Quality improvement around the world: how much we can learn from each other

Fiona Moss, Margareta Palmberg, Paul Plsek, Wim Schellekens

The USA National Forum on Quality Improvement in Health Care—organised by the Institute of Healthcare Improvement (Boston USA)—attracts many people from outside North America. At the 1999 meeting 20 countries were represented. An session on “Quality improvement around the world” was included in the pre-conference programme to bring together people working in many countries to explore and compare their experiences in a programme of short presentations (table 1). This article draws together some of the themes that emerged from the presentations and from the discussion.

Understanding different worlds
The world is getting smaller and more accessible. Travel is quicker and cheaper. Places that were mysterious, remote, and even dangerous have become packaged for tourists. Information that was once the provenance and property of specialised groups is now available to the millions of people worldwide who use the internet. But many aspects of health care remain mysterious, remote, and even dangerous to patients using these services. Most healthcare systems operate as a set of distinct, unconnected worlds rather than as one coherent system. Even in emerging nations such as Tanzania the vertical nature of hierarchies in health care are a challenge. Making connections between many different worlds is crucial work for those who understand that quality improvement (QI) can make a real difference for patients. This was an overarching theme echoed by all of the presenters.

Health care, politics, and the media
Health care is a political issue. Costs, access to care, allocation of resources, and other aspects of the healthcare system quite properly are part of political discourse. Often, however, political debate takes on such a short term outlook that responses to problems are expedient and opportunities for actions that could have important long term benefit for patient care missed. The message of QI is that it is important long term benefit for patient care.

The relationship between health care, the media, and politicians is an uncomfortable one. Stories about health care are rarely good news. Transparency and honesty about mistakes are prerequisites for improvement. Media interest in mistakes is inevitable and, although coverage may feel relentless and at times unfair, it is one of the voices of consumers of health care; and it is important as we need to take every opportunity to understand the world of consumers. The publicity of the error rates in Australian hospitals has brought the subject into open discussion, has shown that data do influence, and provided a clarification of the responsibilities for governance studies that have shown errors as a significant and dangerous issue. In the UK a series of blunders by hospitals and failings of individuals have on the one hand shaken trust in the health system and, particularly, the trust between patients and doctors. But the media coverage has led to public inquiries that are providing important lessons about the system. Some media coverage can be seen as society mobilising around improvement. President Clinton’s public pronouncement that action is needed to remove the costs of poor quality care in systems that are poorly funded. Work in Tanzania, running since 1988, using a QI approach has shown errors as a significant and dangerous issue. In the UK a series of blunders by hospitals and failings of individuals have on the one hand shaken trust in the health system and, particularly, the trust between patients and doctors. But the media coverage has led to public inquiries that are providing important lessons about the system. Some media coverage can be seen as society mobilising around improvement. President Clinton’s public pronouncement that action is needed to remove the costs of poor quality care in systems that are poorly funded. Work in Tanzania, running since 1988, using a QI approach has shown errors as a significant and dangerous issue.

QI in health care in emerging nations
QI is relevant to development and improvement in all healthcare systems. It is not an added extra, a luxury that can be afforded only by healthcare systems in developed countries. Indeed, there is perhaps a particular imperative to remove the costs of poor quality care in systems that are poorly funded. Work in Tanzania, running since 1988, using a QI approach has brought together client rights and provider needs and shown considerable improvements in delivery of reproductive health care. Staff involvement and ownership were essential to making change and the QI approach encourages staff to take responsibility. All this needed staff development; an issue just as important in the developed world.

In the Russian Federation a Q1 analysis of the care of babies with respiratory distress syndrome linked the world of clinical evidence with the world of organisation. This work demonstrates that solutions are often found outside...
Table 1 Contributors to the USA National Forum on Quality Improvement in Health Care session on “Quality improvement around the world”

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Country</th>
<th>Topic</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duncan Stuart</td>
<td>Healthier Outcomes Network International</td>
<td>Sydney, Australia</td>
<td>Chief Executive Officer networks in Australia</td>
<td><a href="mailto:Duncan.Stuart@bigpond.com">Duncan.Stuart@bigpond.com</a></td>
</tr>
<tr>
<td>Margaret Palmberg</td>
<td>MemeNet AB</td>
<td>Uppsala, Sweden</td>
<td>Leadership network</td>
<td><a href="mailto:Margaret.palmberg@memenet.se">Margaret.palmberg@memenet.se</a></td>
</tr>
<tr>
<td>Narue Uehara</td>
<td>Tohoku University School of Medicine</td>
<td>Sendai City, Japan</td>
<td>Kaizen in Japanese healthcare</td>
<td><a href="mailto:Naruo@t3.nim.nih.go.jp">Naruo@t3.nim.nih.go.jp</a></td>
</tr>
<tr>
<td>Sarah Fraser</td>
<td>The Buckinghamshire Partnership</td>
<td>Aylesbury, UK</td>
<td>Learning from working across boundaries</td>
<td><a href="mailto:Sfraser861@aol.com">Sfraser861@aol.com</a></td>
</tr>
<tr>
<td><strong>Breakthrough Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stein Tore Nilsen</td>
<td>Norwegian Medical Association</td>
<td>Oslo, Norway</td>
<td>Caesarian section</td>
<td><a href="mailto:Hans.asboeom.holm@legeforeningen.no">Hans.asboeom.holm@legeforeningen.no</a></td>
</tr>
<tr>
<td>Jean Penny and Helen Bevan</td>
<td>National Patient Access Team, NHS Executive</td>
<td>London, UK</td>
<td>Patient access to cancer care</td>
<td><a href="mailto:Jean.Penny@n.pat.trent.nhs.uk">Jean.Penny@n.pat.trent.nhs.uk</a></td>
</tr>
<tr>
<td>Caroline van Weert</td>
<td>Dutch Institute for Healthcare Improvement, CBO</td>
<td>Utrecht, the Netherlands</td>
<td>Dutch breakthrough projects</td>
<td><a href="mailto:C.vanweert@cbo.nl">C.vanweert@cbo.nl</a></td>
</tr>
<tr>
<td>Dag Hofoss</td>
<td>Norwegian Medical Association</td>
<td>Oslo, Norway</td>
<td>Lessons learned in breakthrough</td>
<td><a href="mailto:Dag.hofoss@le.geforeningen.no">Dag.hofoss@le.geforeningen.no</a></td>
</tr>
<tr>
<td><strong>Quality improvement in hospitals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hans Rutberg</td>
<td>University Hospital</td>
<td>Linkoping, Sweden</td>
<td>Process management in a cardiac centre</td>
<td><a href="mailto:Hans.rutberg@thx.un.luo.se">Hans.rutberg@thx.un.luo.se</a></td>
</tr>
<tr>
<td>Marieke de Boer</td>
<td>Dutch Institute for Healthcare Improvement, CBO</td>
<td>Utrecht, the Netherlands</td>
<td>CBO BEREIK project</td>
<td><a href="mailto:M.deboer@cbo.nl">M.deboer@cbo.nl</a></td>
</tr>
<tr>
<td>Johan Thor</td>
<td>Huddinge University Hospital</td>
<td>Huddinge, Sweden</td>
<td>Hospital-wide process improvement</td>
<td><a href="mailto:Johan.thor@dir.hs.sll.se">Johan.thor@dir.hs.sll.se</a></td>
</tr>
<tr>
<td><strong>Special topics involving physicians</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ross Wilson</td>
<td>Royal North Shore Hospital</td>
<td>St Leonards, Australia</td>
<td>Reducing medical error</td>
<td><a href="mailto:Ewison@doh.health.nsw.gov.au">Ewison@doh.health.nsw.gov.au</a></td>
</tr>
<tr>
<td>Staffan Lindblad</td>
<td>Karolinska Hospital</td>
<td>Stockholm, Sweden</td>
<td>Linking registers of process and outcome to doctors practice</td>
<td><a href="mailto:Sli@rheum.ko.se">Sli@rheum.ko.se</a></td>
</tr>
<tr>
<td><strong>Quality improvement in primary and community care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kerstein Alberius</td>
<td>Primary Care County Council of Uppsala</td>
<td>Uppsala, Sweden</td>
<td>Improving primary care</td>
<td><a href="mailto:Kerstin.Alberius@adm.pv.lul.se">Kerstin.Alberius@adm.pv.lul.se</a></td>
</tr>
<tr>
<td>John Oldham</td>
<td>Manor House Surgery</td>
<td>Glossop, UK</td>
<td>Impact of well publicised mistakes</td>
<td><a href="mailto:JOeuro89@aol.com">JOeuro89@aol.com</a></td>
</tr>
<tr>
<td>Charles Campion-Smith and Peter Wilcock</td>
<td>Institute of Health and Community Studies</td>
<td>Bournemouth, UK</td>
<td>Improving health through interprofession al education</td>
<td><a href="mailto:CampionS@aol.com">CampionS@aol.com</a></td>
</tr>
<tr>
<td><strong>Quality improvement in developing countries and the former soviet union</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rashad Massoud</td>
<td>University Research Corporation</td>
<td>Bethesda, USA</td>
<td>Improving healthcare in the Russian Federation</td>
<td><a href="mailto:Rmassoud@ur.c-chs.com">Rmassoud@ur.c-chs.com</a></td>
</tr>
<tr>
<td>Erin Mielke</td>
<td>AVSC International</td>
<td>New York, USA</td>
<td>Improving the delivery of reproductive health care</td>
<td><a href="mailto:Emielke@avsc.org">Emielke@avsc.org</a></td>
</tr>
</tbody>
</table>

the familiar worlds in which we normally operate. Thirty baby units—one of them able to offer the best care for these vulnerable children—were brought together into one large, well equipped special care unit. A previous block to doing this—access to this one unit from many maternity units over a large area—was solved by including transport as a process within the healthcare systems.

**Leadership**

There is a joke used to describe the characteristics of a group of people. It starts: “How many managers/psychiatrists/footballers, etc does it take to change a light bulb?” So, how many leaders does it take? If the leader employs methods of QI the answer is “none”. The person whose role it is to change the bulb will have done it already.

The importance of leadership in the development of QI within health care cannot be over emphasised. Without leaders involved in and committed to integrating QI into routine practice, radical change is unlikely. Engaging leaders in QI seems to be a common problem. Leadership in health care can be a particularly tough assignment, but some would argue that the leader’s role is easier in an organisation that works to the principles of QI.

Several groups, for example in Sweden, Australia, UK, the Netherlands, and Japan have focused on the development and support for leaders as part of a strategy of implementing QI. In the past chief executive officers may have been more isolated than their professional colleagues. The Australian experience of setting up a network for chief executives was one of start and stop until the development of the Health Round Tables in 1996. Inspired by the example of benefits of exchange demonstrated in the human genome project, groups of a maximum of 10 senior managers, funded through their own hospitals, meet to exchange experience and best practice and to collaborate. Key success factors include the provision of analytical support with a framework for classifying and linking data and problems and solutions; direct control of the agenda by the group; encouraging an emphasis on current issues and practical solutions; and providing an environment where everyone can contribute and there is no fear.

A network for leaders in Sweden has been set up as part of an agreement with the counties—part of the system of government—who are crucial players in the organisation of the healthcare system in collaboration with “MemeNet”, the Centre for Health Care Improvement in Uppsala (box 1). The official endorsement of such a network is encouraging. The aim is long term support for leaders to learn from each other and to explore what leadership is about. Basic assumptions include a patient focus, a knowledge base, and cost effectiveness. From this network the idea of “new leadership” has emerged. This includes a systems perspective and futurising or looking beyond how things are to how things could be.
Individuals look at their personal styles of leadership and what leadership means for them. The changes needed for improvement almost invariably involve cooperation among individuals from different professions or those who work in the micro worlds within a hospital. Leading change management is an important task that needs a positive personal style.

Memes are contagious ideas or units of knowledge. The concept of memes originated by adapting the terminology of genes to describe the raw material of the new “knowledge society”, a society that has instant access to an unprecedented amount of information. Memetics describes the discipline of understanding systems of knowledge and ideas and seeks to explain how ideas emerge, spread, and are adapted and adopted within and between human societies.

Box 1 MemeNet

Cooperation among the typically different worlds within an organisation is a also a key theme in the Bucks Partnership in the UK. Three hospitals, a local health authority, and over 60 general practices are working together to find ways of improving health care in their locality. Using leadership networks, as well as learning events and collaborative improvement projects, the partnership has improved both the process and outcome of many aspects of care and palpable cultural changes in how everyone works together that has allowed effective joint working. This has needed a style of leadership that, compared with a traditional controlling that manages projects through steering groups, emphasises patience, enthusiasm, ability to manage in uncertainty, and has the courage to allow initiatives to evolve.

QI was developed by American management consultants and used in Japanese industry. Various concepts that developed what the Japanese call Kaizen (continuous incremental improvement), for example “every defect is a treasure that can point the way to improvement”—emerged into standard management texts, manuals, and as a result, work across these different cultures. But the Japanese world of health care has been as slow as the rest to incorporate Kaizen into routine practice. That is now changing, however. The first Japanese National Forum on Kaizen in Health Care attracted leaders from over 100 Japanese hospitals and scores of other institutions eager to learn from the initial efforts of 16 hospitals. The difficulties of introducing Kaizen into Japanese health care suggest greater similarities between health care in different countries than between the worlds of industry and health care in one country.

Recent government directives in the UK have widened the responsibility of chief executive officers to include quality of care and financial targets. Separating the world of financial management from the world of QI hinders both the development of better quality care and better use of the health dollar or health euro.

Poor quality care is simply a waste of money. A leader who only focuses on the financial bottom line could do worse than to embrace principles of QI.

Healthcare professionals and QI

Healthcare professionals have extensive education and training in the care of individuals in their specialty or discipline, but in general have little or no training in the organisation of the processes of care or in the principles and practice of QI. Leaders who want to introduce the principles of QI have to be able to convince healthcare professionals to work differently. Taught or learnt helplessness is a strategy used by some healthcare professionals to maintain the status quo. Failure to involve physicians in QI has been reported in Japan as well as in the US and Europe. The results of QI are not always easily accessible to professionals, however. Work that aims to improve care must make sense to clinicians and managers, and it is the responsibility of the proponents of healthcare improvement to break down the language and professional-cultural barriers that often separate these worlds.

Providing opportunities for healthcare professionals to gain the competencies relevant to QI is part of the work of QI. In Bournemouth in England three community based healthcare teams that are collaborating with the university there to develop QI principles in their routine work have included pre-qualification professionals. The enthusiastic response of these students should encourage others to include QI within pre-qualification experience.

QI in hospitals

Hospitals are complex systems. Any attempt to analyse a patient pathway for even the most simple of events, such as having a chest radiograph, ends up with an often incomprehensible map. To help make sense of their own worlds departments often have their own sets of rules and working practices. At Linkoping Cardiac Centre in Sweden, the medical director discovered 12 different patient databases. The task of developing one database required a system that was based on process of care for the patient and not on the work of clinics or departments. The principle used in setting this up was to gather data that would provide information that could guide improvement.

In the Netherlands seven healthcare organisations work together with the Dutch Institute for Healthcare Improvement CBO to implement the vision, strategy, and methods of QI to improve patient care in their whole organisation. This program (“BEREIK”) consists of three program lines:

- Learning to finish QI projects within 6–8 months using the rapid cycle improvement approach.
- Building a balanced set of performance indicators for the organisation and the main care processes.
- Using the principles of leadership and change management to change the culture into a real patient centred organisation.
Many places exist where QI and clinical research interact. Much information exists about how a patient’s response to treatment that is contained within patients’ notes and is data that are not available for inclusion in research on effectiveness of care. The difficulty of transferring information about process and outcome from notes or charts also frustrates some work in audit and QI. In Sweden the use of a patient’s unique number has allowed linkage between short, medium, and long term outcomes. This has provided good information about discrete episodes of care such as hip replacement and cataract surgery. Applying this approach to chronic diseases, such as interventions for rheumatoid arthritis, presents a more complex set of problems, particularly in determining appropriate medium term measures.

Hospitals are dangerous places. The incidence of error, often unnoticed, in routine care in Australia is 17%. Many of these are preventable and some (19%) result in death or permanent disability. Figures as startling as these might be supposed to be enough to trigger action. But inertia is such a characteristic of hospital systems that little has changed—yet. Importantly, these data seem to have triggered establishment of a culture of measurement: a necessary first step towards establishing patterns of practice that both discourage and monitor.

Making change happen

Showing how the theory of QI translates into real improvement in the swampy world of routine practice is crucial. Established patterns of working are barriers to improvement. The arguments for staying the same become deceptively compelling and change is perceived as too difficult. Breakthrough improvement collaborations—multiple organisations working together to achieve significant improvement in a focused area of care—are an effective way of transferring knowledge for change. Breakthrough collaboratives work on the principle that generalisable knowledge can be drawn for local experience and relevant published literature. The question for others then becomes “Why don’t we work like that here” and challenges the comfort of the status quo.

Breakthrough projects are underway in several countries. In Norway these include looking at improvements in the care of patients on intensive care units and of the care of mothers who have caesarean sections. A large collaboration in the Netherlands is adapting the breakthrough methodology to improve care in accident and emergency departments in a project comprising 20 hospitals. In the UK some of the well publicised deficiencies in cancer care are being tackled through a cancer care collaborative that aims to share good practice and successes throughout the country. Breakthrough projects in Sweden have addressed delays and care of people with diabetes. Measurable improvements are triggering further enthusiasm for this work.

Breakthrough strategies have improved aspects of primary care in Uppsala, Sweden. Here, quality improvement is seen as a process and not a goal. QI has included a focus on the working environment of staff. Improvements include faster telephone access for patients; a better prevention programme for pregnant women; and better satisfaction with work for staff. Breakthrough provides a basic discipline. Effort needs to be put into translating results for use in other contexts. Even the word breakthrough may not be helpful as it suggests something different. Making QI ordinary is an important step.

Conclusions

The point of QI in health care is to change things for the better throughout the system but especially at the places where patients meet the system. Making the changes needed requires a radical approach to the organisation and the practice of health care, an eclectic set of skills, and understanding the many worlds that make up the healthcare system.

One of the challenges is to root out those aspects of a system that resist change and improvement. For example, linking the worlds of routine practice, as seen through QI, with pre-qualification professional learning is a goal shared across the world. If QI was a recognised theme in pre-qualification courses, healthcare professionals might be able to appreciate better the connections between worlds of clinical work and the organisation of care.

Box 2 Lessons from around the world

- Health care is a political issue.
- Leadership is leading improvement
- Use QI thinking to help people do the work they already do
- Create language common for politicians and healthcare professionals
- Different healthcare systems have similar problems
- Emphasise the relationship between QI and cost reduction
- Adapt generic strategies and tools to provide local solutions for local problems
- Develop educational formats for healthcare professionals that include training in and learning about QI
- Listen to what people really feel

QI is not a quick fix. Progress can be slow and difficult to sustain. As it is easier to appreciate changes others have made, the meeting was left in no doubt of the considerable progress that has been made in the implementation of QI worldwide. The short presentations stimulated discussion of many themes and ideas. Box 2 summarises some final thoughts of the participants. The similarity of problems worldwide indicates that there is much to learn from each other. We should find ways of continuing to share experience, so that the process of improving care can be speeded up.

Linking though email should speed the interchange of ideas. If you want to find out more about the experience of the presenters, table 1 provides email addresses.

The authors thank the 18 contributors and the attendees on whose discussion this report is based.
Quality improvement around the world: how much we can learn from each other

Fiona Moss, Margareta Palmberg, Paul Plsek and Wim Schellekens

Qual Health Care 2000 9: 63-66
doi: 10.1136/qhc.9.1.63

Updated information and services can be found at: http://qualitysafety.bmj.com/content/9/1/63

These include:

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to: http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to: http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to: http://group.bmj.com/subscribe/