

Quality improvement in general practice

IN our efforts to improve care in British general practice, what can we learn from experience in other fields? 'Quality improvement', as we use the term, is the central activity of total quality management. 'Total quality management' (TQM) is a philosophy and set of techniques widely applied in the business world^{1,2} and attracting increasing interest in health care.³⁻⁵ It grew from the insight, in pre-war American industry, that 'doing the right thing right, first time' may be more effective in achieving high quality than elaborate systems for remedying defects. The concepts and methods known today were developed in Japan during post-war industrial reconstruction^{1,2} and have been adopted widely by companies in many countries. Modified forms of TQM have spread into service industries⁶ and eventually into areas of the public sector.⁷

Total quality management, in its fully developed form, is a comprehensive organization-wide activity that seeks to draw on the ideas and energies of all employees. An organization introducing this approach needs to make quality, namely meeting the needs of those it serves,⁸ its top priority. Leadership from top managers, and in health care also from doctors, is needed to establish the right climate. Ideas from all organizational levels and from customer feedback help to shape overall strategy. In the workplace, teams of up to six people, including front-line personnel, study work processes with a view to improvement. Such a 'quality improvement team' will typically create a flow chart to map out the stages in a process (which might be the production of an engine part or the treatment of a patient). Brainstorming and other techniques will generate ideas about the underlying causes of delays and other difficulties. After data collection, members use various analytical tools to ascertain the root causes of problems and to propose changes. The groups will then test pilot versions of the proposed solutions, studying their effects and adjusting the changes before definitive implementation. Through such repeated incremental adjustments, they work towards the continuous improvement of quality, at the same time reducing costs and wastage.^{1-4,8}

In 1987-1988, the National Demonstration Project on Quality Improvement in Health Care first linked a number of industrial quality experts in the United States with health care organizations. An eight-month collaboration showed that the techniques could be applied within health care, with some early indications of improvement in care.⁴ Total quality management was also the subject of a major study funded by the Department of Health in eight British hospitals and community health service units.⁵ Two sites demonstrated substantial improvements in care. Strong senior management commitment and the early involvement of key clinicians were confirmed as being important in the successful units.^{4,5} The most productive approaches integrated pre-existing strengths into organizational structures, providing appropriate training and support for front-line staff.⁵ These studies mainly describe experience in large organizations, differing in many ways from the small or medium-sized enterprises that provide primary care in most countries, and suggesting the need for further research and development work.

Following the original collaborative project, the application of continuous quality improvement (to use a common, alternative term) has grown in the United States, largely stimulated by the Institute for Health Care Improvement in Boston.⁹ A recent brief review discussed reports of improved health outcomes, combined with reduced hospital stays, from projects ranging from the management of pneumonia to paediatric cardiac surgery.¹⁰

The American experience led to the first European Forum for Quality Improvement in Health Care in London in March 1996.⁹ This provided an opportunity to learn about quality assurance in Europe¹¹ and about early experience in British general practice following the pioneering courses in quality improvement in Hull.¹² Several university-based researchers have worked with practices elsewhere,^{13,14} generally also with audit support staff, to introduce and evaluate the newer methods. In Dorset and the former Oxford region, an initial course over two or three days introduced the techniques to representatives of practice teams. They subsequently worked with project facilitators to apply them to their own work. In Leicestershire a similar process was conducted on the premises of participating practices during a series of two- to three-hour meetings.¹⁴ These projects show the feasibility of the methods, but only a minority of eligible practices in these areas volunteered to participate. All the studies experienced drop-outs (4 out of 10 practices¹⁵ or 1 out of 19 practices¹³), generally because of the time commitment needed.

Primary care teams have used the methods described above to improve diabetic care (increasing the proportion of annual reviews to 96% of patients¹⁶), cervical cytology, and the secondary prevention of myocardial infarction.¹³ Organizational topics, which may be a higher priority in the early stages of quality improvement,⁴ have included appointment systems, telephone access, and repeat prescribing.¹³ One project halved the mean delay in doctors attending the treatment room when requested by the practice nurse.¹³ Among the specific tools used, the shared construction of flow charts has illuminated areas of patient care processes needing improvement.^{4,13} Cause and effect, or 'fishbone' diagrams have helped to categorize causes of problems (under headings including people, places, and procedures).¹⁵ A clearer view of health care needs has emerged from the use of interviews and surveys, and from patients' membership of quality improvement teams.^{13,15} Simple approaches to data collection, rather than complex statistics, have generally provided adequate information.^{4,13} Indeed, 'keep it simple' is a clear message to emerge from the studies.^{13,15} The wider effects on practice functioning included greater involvement by staff in determining overall strategy, with a happier team climate and an increased sense of common purpose. In those instances where doctors were active in quality improvement, this symbolic commitment was welcomed by staff members.^{13,15} Conversely, negative responses by partners or managers could block helpful change.^{13,15} 'These benefits came directly from the total quality management approach, attending to the culture of the practice at the same time as working in depth together on projects to improve patient care.'¹³

Quality improvement along the above lines could form an important part of a more comprehensive approach to quality assurance, encompassing all those working in primary care, and not only those based in general practice.¹⁷ While total quality management in health care uses the methods of clinical audit, it ranges much wider in its concern to develop organizations and teams through a shared learning approach.^{4,8,16} Benefits for teamwork and culture are apparent in the existing studies,^{13,15} and these may often be a necessary precursor of improvements in patient care.¹⁶ More evidence about substantial changes in care will come from further reports, including those from the studies in Oxford^{13,16} and Leicester.^{14,15} Experience in Dorset seems to have been broadly similar (Peter Wilcock, personal communication, 1996). Facilitation, usually by audit support staff, has been

an important part of studies to date, and some primary care teams may need help developing their teamworking before they can start quality improvement projects.¹⁵ Community health staff attached to practices have participated less actively so far,¹³ and increasing their role could be a task for future projects. Quality improvement is time-consuming, and practice team members have generally identified this as an obstacle. Indeed, the time and effort required, in the conditions of general practice since the 1990 health service changes, have been the major factors discouraging practices from participation, or causing them to withdraw from studies.^{13,15} Future researchers will therefore need to assess both effectiveness and direct- or opportunity-costs for primary care teams and health authorities. A study commencing at the University of Warwick will be focusing on such factors, comparing TQM with traditional audit in primary care teams. However, focused and effective quality improvement could replace much current poorly coordinated activity in audit and primary care development. An innovative study in the North Thames region is to observe the implementation of evidence-based care in practices, comparing the effect of quality improvement techniques with traditional methods. This could bring quality assurance closer to education and clinical effectiveness, where surely it belongs.

Large organizations implementing quality management, experience maturing changes in group culture⁵ over five years or longer. This suggests that one- or two-year projects need continuing support and facilitation from health authorities or their quality groups. Longer-term research is also needed. Accordingly, we would urge the National Health Service Executive or its research and development arm to complement the above relatively limited studies, and the earlier work on total quality management in secondary care,⁵ by commissioning a comprehensive evaluation in order to identify important effects slowly developing from the original initiatives.

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Mental health care in the community: what should be on the agenda?

A new report has given us the opportunity to re-examine the health services available to those suffering from mental illness. The King's Fund, an independent research and policy institute, invited four groups of mental health experts to investigate and report on the state of London's mental health services as part of the second London Commission. The report, recently published,¹ covers services for all specialist mental health sectors and primary care, and is relevant to other large English cities, not just London. The researchers focused on the mental health service needs of Londoners and on how far current services meet these needs. A tripartite taxonomy, dividing health authorities into three distinct groupings (inner deprived, mixed status, and high status), allowed comparison between areas of similar grouping and different geographical locations.²

While the problems are essentially the same in the large cities, they are worse in London, where extremely high levels of demand have overstretched mental health services, resulting in bed occupancy rates as high as 125%, higher levels of violence, more compulsory detentions, and higher thresholds for admission

among people with mental health problems. These features are particularly marked when comparing the inner deprived areas of London with other cities — and London has six of the most socially deprived areas in the country. Other factors contributing to higher rates of mental illness in the capital include a greater proportion of the population in the higher-risk age group (15-45 years), more people living alone, the presence of several major railway termini, a large Afro-Caribbean population with higher rates of psychotic illness,³ more homeless people, more refugees, and higher rates of substance abuse.

Inpatient facilities are being used inefficiently owing to a lack of residential placements in the community. Between a quarter and a third of the beds on acute psychiatric units are occupied by patients who could be better treated in the community if a residential placement were available. There are long delays before patients can be admitted to a secure unit, allocated a community psychiatric nurse or social worker, or placed in supported residential accommodation. Aspects of good long-term care (such as day care, family interventions, and employment schemes) are

taking second place as resources are concentrated on trying to meet the needs of the most acutely ill. As if this were not enough, a severe manpower shortage is affecting all the mental health professions, and morale is low in many health services. The voluntary sector is increasingly a major service provider of day and residential care, and the National Health Service is undertaking rehabilitation services that were previously in the remit of social services.

For the general practitioner (GP) in urban practice, and particularly for those in inner deprived areas, care of the severely mentally ill has increased the workload. Guidance on continuing care in the community was issued by the General Medical Services Committee,⁴ but was considered to be over-defensive and not in the best interests of patients.⁵ Further evidence of difficulties in inner-city practice is provided by General Medical Services performance indicators.⁶ Despite smaller list sizes, GPs in inner deprived areas in London are underperforming compared with colleagues in similarly deprived areas outside London. More London GPs are single-handed, and there are fewer practice nurses. However, recent figures⁷ confirm earlier reports of a difference in psychiatric case identification between GPs in Manchester (where approximately 61% of psychiatric cases are recognized^{8,9}) and those in London (where only 45.5% are recognized).

There is an inequitable distribution of counsellors and psychologists working in primary care among London's health authorities. Fundholding practices have increased links with mental health professionals, but there is concern that this favours those with less severe mental illness.⁹ The present report draws no conclusions (since these will be left to the London Commission, which funded the research and is due to report in June 1997), but it is possible to outline an agenda for future mental health service provision. It is clear that there are problems across a range of areas, with important messages for London in particular, for inner-city general practice, and for the provision of mental health services by primary and secondary care. There is a reasonable call for increased resources, which may be met in part by the Department of Health's appropriate application of formulae to determine the allocation of resources to deprived inner-city areas.¹⁰ New money is needed for high-support residential placements and 24-hour nursing staff.

General requirements include the establishment of agreed minimum standards for maximum acceptable waiting times for residential care, and for speed of response by community teams. Specific services to support carers should be available, and increased inter-agency collaboration should be established across health services, local authorities and the voluntary sector. A strong case can also be made for basing catchment areas on GPs rather than on patients' street addresses; this produces problems in providing local authority social services, but such problems are trivial compared with the improved liaison between the primary care team and the community mental health team.

A template for improved working arrangements between primary care and community mental health services was drafted four years ago by the Royal College of General Practitioners (RCGP) and the Royal College of Psychiatrists.¹¹ The King's report reiterates these earlier recommendations. Local community mental health teams should identify liaison key-workers for particular general practice surgeries. Where there is local need, psychiatrists can work in a general practice setting but remain part of the local mental health team and generally promote improved communication and establish agreed care plans. There is a need for continuing education of GPs about mental illness.¹² The RCGP Unit for Mental Health Education in Primary Care is now running a 'teach the teacher' course for GPs and nurse

teachers involved in continuing medical education (CME). Case registers of the long-term mentally ill should be promoted in the same way as chronic disease registers for diabetes and hypertension. Mental health nurse facilitators can assist in looking at individual practice approaches to the mentally ill, help set up case registers, and define practice protocols. The RCGP Mental Health Task Force continues to look at ways of achieving desirable changes in practice to improve the care of the mentally ill.

There is no shortage of activities that can be locally implemented in primary care to enhance the delivery of care to the mentally ill. More resources are just one part of an agenda that has been established for some time now. The messages need to be repeated again and again until they are taken up or facilitated into practice.

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