

Improving quality and safety of telephone based delivery of care: teaching telephone consultation skills

J Car, G K Freeman, M R Partridge, A Sheikh

High quality telephone based health care delivered by appropriately trained staff should be available to all

The opportunity to consult by telephone is now an integral part of any modern patient centred healthcare system.¹ The public values the option of consulting by telephone, citing advantages of quicker access to care, greater convenience, and more choice in the way health care is received.² In the United States up to a quarter of all primary care consultations are now conducted over the telephone, but there are also risks associated with this form of communication.³ Key approaches and skills that clinicians need to acquire to minimise these risks include use of detailed protocols for the organisation of a telephone service, structured evaluation of the urgency of calls, and issues to do with confidentiality. None of these has so far been incorporated into doctors' formal training, and this needs to change.

Telephone contacts are increasingly used as an extension of, or substitute for, traditional face to face contacts with a range of primary and secondary healthcare professionals. Telephone services now include delivery of routine and emergency care, facilitating health promotional interventions, obtaining results of laboratory investigations, and repeat prescriptions.² Many doctors are, however, still reluctant to provide this form of service and this probably reflects lack of confidence, perceived vulnerability and, underpinning these, a lack of appropriate training.⁴⁻⁵ This is unsurprising because, although there are a number of skills that are common to all forms of consultation, consulting by telephone does require an additional range of skills. These include a more refined appreciation of the importance of verbal cues and focused history taking to compensate for the inability to examine the patient.

The British Medical Association's guidance for general practitioners, *Consulting in the Modern World*, warns doctors on the one hand of the limitations of telephone consultations: "During a telephone consultation the doctor cannot see, touch, examine, investigate, smell or, in the strictest

terms, even hear the caller/patient" and then advises that: "telephone consultations when correctly conducted can be considered to be safe and acceptable practice". Both the limitations and the advantages of telephone consultation are therefore apparent, but doctors and medical students are given little advice or training in how to conduct telephone consultations correctly or develop the requisite skills. Most other professional and commercial services, including health related nurse run telephone services, insist on training for those who develop telephone based services.

Training courses need to help clinicians build appropriate attitudes, skills, and knowledge and should include both generic and specialty specific modules. In addition to verbal cue sensitivity and more focused history taking, generic topics include training in the adequate documentation of telephone encounters and awareness of when telephone consultations are inappropriate (for example, where there are language difficulties or where there is a clear necessity for clinical examination or need for use of investigative facilities) and an appreciation of relevant medico-legal issues. Clear guidance is needed regarding the "substitution" of questions for examination such as asking the patient to measure her/his temperature, blood pressure, peak flow or blood glucose level; exploration of strategies for home management including self-monitoring; negotiation of a plan and assessment of its feasibility; follow up arrangements; and management of expectations for a home visit. In addition, medical managers need to be aware that planned telephone consultations must require availability of medical records, a confidential telephone line in a quiet area, and the resources to document the consultation and to communicate this to others such as the general practitioner and the patient. There must be opportunities for early face to face consultation if the need becomes apparent during the telephone

consultation. Hospitals should also consider offering morning or evening "commuter" telephone clinics for patients in employment.

Each specialty must consider its specific telephone training needs. We anticipate that these may focus on issues such as "warning signs and cues" for various disorders, guiding patients in performing limited self-examination (for example, determining if a rash blanches or, for asthma, asking an adult patient to record his/her peak flow or the mother of a child with asthma to assess the pulse rate or respiratory rate) and prescription guidelines (for example, prescription of non-steroidal anti-inflammatory drugs in acute low back pain).⁶ Professional bodies need to provide clinicians with evidence (or state the absence) of the effectiveness and safety of such interventions to allow clinicians to undertake an evidence linked assessment of the advantages and limitations of telephone consultations. Future versions of guidelines, such as the British Thoracic Society/Scottish Intercollegiate Guidelines Network (BTS/SIGN) asthma guidelines, might include key questions to be asked during a telephone consultation.⁷⁻⁸

There is evidence that clinicians' performance, confidence, and satisfaction with delivery of care by telephone can be improved by short educational programmes.⁹⁻¹⁴ As for teaching traditional consultation skills, simulated patients are the cornerstone of teaching programmes aimed at improving telephone consulting skills.¹⁵ Such training should become an integral part of the consultation skills programmes that now run throughout undergraduate, general practice, and specialist training. For established clinicians, training opportunities need to be offered as part of continuing professional development.

A number of studies have identified substantial variation in the quality of telephone consultations.¹⁶⁻¹⁷ Monitoring and assessing the organisation and quality of telephone consultations is essential, and this appraisal should extend to receptionists and other essential team members. Many of the quality indicators for telephone consultations can be adapted relatively easily from other organisations such as The Telephone Helplines Association, UK.

With over 90% of the UK population now having ready access to a telephone, and with an increasing array of services now available on the telephone, it is essential that mechanisms are developed to ensure that high quality telephone based health care delivered by appropriately trained staff is available to all. *NHS Direct* (and similar developments in a range of commercial

services) have heralded a much needed shift in culture, and it is now time that mainstream primary and secondary healthcare services followed suit.

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REFERENCES

- 1 Evans R, Edwards A, Elwyn G. The future for primary care: increased choice for patients. *Qual Saf Health Care* 2003;**12**:83-4.
- 2 Car J, Sheikh A. Telephone consultations. *BMJ* 2003;**326**:966-9.
- 3 Patel A, Dale J, Crouch R. Satisfaction with telephone advice from an accident and emergency department: identifying areas for service improvement. *Qual Health Care* 1997;**6**:140-5.
- 4 Hannis MD, Hazard RL, Rothschild M, et al. Physician attitudes regarding telephone medicine. *J Gen Intern Med* 1996;**11**:678-83.
- 5 Hughes RA. Telephone helplines in rheumatology. *Rheumatology* 2003;**42**:197-9.
- 6 Atlas SJ, Deyo RA. Evaluating and managing acute low back pain in the primary care setting. *J Gen Intern Med* 2001;**16**:120-31.
- 7 British Thoracic Society/Scottish Intercollegiate Guidelines Network (BTS/SIGN). British guideline on the management of asthma. *Thorax* 2003;**58**(Suppl 1):i1-94.
- 8 Pinnock H, Bawden R, Proctor S, et al. Accessibility, acceptability, and effectiveness in primary care of routine telephone review of asthma: pragmatic, randomised controlled trial. *BMJ* 2003;**326**:477-9.
- 9 Reisman AB, Stevens DL. *Telephone medicine*. Philadelphia: American College of Physicians/American Society of Internal Medicine, 2002.
- 10 Ottolini MC, Greenberg L. Development and evaluation of a CD-ROM computer program to teach residents telephone management. *Pediatrics* 1998;**101**:E2.
- 11 Kosower E, Inkelis S, Seidel J. Telephone TALK: a teaching/assessment tool for medical training. *J Biocommun* 1996;**23**:22-6.
- 12 Marklund B, Silfverhielm B, Bengtsson C. Evaluation of an educational programme for telephone advisers in primary health care. *Fam Pract* 1989;**6**:263-7.
- 13 Sloane PD, Egelhoff C, Curtis P, et al. Physician decision making over the telephone. *J Fam Pract* 1985;**21**:279-84.
- 14 Smith SR, Fischer PM. Patient management by telephone: a training exercise for medical students. *J Fam Pract* 1980;**10**:463-6.
- 15 Evens S, Curtis P. Using patient simulators to teach telephone communication skills to health professionals. *J Med Educ* 1983;**58**:894-8.
- 16 Shekelle P, Roland M. Nurse-led telephone advice lines. *Lancet* 1999;**354**:88-9.
- 17 Andrews JK, Armstrong KL, Fraser JA. Professional telephone advice to parents with sick children: time for quality control! *J Paediatr Child Health* 2002;**38**:23-6.

Open disclosure of medical errors

Open disclosure: the only approach to medical error

R Lamb

Open, honest, and timely disclosure should be the only approach to medical error

The open, honest, and timely disclosure of medical error to patients should be, as Americans say, a "no brainer". It is ethically, morally, and professionally expected of clinicians.¹⁻³ It is clearly the right thing for patients who frequently say that, when things go wrong with their health care, what they need most is disclosure, an apology, and information about what happened and how it can be prevented from happening again.⁴

Clinical staff might feel that open disclosure is either too difficult to deliver or labour under the perception that, by doing this, they will increase the risk of litigation. But being honest with patients about errors and mistakes is the right thing for doctors, other clinical staff, and the hospital involved. Open and truthful discussion with the patient is the first stage in promoting and fostering an environment and culture that, through honest discussion, encourages the learning needed to improve systems and thus reduce medical error. Doctors and other clinical

staff who are not used to such an approach to discussing errors will need support as such discussions are difficult. But once an error has been acknowledged, discussed, and acted upon, clinical teams can get on with their job of treating the sick.

This all sounds so obvious, particularly to a reporter like me who, during 25 years in journalism, has frequently interviewed patients who have suffered from the health care they have received. But, traditionally, the decision about whether or not to disclose information about an error when it has taken place has largely been left to individuals. Traditions die hard and, while many individual clinicians undoubtedly do deal with such matters openly and honestly, it is clear from public statements of many patients that, even in the 21st century, this does not happen often enough and it is not encouraged in a systematic, organisation-based way. Or, when it does happen, it may not be handled satisfactorily from the patient's point of view.⁵

Certainly, my experience has been that, when patients take their stories to the news media, most of their anger is about how they were treated after the adverse event rather than the event itself. Mostly (and there are exceptions), these people have already tried hard to resolve issues through local and official channels and feel that they are not getting anywhere. Going to the news media is an action of last resort, born of frustrated attempts to find out the truth.

In New Zealand in 1995 a patient referred to in a later inquiry as "patient A" was diagnosed and treated for cervical cancer. She discovered that four cervical smears before this had been reported as normal or inconclusive when, in fact, they showed evidence of cancer. Put simply, her cancer could have been diagnosed earlier and, if it had, her treatment may have been considerably less invasive and subsequent health problems avoided. Fearing that many other women may have been similarly affected, she wanted to find out why her cancer had been undiagnosed and tried to get official agencies to investigate. In 1999, believing that was getting nowhere, she felt that she had no option but to take to court the by then retired pathologist responsible for the diagnostic error and the unnecessarily late diagnosis of her cervical cancer. The matter then became public, finally hit the headlines, and set up a train of events that led to the 2001 Gisborne Cervical Screening Inquiry. The problems that were uncovered have led to wide ranging recommendations for improvements to the national cervical screening programme.

The legal battle continued until October 2003 when "patient A" reached a settlement with both the retired pathologist and the Crown. But in an interview a few months before this the patient told me that she would not have pursued the matter for so long if it had been dealt with more openly. She said that her actions would have been quite different if, at the outset, there had been an apology and if officials had responded more quickly to her questions and her concerns about other women.

Similar views were expressed to me by a group of New York patients and their relatives whom I interviewed in 2001; all were in the process of suing their doctors after iatrogenic events. Once again their anger was linked much more to the way they were treated after the event than the event itself. They commonly spoke of feeling betrayed by clinicians they had previously trusted because, they said, their doctors had been unwilling to talk to them openly about what had occurred. They said they understood that mistakes happen, but they expected an honest and "human" response. Some of the patients were suing because they had unanswered questions. Interestingly, one woman had abandoned her lawsuit after getting the information she sought through the legal disclosure process.

So why do clinicians find it so difficult to be open about mistakes and errors? Just what are the barriers? One problem cited by clinicians has been the lack of institutional support for such seemingly risky behaviour as open disclosure. It does seem—at last—that this is changing. In the United States and Australia spiralling medical malpractice insurance costs and large legal settlements have prompted a fresh look at how adverse events are handled.⁶⁻⁹ Amidst the calls for tort reform and no-fault compensation schemes, there is some recognition that open, honest, and timely disclosure may lower legal bills as well as bringing better outcomes for everyone. Despite the reputation of the United States as a highly litigious society, some big insurers and risk management organisations now routinely advocate honest disclosure, as does the American Hospital Association.¹⁰ Such action directly challenges previous assumptions that disclosure increases the risk of litigation and may even encourage patients to sue.¹¹⁻¹² Agencies such as the United States' Joint Commission on the Accreditation of Healthcare Organisations (JCAHO) and Australia's Council for Safety and Quality in Health Care are using standards to promote such organisational policies and practices.¹³⁻¹⁴ In the UK, too, the government is introducing to its

National Health Service (NHS) a "duty of candour", requiring doctors to tell patients about negligent acts or omissions which cause harm. A new "redress scheme" is also being proposed, offering remedial care, apologies, and compensation to injured patients and their families.

Another significant barrier is fear—fear that in the United States focuses on malpractice risk¹⁵ but which, in a small country like New Zealand with no-fault accident compensation, may equally be about adverse publicity, disciplinary processes, and potential damage to career and reputation. But is such fear justified? Certainly, in New Zealand there have been several recent high profile medical misadventure cases where doctors' names have been widely publicised as they have gone through the complaints and disciplinary process. It has led to a view that, despite the presence of the accident compensation scheme, the medicolegal/disciplinary environment is a punitive one. However, this view is described by the country's Health and Disability Commissioner in his latest annual report¹⁶ as a "myth". He points to a dramatic fourfold reduction in the number of medical practitioners facing disciplinary proceedings over the last 9 years and an increasing emphasis on resolving patient complaints through advocacy.

In the United States, where large jury settlements have fuelled medicolegal fears, there are also some encouraging signs that the fear may be worse than the reality. While the hard data on whether disclosure does lower malpractice costs are still limited, there is one notable exception—namely, The Veterans Affairs Medical Center in Lexington, Kentucky where it has been shown that a proactive policy for full disclosure has clearly mitigated the financial repercussions when patients have been harmed.¹⁷

More anecdotally, other US hospitals that are actively pursuing such policies also report that it is not hurting them. Hospitals such as Minneapolis Children's and Boston's Dana-Farber Cancer Institute have had written disclosure policies for more than 2 years.¹⁸⁻¹⁹ In interviews last year their chief operating officers reported that, while it was too early to present claims data, they believed the policies were beneficial not only to staff and patients but also to the organisations themselves. Julie Morath, the Chief Operating Officer for Minneapolis Children's Hospital, said that they initially thought they would have to sedate their lawyers. "They got very anxious about the implications [of a disclosure

policy]. But we see it as our obligation, our values and standards, our promises to families. Our legal counsel provides counsel about the risks and limitations but ultimately the decision about how we behave is ours and our board did endorse this knowing that there were risks in what we were about to do." Jim Conway of the Dana-Farber Cancer Institute says: "People believe that you tell a patient about error and they make two phone calls. One is to the press, the other to their lawyer. It does not work that way."

As we wait for further empirical evidence, such testimony surely provides some reassurance that the open, honest, and timely disclosure of medical error to patients is indeed the right thing to do and should be the only approach to medical error. If we look back at the New Zealand cervical screening case, the comment by "patient A" certainly suggests that a more open response to the discovery of her under-reported smears in 1999 and an early investigation into whether there were other cases would have allowed her and the retired doctor to move on with their lives much earlier; it would also have taken the sting out of the publicity and avoided many of the headlines which have chronicled the difficult legal battles, the inquiry, and continuing fallout from the case. Of course the error would have made the news, but it would not have continued to make headlines for 4 years. It is more difficult to think up sensational headlines when the underlying story is essentially "Error discovered: inquiry launched immediately" rather than "No action despite six looks at doctor" or "Warnings went on for years" and "Review confirms what battling patient knew"—headlines which appeared 4 years after patient A discovered her misread cervical smears.²⁰

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REFERENCES

- 1 American Medical Association. *American Medical Association code of medical ethics: current medical opinions*. 31 July 2002.
- 2 American Nurses Association. *American Nurses Association code of ethics for nurses with interpretive statements*. 2001.
- 3 Wu AW, Cavanaugh TA, McPhee SJ, et al. To tell the truth: ethical and practical issues in disclosing medical mistakes to patients. *J Gen Intern Med* 1997;**12**:770-5.
- 4 Witman AB, Park DM, Hardin SB. How do patients want physicians to handle mistakes? A survey of internal medicine patients in an academic setting. *Arch Intern Med* 1996;**156**:2565-9.

- 5 **Gallagher TH**, Waterman AD, Ebers AG, *et al*. Patients' and physicians attitudes regarding the disclosure of medical errors. *JAMA* 2003;**289**:1001–7.
- 6 **Freedman M**. The tort mess. *Forbes* 13 May 2002.
- 7 **Gorman T**. Physicians fold under malpractice fee burden. *Los Angeles Times* 4 March 2002.
- 8 **Miranda N**. Botches in hospitals cost \$4.5m. *Sunday Times (Perth)* 13 October 2002.
- 9 **Smith W**, Ryan S. Patients to suffer as crisis deepens. *Courier Mail (Brisbane)* 18 May 2002.
- 10 **American Society for Healthcare Risk Management (ASHRM)**. *Perspective on disclosure of unanticipated outcome information*. American Hospital Association. Quality Advisory for Members: A "Culture of Safety" Disclosure of Unanticipated Outcome Information. Available at www.aha.org/patientsafety (accessed 3 October 2003).
- 11 **Victoroff MS**. The right intentions: errors and accountability. *J Fam Pract* 1997;**45**:38–9.
- 12 **Robertson GB**. *When things go wrong: the duty to disclose medical error*. Willis Cunningham Memorial Lecture in Law and Medicine, Queens University, February 2002.
- 13 **Joint Commission on the Accreditation of Healthcare Organisations (JCAHO)**. *JCAHO Standard RI.1.2.2* 1 July 2001.
- 14 **Australian Council for Safety and Quality in Health Care**. *Open disclosure standard: a national standard for open communication in public and private hospitals following an adverse event*. July 2003 (available at www.safetyandquality.org/articles/publications/opensdisclosure_web.pdf).
- 15 **Lamb RM**, Studdert DM, Bohmer RM, *et al*. Hospital disclosure practices: results of a national survey. *Health Aff* 2003;**22**:73–83.
- 16 **New Zealand Health and Disability Commissioner**. *Annual report*. 30 June 2003.
- 17 **Kraman S**, Hamm G. Risk management: extreme honesty may be the best policy. *Ann Intern Med* 1999;**12**:963–7.
- 18 **Minneapolis Children's Hospital and Clinics**. *Policy 703.00. Medical accidents, reporting, and disclosure, including sentinel events*. Originally effective 28 July 1999, revised 1 October 2001.
- 19 **Dana Farber Cancer Institute**. *Policy for disclosing medical errors to patients and families*. Approved 12 July 2001.
- 20 **New Zealand Herald**. 8 May 1999 and 22 September 1999.

All change

Quality and safety in health care: plus ça change, plus ça ne reste plus la même chose

F Moss

In the 12 years since *QSHC* was launched as *QHC* (*Quality in Healthcare*) attitudes to quality improvement have changed enormously. Then, in the United Kingdom, quality improvement work largely consisted of medical audit. Results of audit work were usually discussed in clinical meetings with little management involvement. Now there is corporate responsibility—shared between clinicians and managers—for the quality of care, quality improvement, and risk management. The links between improvement in clinical practice and organisational change are widely acknowledged. Quality improvement is less an optional extra, it is more a part of routine practice. And much more is known about the extent of error than 12 years ago. Shocking revelations from public inquiries into the circumstances of scandals have illustrated the frailty of many parts of care systems. Data quantifying the extent of adverse events within many healthcare systems indicate that error is endemic. And, although health systems may differ, many of the circumstances of error and the lessons that emerge from investigations apply in any country. Worldwide, people are trying to find ways of making health care safer and less damaging to patients.

This journal has changed too. Changes in the content have reflected developments in quality and safety

improvement. Organisational change and team functioning have become important and recurring themes. Human factors, clinical microsystems, and decision making are some of the topics covered in the past two years that may not have made as much sense 12 years ago as they do now. Many more authors are from outside the United Kingdom and we hope that all papers have generalisable messages accessible to readers worldwide.

Two years ago, too, the journal changed in appearance; a new cover, a new layout, and a new title. But more importantly the journal became available electronically, making it accessible from anywhere in the world and providing opportunity for readers to respond to published papers. Also, since 2002, all the editorial processes are web based.

Journals are like all systems, they are "perfectly designed to get precisely the results that they get" and any improvement requires a change in the system. But sometimes change requires a catalyst, usually an individual. Two of this journal's change agents, Richard Grol and Paul Barach, have now stepped down from the editorial team. An early editorial aspiration was that the journal should become international. But in this matter the journal's beginning was not auspicious. Launched as *QHC* by the BMJ Publishing Group in the wake of the introduction of medical audit in the United Kingdom, this was a very British

enterprise that looked very medical and, despite early editorial intentions, was of particular interest to people working within the United Kingdom National Health Service (NHS). Richard Grol, viewing the journal from the other side of North Sea, was able to show the editorial team just how British we were, and just how difficult it was for others to glean generalisable messages from papers that assumed a working knowledge of the NHS. Unless we changed, he said, we would attract neither readers nor authors from outside the United Kingdom. Now all authors are asked to include relevant aspects of their healthcare systems to enable their work to be accessible to readers from other countries. A little extra work for authors perhaps, but it should widen the impact of their work. Richard has served the journal well for many years and his suggested series, *Quality improvement research*, will be published in a book later this year.¹

Another early assumption was that the safety of care was integral to good quality care. This is a crucial subject: if all healthcare systems were safer, lives would be saved. But, despite a focused issue on clinical risk management and a few other papers, it was not clear either to authors or readers that *QHC* was interested in papers on the safety of care. Paul Barach had the inspiration to put the "S" into *QHC*. Since then many more papers on a wide range of topics relevant to safety improvement have been published. Paul has contributed hugely to the journal but has decided to step down from his active editorial role in order to devote more time to his new and demanding role as Director of the Miami Center for Patient Safety.

Many thanks to Richard and Paul for their important contributions and for stimulating change.

The editorial team can influence the content of a journal by commissioning papers. But as a peer reviewed journal we are dependant, too, on submitted papers. So, the content will reflect the range of topics covered by submitted

papers. We now receive more than three times more unsolicited papers than we did 12 years ago. As a result *QSHC* was able easily to expand from a quarterly to a bimonthly journal. Papers that report original research are an important part of this journal and we now publish many more: only 16 in 1993, but 33 in 2003. Maybe more research on quality and safety is being done, or perhaps more of it is being submitted to *QSHC*.

One unfulfilled editorial aspiration is to increase the number of quality improvement reports, but very few are submitted. In 1993 we published six quality improvement reports (all from the United Kingdom), but only one in 2003. As there is both more concern about the quality and safety of care and more energy expended trying to do something about it, it might be supposed that more people are attempting change and gaining the sort of insight into what it takes to improve care that would be helpful to others. And perhaps too we might have expected to receive more quality improvement reports for consideration. We realised that the standard structure for reporting research is not helpful for writing about a process of improvement that involves several cycles of reflection and action. So, in 1999, to help authors construct quality improvement reports, we put together a structure that we thought might encourage people to write about and submit

them. The editorial outlining that structure is reprinted in this issue.²

Although only few quality improvement reports have been submitted to this journal, more have been submitted to and published by the *BMJ*. And so, to encourage more people to write about their quality and safety improvement work we will re-publish at least one *BMJ* quality improvement report in each issue of *QSHC*. The first of these describing criteria based audit in Ugandan maternity units is on page 49 of this issue.³ But we want to make this an iterative process and are interested in your views on both the content and the structure of quality improvement reports. (This might help us fulfil another unfulfilled editorial aspiration: to encourage exchange of ideas through the rapid response connection on the *QSHC* website.) We are asking readers to respond to three questions about each quality improvement report by using the rapid response facility available through the website (www.qshc.com):

- What else would you like to know about this work?
- Do you encounter similar problems in your practice?
- Was the structure helpful?

Please use the rapid response button and let us know your views and your suggestions.

The world is now much more knowledgeable about the quality and safety of health care. It is not clear that it is yet any wiser. Many people are working to improve care and some of the lessons they are learning may be of use to others. Tell us about your experiences. If you don't have the time, inclination, or energy to write a quality improvement report then respond through the new "Quality Ideas" button and post your idea on the web (<http://www.qshc.com/misc/ideas.shtml>). Web based publishing has changed journals. Already readers can now contribute their views on published papers in real time and enter debates on the web. Much more interaction is likely in the future. We have set it up! So, be part of this change and let us know what you think.

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REFERENCES

- 1 Baker R, Grol R, Moss F. *Quality improvement research*. London: BMJ Books, 2004.
- 2 Moss F, Thomson R. A new structure for quality improvement reports. *Qual Saf Health Care* 2004;13:6–7.
- 3 Weeks AD, Alia G, Ononge S, et al. Introducing criteria based audit into Ugandan maternity units. *Qual Saf Healthcare* 2004;13:49–52.

Quality improvement reports

A new structure for quality improvement reports

F Moss, R Thomson

Finding out about how others' schemes to implement change succeed or why they fail can be extremely helpful. It can save time and effort and may accelerate improvements in service delivery. One of the stated aims of this journal is to publish such *quality improvement reports* along-side papers that report the results of relevant research. The editorial team are aware through discussion with colleagues, from papers presented at meetings, and reading local reports that many people are involved in useful and informative quality improvement projects that could have valuable messages for others. And yet in the past seven and

a half years we have only published 12 quality improvement reports—the most recent one in December 1995.

We rely on submitted reports, and one of the reasons for this dearth of published quality improvement reports may be that people are simply too busy improving care to have time to write. But there may be other barriers. The standard form for writing papers in medical journals is the scientific IMRaD (introduction, methods, results, and discussion) structure. This is a convenient and helpful structure for writing about research. When writing a quality improvement report this structure does not quite fit, however. For

example, there will be a first methods section—when the measurements are made—and a first results section—when the results are analysed. However, there follows a second methods section describing the implementation of change, perhaps followed by a third methods section when the measurements are repeated to assess progress, and then a second results section describing the improvements. Writing quality improvement reports in this way may not only be difficult but may result in a paper that does not convey the lessons that others would find useful. The editorial team has therefore developed a new structure (box) for describing quality improvement work that we think will reflect this work more accurately and which we hope will encourage authors to write about their experience. A quality improvement report using this structure is republished in this issue.¹

This is a reprint from the June 1999 issue of *QHC* (Moss F, Thomson R. A new structure for quality improvement reports. *Qual Health Care* 1999;8:76).

Box 1 Structure for quality improvement reports

- *Brief description of context:* relevant details of staff and function of department, team, unit, patient group.
- *Outline of problem:* what were you trying to accomplish?
- *Key measures for improvement:* what would constitute improvement in view of patients?
- *Process of gathering information:* methods used to assess problems.
- *Analysis and interpretation:* how did this information help your understanding of the problem?
- *Strategy for change:* what actual changes were made, how were they implemented, and who was involved in the change process?
- *Effects of change:* did this lead to improvement for patients—how did you know?
- *Next steps:* what you have learnt/achieved and how will you take this forward?

There is also another fundamental difference between quality improvement reports and the reports of original research. Research seeks broadly to produce generalisable results. Thus, trials of thrombolytic treatment in acute myocardial infarction sought to determine whether thrombolysis reduced subsequent mortality, such that the results could be generalised to coronary care units and medical wards treating such patients. On the other hand, a local audit or quality improvement project, which seeks to assess whether patients are appropriately treated with thrombolytic therapy does so to monitor and ensure the implementation of evidence based treatment in practice. The *results* of such a study are not generalisable to other coronary care units in the same way as the preceding research evidence, and for many this

would suggest that the work is not publishable. We would disagree. The results may not be generalisable, they are unique to the unit where the audit was undertaken—and most probably to the time of the audit. Any identified problem needs local diagnosis and local change to occur to create improvement. But a well written and structured quality improvement report may include generalisable *methods* and *strategies for change* from which others undertaking similar audits would benefit. Thus, good quality improvement reports should offer a means of disseminating good practice, and there is little doubt in our minds that much that is good about such work is not as yet widely reported. As a result practitioners are denied the opportunity to learn from each other as the science of audit and quality improvement matures.

All quality improvement reports submitted to the journal will be peer reviewed and the decision on acceptance made by the editorial team. Quality improvement reports do not necessarily have to report success. However, all should contain lessons or messages that have relevance to others and that could help them in the process of improving care. Measurements need to be robust and rigorous and results analysed and interpreted with care. Quality improvement reports should include a reflection on the cause of deficiencies in care. Problems associated with implementing change should not be glossed over but described, and possible causes and solutions discussed.

We hope that the new structure will encourage those with practical experience of quality improvement to write about it in a way that will help others. And we hope that readers will find the new quality improvement reports interesting and useful—please let us know.

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REFERENCE

- 1 **Weeks AD**, Alia G, Ononge S, *et al*. Introducing criteria based audit into Ugandan maternity units. *Qual Saf Health Care* 2004;**13**:49–52.