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Research papers

Quality initiatives as a component of continuing professional development in general practice

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ABSTRACT

Introduction Although health professionals clearly wish to provide best quality care to their patients there is considerable resistance towards quality improvement activities. This paper describes the integration of small-scale practice-based quality improvement projects into a diploma course for general practitioners (GPs).

Context Participants in the diploma course in therapeutics by distance learning at the Irish College of GPs are required to complete a quality improvement project. A structured 4000 word report on this project is formally assessed, comprising 30% of the total marks for the diploma.

Methodology Forty-five GPs completed the diploma in 2001–02 and their projects were reviewed and classified according to the methodology employed, the clinical topics addressed and the outcomes of the projects.

Results Twenty-two of the 45 (49%) completed practice-based audits, 10 (22%) undertook the development or implementation of a guideline, eight (18%) described organisational change in the delivery of care and the remaining five (11%) addressed a range of topics. Patients were consulted about their knowledge and satisfaction in 15 of the projects. Eight special clinics were established, 10 practice-specific protocols or guidelines were developed and a number of patient information leaflets were produced. Clinical activities were structured in 10 practices.

Discussion The success of these projects was grounded in the opportunity that participants had to individualise the application of the knowledge gained on the course. They selected their own topic and completed it with support from the distance learning unit. The relevance and value of undertaking the projects was evident from informal feedback, and a number of participants have undertaken second round audits, and have participated in further quality initiatives and subsequent courses by distance learning including quality projects.

Keywords: audit, CME, CPD, distance learning, general practice, guidelines, quality improvement projects

Introduction

Health professionals have a desire to learn in order to meet the needs of their patients.[1] The apparent paradox between doctors' desire to deliver best quality care to their patients and the widespread resistance by these same doctors towards quality improvement activities is puzzling.[2] This may be partially explained by inappropriate administrative policies and lack of resources.[3] Lack of consultation with front-line workers when developing quality improvement activities may also pose problems. Grol and Leatherman suggest that the most important ingredient in achieving successful implementation of quality improvement methods is the professional values of individual clinicians in association with a collective professional ethos.[4]

Continuing medical education (CME) can be defined as 'any attempt to persuade physicians to modify their practice performance by communicating clinical information'.[5] While the ultimate objective of CME is to provide optimal care for patients, the evidence to support a direct effect on improving patient care is more controversial.[6–8] The terms CME and continuing professional development (CPD) are often used interchangeably. However, it could be argued that CPD incorporates quality development activities not necessarily seen in CME. CPD can be seen to unite CME and quality development in an integrated approach describing how professionals learn and translate newly acquired knowledge into practice.[9]

Quality improvement initiatives for general practitioners (GPs) using various methodologies have been described throughout Europe.[10] These include clinical audit, small group learning and quality circles, development of quality indicators, guideline implementation and patient satisfaction studies.[11–16] While many methods for quality improvement have been identified, the evidence for understanding their likely impact is not robust.[17]

Adults learn best when the topic is closely related to their interests and relevant to their work.[7,18] Experiential work, using personal experience to derive abstract concepts and then testing these concepts in new situations enhances learning.[19] Self-directed learning based on experience is the best method of educating established GPs.[20] Therefore, the emphasis should be on self-directed learning with clinical practice and problem solving as key focus areas.[21] To complete the learning process, the effectiveness in producing positive change in practice must be evaluated.[22] Although programmes without assessment are considered incomplete[23] there is a marked lack of evaluations of general practice-based education interventions.[23,24]

This paper describes small-scale practice-based quality improvement projects as a component of a diploma in therapeutics by distance learning. These projects represent links between CME and quality development at a practice level. They can be seen as a new method of implementing systematic quality improvement in general practice.

Context

A diploma in therapeutics was developed, as a component of the Quality in Practice Programme of the Irish College of General Practitioners (ICGP), to provide GPs with a practical update on therapeutics that is relevant and applicable in everyday practice. The course is delivered by distance learning and consists of a combination of written topic-specific modules and face-to-face workshops. Evaluation of the first two cohorts provided subjective evidence of improvements in patient care in a number of dimensions, but objective evidence of quality improvement was lacking.[25] Assessment methods for third and subsequent cohorts were modified to include structured evaluation of quality improvement projects.

Participants were supported in selecting topics and applying methodology. They submitted a 4000 word report, following a structured template. These reports were formally assessed and constituted 30% of the overall marks for the diploma with 50% for modified essay questions and 20% for a reflective learning diary. This paper describes the quality improvement projects and explores/discusses the resultant promotion of a quality approach in general practice.

Methods

Forty-five GPs (30 working in Ireland, 14 working in Malta and one working in Saudi Arabia) completed the diploma in its third year (2001–02). All 45 reports on completed quality improvement projects were reviewed and classified according to the methodology employed, the clinical topic addressed and outcomes including patient involvement.

Results

Projects were classified into four broad categories, according to the predominant methodology (see Table 1). Audits were undertaken in 22 of the 45 projects (49%). Ten (22%) described the development or implementation of a guideline. Eight (18%) described organisational change in the delivery of care and the remaining five (11%) addressed a range of diverse topics. Analysis according to the clinical area addressed reflected common conditions in general practice (see Table 2).

The diversity of topics addressed was reflected in the range of outcomes (see Table 3). Patients were consulted about their knowledge and satisfaction in 15 projects, by way of postal questionnaire, telephone survey or interview. Eight special clinics were established, and 10 practice-specific protocols and guidelines were developed. Patient information leaflets were produced to address the specific needs of three practices. Clinical activities were structured in 10 practices. Some participants presented their findings and published their results, locally and nationally in Ireland and in Malta.

Projects were graded as a component of the assessment for the diploma. Marks ranged from 40% to 72%.

Table 1 Classification of quality improvement projects according to methodology (n = 45)

Methodology	Number (%)	Topics addressed
Audit	22 (49)	Risk factor assessment in cardiovascular disease (6) Diabetes care (5) Prescribing (4) Management of asthma (2) Practice organisation (2) Other (3)
Development and/or implementation of guideline	10 (22)	Diabetes (3) Prescribing (2) Practice organisation (2) Others (3)
Organisational change in delivery of care	8 (18)	Chronic disease clinics (5) Women's health clinics (2) Vaccination clinic
Other	5 (11)	Spirometry in the elderly Comparison of nebulised asthma medications Patient satisfaction with intrauterine system (IUS) Improving compliance Profile of laxative use

Discussion

Towle emphasises the importance of evaluation of CME in terms of effectiveness, particularly in relation to its ability to improve patient care and healthcare outcomes.[26] The quality improvement projects described in this report demonstrate the application of knowledge gained from CPD. They successfully address the four basic principles identified in the European Association for Quality in General Practice/European Academy of Teachers in General Practice (EQuiP/EURACT) policy document for the successful integration of CME and quality development.[9] These are:

- patient and community priorities concerning healthcare should be central
- CPD should be based on the learner's daily work practices
- goals should be set by the GP and/or practice
- integration of CME and quality development is a continuing process.

The diploma in therapeutics is based on adult education principles. The diversity of the methodology and clinical areas addressed in the quality improvement projects described in this paper reflect the way in which the course participants individualised the application of knowledge gained on the course. The outcomes also reflect the self-directed nature of course work and assessment. Learners who are not self-directed have greater difficulty incorporating new information.[27] Doctors do not learn in a vacuum, they respond to learning needs in their environment such as interactions with patients, other healthcare personnel, health authorities, peer review and more formal processes such as competence assurance.

The main motivation for a doctor to change clinical behaviour is to become more competent in the delivery of healthcare to patients.[15,21] Undertaking the quality projects gave the participants the opportunity to link quality initiatives to daily practice, giving them a sense of ownership of the process.

While no independent verification of project outcomes was obtained, formal evaluation based on the structured reports provided subjective evidence of quality improvement. The distribution of grades achieved by individual participants for their projects demonstrated variability in standards. Participants who had undertaken research or quality improvement work in the recent past achieved higher grades for their work. Informal feedback suggested that completion of the project and report took more time and effort than anticipated. The feeling of isolation that is characteristic of distance learning was amplified by this exercise and some participants recommended more structured support from the course organisers.

Support for project work for subsequent cohorts was enhanced, individualised and provided in a systematic, continuous fashion. Each subsequent course

Table 2 Principal clinical areas addressed (n = 45)

Principal clinical area	Number (%)	Description
Cardiovascular disease	11 (25)	Identification of cardiovascular risk factors (6) Hypertension (3) Protocol for 24 h ambulatory blood pressure monitoring Lipid clinic
Diabetes mellitus	9 (20)	Audit of diabetic care (5) Establishment of diabetic register (3) Implementing diabetic guidelines
Respiratory disease	5 (11)	Asthma audit (2) Spirometry in the elderly Audit of antibiotics in upper respiratory tract infections Comparison of nebulised medications for asthma
Women's health	6 (13)	Patient satisfaction with contraception (2) Patient knowledge of risk factors for osteoporosis Guideline for polycystic ovarian syndrome Recall register for cervical screening Women's health clinic
Management of prescribing	6 (13)	Audit of specific drug groups (3) Reducing antibiotic prescribing Development of a practice drug formulary Improving compliance
Practice organisation	4 (9)	Protocol for emergency care Introduction of free medical care for the over 70s Vaccination clinic Audit of out-of-hours care
Other	4 (9)	Smoking cessation Haemachromatosis protocol Usage of laxatives Patient and doctor perception of pain

has had a dedicated course project co-ordinator to whom participants have electronic access, and structured support sessions at the interactive workshops. The relevance and value of undertaking the projects was evident from the informal feedback from participants. Second-round audits and subsequent participation in further quality activities provided further evidence of concrete application of quality initiatives. Furthermore, improvement in the standard of projects produced by some of this group in subsequent distance learning courses demonstrated an enhanced understanding of applicability.

Completion of an ICGP distance learning course has also been shown to increase skills in the use of electronic communications and information retrieval.[25] Feedback from this cohort has resulted in the provision of specific training in IT on subsequent courses.

This project demonstrates a useful method of introducing and integrating quality improvement initiatives in the daily work of general practice. Incorporating quality initiatives into a CME/CPD programme can overcome the resistance of doctors to involvement in such activities.

Table 3 Outcomes of quality improvement projects as part of the diploma in therapeutics by distance learning (n = 46; some projects had more than one outcome)

Outcome	Number	Description
Patient knowledge/ satisfaction measured	15	Evaluation of structured diabetes care (2) Ambulatory blood pressure monitoring experience Response to lipid clinic establishment Knowledge of rules for taking the contraceptive pill Patient experience of levonorgestrol (LNG)-IUS (Mirena) Use of laxatives in general practice Awareness and uptake of vaccinations in adults Health awareness in postmenopausal women Awareness of cardiovascular risk factors Satisfaction with out-of-hours care Patients' and doctors' perceptions of chronic pain Knowledge of risk factors for osteoporosis Awareness of monitoring required for anti-rheumatic drugs Compliance with polypharmacy
Introduction of structured care	10	Structured diabetic care (6) Structured cardiovascular disease risk factor assessment (3) Cervical screening
Development of practice-specific guidelines and protocols	10	Care of type 2 diabetes mellitus (3) Patient selection for ambulatory blood pressure monitoring Maintenance of emergency equipment Detection and management of haemachromatosis Practice formulary Cardiovascular risk factors Monitoring of disease-modifying anti-rheumatic drugs Detection of polycystic ovarian syndrome
Establishment of special clinics	8	Chronic disease clinics (6) Adult vaccination clinic Women's health clinic
Development of practice-specific patient information leaflets	3	Ambulatory blood pressure monitoring Antibiotics for respiratory infections Cardiovascular risk factors

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CONFLICTS OF INTEREST

None.

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