such perceptions were shared across primary healthcare team members, although their salience varies between groups. General practitioners, reception and administrative staff expressed concern about the quality initiatives themselves (for example, understanding, outcome and value) while nurses and members of professions allied to medicine expressed more concerns about teamwork. Concerns about practical issues of time and money appeared more salient to GPs than other team members. These differences may have reflected different roles within the team; GPs are independent contractors and employers, reception and administrative staff support daily practice functioning and members of professions allied to medicine and nurses' roles as care providers within clinical teams.

These findings are consistent with the theoretical work of Bandura on the adoption and maintenance of any behaviour. In particular, an individual must have confidence in their ability to perform and accomplish a task and perceive it to have value with respect to outcomes.⁸ For the present sample, while quality improvement is perceived as beneficial, achievement of benefits appears to be constrained by confidence in being able to successfully perform tasks. Confidence is influenced by anxieties about resources (e.g. time, human resources and support) and perceived negative impacts of actual activity (e.g. conflict, feelings of inadequacy, negative impact on team, increased workload). Such feelings are likely to impede the successful adoption and implementation of any initiative.

Concerns about time have already been highlighted in primary care research.^{4,7} This study confirms this, but helps emphasise that such concerns can apply throughout the primary healthcare team and not just to GPs and managers. Time issues are not just related to the process of carrying out initiatives, but are also linked to the initial planning and perceived outcomes in terms of increased future workload (as above). Those advocating and promoting quality in primary care need to recognise the need to create protected time for quality improvement and its long-term implications in respect to ongoing workload management across the whole team.

These primary healthcare team members appear to feel constrained by current working practices. Part of teambuilding and team working is for team members to recognise and understand each other's constraints and viewpoints. Practice nurses and members of professions allied to medicine should be made aware of the constraints and responsibilities of independent contractors in terms of time and finance. General practitioners need to be more aware of the importance of teamwork and of including all other staff, clinical and non-clinical, in planning and delivering quality improvement.

The content of this study reflects the perceptions of a wide range of primary healthcare team members in a wide variety of practices. These practices participated in a quality improvement initiative and may be more positively disposed to such activity. The study was also performed in a single English health authority that has a long history of innovation and support of quality in primary care (Khunti K, personal communication). They are therefore unlikely to over-represent the concerns and anxieties of primary healthcare members nationwide.

The issues emerging from this study are key to implementing quality improvement in primary care and highly relevant to primary care trusts and their clinical governance structures. The importance of the role of primary healthcare teams, the expanding role of non-medical clinical staff and the potential barrier of independent contractor status are likely to be key issues for primary care trusts. The gap between the theoretical and perceived benefits of quality improvement that this study highlights together with an understanding of the confidence and anxieties across and between team members in respect to quality processes and outcomes represent a significant training issue in primary care.

REFERENCES

- 1 Department of Health. *The new NHS: modern, dependable.* London: The Stationery Office, 1997.
- 2 Kaluzny AD, McLaughlin CP and Simpson K. Applying total quality management concepts to public health organizations. *Public Health Report* 1992;107(3):257–64.
- 3 Lawrence M and Packwood T. Adapting total quality management for general practice: evaluation of a programme. *Quality in Health Care* 1996;5(3):151–8.
- 4 Baker R, Robertson N and Farooqi A. Audit in general practice: factors influencing participation [comment]. *British Medical Journal* 1995;311(6996):31–4.
- 5 Farooqi A, Khunti K and Sorrie R. Does clinical audit improve care? Lessons for clinical governance from a district-wide primary care audit of diabetes. *Journal of Clinical Governance* 2000;8(3):152–6.
- 6 Department of Health. *Medical Audit in the Family Practitioner Services.* Health circular HC(FP) (90)8. London: Department of Health, 1990.

- 7 Department of Health. *Clinical Audit in Primary Health Care: Report to Clinical Outcomes Group by the Primary Health Care Clinical Audit Working Group.* Leeds: Department of Health, 1994.
- 8 Bandura A. Social Foundations of Thought and Action: a social cognitive theory. London: Prentice Hall, 1985.
- 9 Jarman B. Identification of underprivileged areas. *British Medical Journal* 1983;286(6379):1705–9.
- 10 Krippendorf K. Content Analysis: an introduction to its methodology. London: Sage, 1980.
- 11 Maykut P and Morehouse R. *Beginning Qualitative Research: a philosophical and practical guide.* London: Falmer Press, 1994.

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CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr Robert K McKinley, Department of Health Sciences, Division of General Practice and Primary Health Care, University of Leicester, Leicester General Hospital, Gwendolen Road, Leicester LE5 4PW, UK. Tel: +44 (0)116 258 4367; fax: +44 (0)116 258 4982; email: rkm@leicester.ac.uk

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