1 How does EBM relate to quality improvement in general practice?

Summary of practical points from this section

This section brings together EBM and the philosophy of continuous quality improvement (CQI). Essentially, CQI recognises that to improve clinical practice, attention must be given to supporting processes within the working environment of general practice rather than simply concentrating on the individual GP. This management approach to improvement takes into account how GPs change their clinical behaviour and recognises that this requires 'system' support.

This section will clarify what CQI is about and show you how EBM can be promoted using its principles.

1.1 Introduction

The motivation for evidence based practice derives from both the personal desire and the professional obligation to be effective, or in other words, to be 'good' at what one does. This in turn relates to the issue of quality. The principles of quality improvement were first applied to industry in the 1950s, but it took until the late 60s before they were used in the health care setting and they have been applied to primary care only in the last decade. While it is true that the concept of 'quality' is inherent in the framework of 'quality assurance' (QA) with which GPs are familiar, the scope of the *organisational* approach to 'quality improvement' is much wider.

The essence of modern quality improvement philosophy is its emphasis on processes rather than individuals within an organisation. 'Total quality management'(TQM) is an industry based approach which has influenced the 'continuous quality improvement' (CQI) movement in the health care setting. It is highly relevant to EBM as it suggests a means to behaviour change among divisions and general practices.

1.2 What is quality?

Quality can be defined as doing the right things, for the right people, at the right time - and doing them right. This means it is not simply improving the effectiveness of care, it is also about improving access and equity. The concept of quality improvement assumes that there are always better ways of doing things and that it is a professional obligation for people to aim for better quality in their work. Doing things better for doctors does not only lead to improved quality of care but also means more satisfaction, less work, less frustration and often more profit.[1]

Like beauty, quality is in the eye of the beholder. Therefore any discussion about quality needs to include a frame of reference. A patient's viewpoint about the quality of care, for example, might be different from that of the doctor, which might in turn differ from that of the hospital or government. Quality is inherently subjective but is, by necessity, quantifiable and within the framework of CQI is something which is defined by the participants within the system to which it is being applied.

1.3 What is CQI?

CQI is 'a philosophy of continual improvement of the processes associated with providing a service or good that meets consumer expectations'.[2]It derives from industry but has been applied to the health care setting since 1989 when Berwick published a landmark paper on this subject.[3] He compared the 'Theory of Bad Apples', where the means to better outputs relies on strict vigilance, punitive controls and correcting or weeding out the malefactors, to the 'Theory of Continuous Improvement' which assumes that it is the processes rather than the players in a system which determine its outputs, and that improvement is linked to study of these processes. Under this theory defects in the system or mistakes in

processes are seen as opportunities to make adjustments and thereby achieve better outputs. It is based on the recognition of the systemic nature of problems in health care delivery and that to improve performance, change must occur to systems of care, not simply individual components of health services.

Berwick[3] describes four skills required in a model for quality improvement. These are:

- Being clear about what is going to be accomplished
- Measuring change and being able to recognise whether this change constitutes improvement
- Having a series of good ideas about quality alternatives to current practice
- Being able to test real changes on a small scale and making further adjustments accordingly.

Berwick explains that this model is based on 'systems theory'. In a real-world system, with its set of interdependent elements, producing one change will not automatically lead to a predictable outcome. The 'system' has complex, nonlinear relationships between its elements, and it is difficult to separate irrational effects from rational causes. This is particularly true in the delivery of health care, where a number of interdependent factors are responsible for clinical decision making.

The non-linear nature of systems makes randomised, controlled trials less relevant to understanding which changes lead to quality improvement. Under CQI, improvement is achieved by implementing so-called 'Plan - Do - Study - Act' (PDSA) cycles. These involve developing a plan, putting it into action and by observing (studying) the effect on the system making a small-scale strategic change (the action). This cycle is then repeated and progress monitored using pre-determined indicators.

There are several principles of CQI which are common to most texts about the subject and which are important for its implementation and success. Theses are outlined in the following box.

Principles of CQI

Leadership – It is crucial that a CQI program involve those who speak for the profession and be led by personnel with a shared vision of a system undergoing continuous improvement.

Customer focus – It goes with out saying that satisfying the customer is the key to the success of any enterprise. It is nevertheless important to keep in mind who the customers are and to establish and maintain an open dialogue with them. Customers might be GPs, patients, or division and practice staff.

Empowerment of staff – Achieving quality improvement relies on the enthusiastic participation of staff and fellow health care workers. Because workers operate within the system they are the best source of information about the weaknesses in it. Therefore, empowering staff to identify problems and suggest changes will promote improvement.

Team work – Fostering a team spirit raises enthusiasm as well as sharing workload and improving morale.

Quality first – This means that there ought to be no excuse for not implementing quality improvement. Quality ought to come before budgets and schedules. In addition, there should be a substantial investment, both in effort and money, in CQI.

Analysing, simplifying and improving processes – The emphasis on the process rather than the participants is the fundamental principle of CQI.

Prevention of adverse outcomes – Finding weaknesses in the system by observing processes allows prevention rather than correction of adverse outcomes.

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1.4 CQI and EBM

The process of continuous quality improvement and the introduction of evidence based practice go hand in hand. Because quality improvement encourages clinicians to monitor and improve their clinical performance, it requires both organisational support and an understanding of what represents 'best practice' or, in other words, the most effective care. Hence, CQI depends on 'evidence' to define its goals.

In turn, the introduction of evidence based practice often relies on the 'systems' approach inherent in the framework of CQI. As discussed in '*How the division can promote EBM*', implementing EBM requires more than just convincing GPs of its benefits; it also means overcoming the systemic barriers to evidence based practice. For example, improving access to resources, implementing skills training and introducing reminder systems might all be part of adopting EBM, and they might also be examples of a quality improvement strategy. Hence, the implementation of evidence based medicine into general practice may not achieve its high aims if it ignores the systems approach within the framework of quality improvement.

1.5 What can Divisions do?

To some extent divisions are already involved with quality improvement and indeed, in a sense, improving the quality of clinical practice can be seen as the principal reason for their existence. Nevertheless, the principles of CQI require a more deliberative approach to quality and quality measurement than that achieved in most divisional projects.

Divisions can take up CQI within two contexts:

1) CQI within the division

The principles of CQI can be applied to the function of divisions themselves so that they might improve their own organisational processes. For example, they might run a specific project to improve the quality of CME activities, to improve IT support or the utility of the division website.

2) Divisions supporting CQI within general practice

Secondly, divisions can provide support to practices wanting to run their own quality improvement projects. These might be in areas such as prevention activities, Active Script (in Victoria), immunisation or practice management. In this regard divisions could have a major role in the process as CQI requires tools and infrastructure which are beyond the capability of most general practices but which could be managed by divisions. These tools include clinical practice guidelines, medical record review, small scale strategic research, clinical pathways, analysis of variations in clinical practice, information systems for data collection and clinical decision support. The United Kingdom is moving in this direction by assigning to primary care groups (the equivalent of divisions of general practice) the responsibility of 'clinical governance'.[4]

The broad components of a CQI program would entail:

1. Management
   Having a team with a shared vision and striving for realistic targets. Effective management also requires adequate administrative resources.

2. Planning
   This means holding planning meetings and developing indicators, data collection systems and an overall achievable strategy.

3. Implementing specific QI projects
   These involve PDSA cycles, specific measurement tools and learning by critical reflection and experience.

To summarise, the following box lists the possible steps for divisions to consider in the establishment phase of a CQI program.

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Steps for divisions to adopt a CQI program

1. Be certain that GPs are interested in sustainable quality improvement. Is there an incentive for doing so? There needs to be an organisational culture which is committed to CQI..
2. Encourage a CQI 'champion' for an identified need.
3. Develop a customer focus, ie base it on what GPs want.
4. Establish a team.
5. Develop a quality improvement project with clear goals, management structure, data and a PDSA method.
6. Base the activity on evidence if at all possible.
7. Reflect on and, if possible, measure improvements.
8. Keep going, with enthusiasm!

Divisions might initially need to canvass the membership to assess the motivation of local GPs for quality improvement. This may be done as part of the annual survey or through informal discussions with board members. Once the need has been identified, an enthusiastic GP board member might then take on the cause, become its 'champion' and lead the team. A management structure would be established with well-defined goals and measurable parameters. The team would then establish and run the PDSA cycles.

For example, a division might decide to improve the uptake of IT in member practices. After canvassing local GPs a GP IT enthusiast could be asked to lead the team and an assessment made of the current status of IT in the division. An indicator or indicators could be established and targets set. An initial PDSA cycle might be established based on perceived barriers to IT uptake derived from interviews of a few key players (perhaps including practice staff). For example, if technophobia was perceived to be a problem, simple practice-based demonstrations of how IT can help practice management might lead to a more positive approach to IT development. The response could be measured in a qualitative way (ie practice staff verbal feedback), with the next PDSA cycle based on this feedback.

In summary, CQI proponents have the attitude of the confident optimist - they say, 'We are good at what we do, therefore we must be able to do it better'. A 'systems' approach which relies on examination of the processes (rather than the people) involved in producing the desired results is more likely to return benefits. Divisions have an opportunity through CQI to improve their own performance and are in an ideal position to promote CQI in general practice through the support of quality improvement projects.

GPs have a professional obligation to keep up to date and to practice effective care. Evidence based medicine helps GPs cope with the vast amount of health information made available through the technological revolution. The practice of EBM involves acquiring and developing skills, getting access to new resources and developing a new way of thinking about day-to-day clinical encounters. We see evidence based practice as a road down which GPs travel as they learn this new approach.

In their role as service providers for general practice and major organisers of CME activities, divisions have an important role in the implementation of evidence based practice in primary care in Australia. It is important therefore that divisions have a good understanding of the principles of EBM together with knowledge of its barriers and an understanding of the criticisms against it. Moreover, as divisions are increasingly seen as agents of change in general practice, they should have knowledge of the effectiveness of interventions which aim to change clinician behaviour.

These resources are directed towards divisions which see themselves as effective change agents and want to take up EBM in principle as part of improving service delivery. We hope Australian divisions will embrace evidence based medicine as an inevitable step forward in the improvement of the delivery of health care to the Australian public and in doing so find the EBM branch of the Monash Division's website a useful resource.

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