Viewpoint

Is audit running out of steam?

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Richard Thomson has research interests in quality in health care and health services research. He previously headed the Northern Regional Health Authority’s multidisciplinary quality directorate with responsibility for facilitating audit and quality assurance activities across the region. He has contributed to several national groups concerned with influencing policy on audit, including that at the purchaser-provider interface, and he is a member of the regional medical audit committee and chairman of the regional public health medicine audit promotion group. Andrew Barton’s principal responsibility is organising post-qualification training in audit for doctors and the professions allied to medicine and advising on the design and management of projects across all specialties. He is researching into the effectiveness of guidelines in audit and the cost of implementing guidelines. A member of the North Tyneside Medical Audit Advisory Group, he is starting to assess the effectiveness of these groups in general.

Many doctors and professional groups welcomed the introduction of audit as a means of showing their commitment to improving the quality of care they provide, although others have been sceptical. Generous government funding was provided (at least in the initial funding of unidisciplinary medical audit) to support the enthusiasts and stimulate the development of comprehensive programmes of audit in the hope of persuading the sceptics that it was a worthwhile endeavour. Subsequently, encouragement and less generous central funding was provided for programmes of audit in the nursing and therapy professions. Why is it that for many audit remains a low priority and for others the original enthusiasm may be diminishing?

Perhaps it is too early for us to expect audit to be a fully integrated component of clinical practice. However, by many it is still seen as an additional burden. The time has come to take stock. The Department of Health has recognised the need for further development of audit in its annual executive letter and recent publication on clinical audit, but these recommendations alone will not create the desired change: we believe that concerted action is needed in several key areas if the audit programme is to continue successfully and achieve its goals (box).

Key factors to be addressed if audit is to progress

| 1 | Attitudes and organisation |
| 2 | Information |
| 3 | Education |
| 4 | Integration with other initiatives – for example, research and development, purchasing |
| 5 | Clinical (multidisciplinary) audit |
| 6 | Research into audit |
| 7 | Priority setting |

Attitudes and organisation

A frequently cited reason for failing to undertake audit is lack of time. The solution is not to identify ringfenced sessions or to undertake audit out of hours – in that way audit will continue to be seen as an activity separate from routine clinical practice. Audit needs to be integrated into daily practice. This requires not only a change of attitude but also enhanced organisation and management skills. The development of clinical directorates offers the opportunity to integrate quality improvement into multidisciplinary clinical and management structures. Furthermore, the incentives to conduct audit must be examined and reassessed if attitudes are to change. Doctors cite lack of time as a reason for not conducting audit, although this is not seen as a barrier to another, similar, activity – namely, research. The skills required are similar, and the time commitment for research is greater. The difference lies not only in the perception of research as a worthwhile and intellectually challenging pursuit but also in the implicit requirement for research papers on the curriculum vitae of doctors applying for senior posts. A well conducted audit with appropriate methods and analysis would be equally intellectually demanding, as well as supporting local improvement in the quality of patient care. As yet, however, the professional status of audit remains lower than that of research, although it could be argued that there are increasing opportunities to publish audit studies, particularly when the method or the standards or guidelines developed are generalisable (in contrast to research, where the major concern lies with the generalisability of the results). Indeed, any literature search discloses many publications indexed on the terms of medical or nursing audit or including audit in the title or abstract. For other clinical professions publication may be of less concern, although a recognition that audit is a legitimate part of the professional role is still required.
Perceptions of the value and role of audit support staff must also change. Such staff are undervalued and underused. Their rapidly developing skills and greater availability should allow a genuine partnership with clinicians, provided that they are appointed at the appropriate level and given appropriate responsibility and respect. Training for support staff to develop the necessary skills – for example, computing, statistics, and designing pro formas or questionnaires – is a vital investment before this partnership can flourish. 14 Although the responsibility for quality must remain with clinicians, particularly clinicians as managers, 15 16 audit staff should be regarded more as able contributors than merely as support. This will happen only if such staff are appointed to the right grade of post and given appropriate responsibility and respect.

Information
As the NHS information strategy 17 develops, ready access to the data required for audit must remain a central concern. If developed with adequate clinical input the information strategy offers a chance to enhance considerably the data available for audit.

Furthermore, there is a parallel need for information on audit itself, at all levels of the service. The Department of Health must account for the considerable expenditure on audit and will require some measures of activity and progress. 18 These measures should develop in collaboration with the professions so that they are seen as meaningful.

Clinically, information is needed on audit methods, projects, and guidelines. For example, if an orthopaedic team wishes to audit the quality of its total hip replacements it should be able to identify examples of similar audits undertaken elsewhere, as well as any relevant guidelines or standards. For this to occur information on audit activity and examples of good practice need to be accessible. It should be possible to integrate central needs for surveillance with local needs for networking and information exchange. Furthermore, the annual reports produced by audit committees, which are increasingly available to managers and purchasers, must include examples of audit demonstrably leading to change in practice and improvement in patient care.

Education
Although effective audit is being undertaken, too much current audit activity is methodologically limited in that it fails to set explicit standards or use available guidelines or to ensure that the standards and guidelines used are based on evidence. 19 Too many audit meetings are unstructured, and too many projects examine data but fail to generate progress around the audit cycle. Too many audit studies ignore the importance of change management, and too many concentrate on individual cases ("deaths and disaster" meetings) and fail to consider patients as populations, hence limiting ability to undertake criterion based audit 20 and thus to show change over time. This is not to say that other audit methods are not valid, but they should be regarded as complementary to criterion based audit with its inherent methodological strengths. 13 21

Many of these deficiencies require educational intervention. For example, effective audit requires a fundamentally different perspective on patients in order to regard them as populations as well as individuals. The central focus of clinicians is, rightly, the patient, each patient being considered as an individual. Audit, however, also demands an understanding of the effects of care on populations of patients. Clinicians need to be epidemiologically literate to support appropriate and effective audit. Further education is therefore needed in the theory and skills of clinical epidemiology as well as in audit methods. 22

Furthermore, audit will continue to be regarded as a burden additional to normal clinical work if it is introduced to clinicians only after they have qualified. Recent surveys of medical schools have shown that only a few include audit in the undergraduate curriculum; it is therefore not surprising that its legitimacy as part of clinical practice is questioned by recent medical graduates. 23 24 Medical undergraduates should be introduced early to the concepts and methods of audit. Undergraduate curricula are, in line with the recommendations of the General Medical Council, developing their public health and epidemiological components. 25 It is also important that skills in audit and quality assurance are emphasised. The same is true of postgraduate and continuing medical education, with the royal colleges and government recognising the need for review. 26 28 Skills in audit, quality assurance, and management have a recognised position in the development of more formal systems of continuing professional development presently being explored by the medical royal colleges. 26 27

These skills are relevant not only to medical training but to the education, training, and continuing professional development of other clinicians (nurses, therapists, etc) and of health service managers. This need to meet the demands of the rapidly developing evaluative culture of the NHS is an increasing challenge to providers in managing their responsibilities for basic and continuing clinical education. Indeed, this is a subject where multidisciplinary learning could be usefully developed.

Integration with other initiatives
Another issue concerns the integration of audit not only into provider clinical practice but also within the wider NHS reforms. Although ringfenced funding has been a necessary component in developing audit programmes to date, it has slowed the integration of audit within the reformed NHS. In the new NHS, audit will have to show that it can survive in...
the marketplace if it is to gain and retain credibility with clinicians. How is the quality of purchased work to be assured? Is there a 2% “quality premium” that will be added to the bill to underwrite audit activity, or will purchasers dictate that clinical practice concurs with one of the increasing library of clinical guidelines?29 Those committed to audit as a means of improving the quality of the care they provide must work to persuade not only their clinical colleagues of its importance but also their customers.

Purchaser-provider interaction is potentially both a saviour of and a threat to audit. If misapplied, involvement of purchasers could lead to a decline in audit. If both purchasers and providers can establish mature and informed communication then the future of audit can be assured. Recently, the Department of Health provided sound guidance on the purchaser-provider interaction and audit.30 It recognised that purchasers have a legitimate role in identifying priorities for audit, but the key is the relationship that develops locally. The intermediate tier should have a central role in promoting and guiding the purchaser-provider interaction on audit and on wider quality improvement towards a cooperative rather than an adversarial or prescriptive relationship.31

The links between audit and the national and regional research and development strategies require further development. Research and development and audit are mutually supportive. The methods and the skills needed overlap.32 33 Audit supports the implementation of research based evidence and evaluation of its impact in routine practice. There is a risk that audit will become engulfed by research and development: it will require vision on the part of research directors and audit leaders to see that further development is mutually and sympathetically supportive and not a struggle for the higher ground.

A link that exists to support this relationship is the burgeoning interest in evidence based guidelines.34-38 Research provides the evidence with which clinical policy is developed. On the one hand, one of the concerns expressed about audit has been the tendency for standards or guidelines to be developed with limited reference to published research, thus limiting their credibility and undermining the potential for appropriate change in practice. On the other hand, guidelines informed by research knowledge can act as the reference point for appropriate standards to be developed and applied in the setting of audit, with subsequent identification of further research priorities (figure). Proctor succinctly summarised this sequential relationship,32 and the Department of Health has recently developed a national initiative to promote guidelines and purchasing, albeit not without its critics.39

Multidisciplinary audit
Patient care is multidisciplinary, and much audit should be multidisciplinary clinical audit. Instances in which unidisciplinary audit and peer review are appropriate will always occur, but audit in the context of multidisciplinary teams enhances the potential for communication and for effective change. Interdisciplinary audit projects enhance teamwork, which in turn is likely to improve quality of care in other ways and to encourage further multidisciplinary audit. Ways to enhance audit and teamwork have been described previously,40 and there is ample reward for teams willing to renounce professional barriers on their way to improved patient care. This implies that there is a need to reorient unprofessional audit structures to facilitate the move towards clinical (multidisciplinary) audit. Although the creation of new committees and the dissolution of old ones may seem tedious, it is hard to see how the unprofessional organisation can effectively support the evolving programme.

Research into audit
The importance of applying good research evidence to clinical activities is increasingly recognised within the NHS.39 Audit can be regarded as an effective means of translating research into practice. There is no doubt that audit can improve patient care. Many studies are able to show a relation between audit and improved processes of care.41 42 As yet, a smaller number provide evidence that audit influences outcome.43 44 Research findings to date, however, do not satisfactorily show that time spent undertaking audit in routine practice could not have been more usefully spent on patient care. Indeed, several studies have suggested that audit lacks impact or has limited impact.18 19 45 This may, however, reflect the inappropriate application of audit methods rather than an inherent ineffective-ness of audit itself. We need to interpret such studies with care, or we may dismiss an effective technology because it is being ineffectively applied. The views of audit cynics could become a self fulfilling prophecy: lack of confidence in audit will lead to lack of enthusiasm.
and will almost certainly limit the potential of audit.

Alternatively, by applying the most effective methods in the appropriate setting we can maximise the potential of audit to improve quality of care for patients. Although studies are being conducted to try to describe successful audit programmes, more research is required of appropriate methods of audit and of factors that influence the effectiveness and cost-effectiveness of audit in routine practice.

Setting priorities

For audit programmes to be most effective, it is crucial that audit addresses appropriate priorities. Several approaches to setting priorities have been suggested, including, for instance, the selection of topics of high variation, high cost, high volume, and on which consensus is available or likely. Audit must, however, be integrated into local and national service priorities and needs. To date, the means of setting priorities and choosing topics for audit have been variable from site to site. In some cases audit has been driven by clearly specified objectives of an organisation or specialty; in others clinical interest or skill has been a more important influence.

Focused audit, relevant to organisational priorities, and to service and patient needs, is more likely to occur when purchasers have a greater say in audit (for example, in emphasising priorities in the Health of the Nation); when audit is multidisciplinary; when audit is planned in the context of an organisation’s expressed priorities (for example, built into the business planning cycle); and when the results of audit are seen to influence decision making and service development.

Conclusions

We are concerned that audit is at risk of losing its impetus and direction. Funding of a programme without widespread support can cause resentment when alternative needs in the health service are so apparent. There are, however, possible actions to overcome present problems. Addressing one or two of them alone will be insufficient: without education in audit methods and associated skills clinicians cannot perform audit; without the demonstrated value of audit they will not want to do so; without information they will not be able to do so, and without integration with other initiatives audit will remain marginalised. The box summarises our views of the key areas where action is required to support the further development of an effective audit programme. We believe that a concerted effort is required at all levels among those commissioning and applying audit, from the Department of Health to individual clinicians.

All of this takes time, commitment, and enthusiasm. Let us not abandon a worthwhile initiative too soon in its development phase for the wrong reasons or we risk letting down future generations of health service staff and patients.

Suggested actions

**Attitudes and organisation**

- Enhance the status of audit
- Better use, integration and development of audit support staff
- Base audit/quality improvement within clinical directorates
- Integrate audit into routine practice
- Ensure appropriate participation of management
- Review audit committee structures and roles

**Information**

- Integrate audit and quality into local and national information strategy
- Develop databases of audit activity and progress and of guidelines
- Encourage use of these databases
- Communicate/publish examples of effective audit methods and projects and of evidence based guidelines and standards

**Education**

- Develop structured basic and continuing educational programmes for clinicians in audit methods, change management, clinical epidemiology
- Enhance audit and quality in undergraduate medical and professional education
- Include audit in education and training of health service managers
- Develop multidisciplinary education and training

**Integration with other initiatives**

- Address audit cooperatively between purchasers and providers
- Integrate research and development and audit programmes at all levels
- Ensure that audit is centred on evidence based standards and guidelines

**Multidisciplinary audit**

- Move towards multidisciplinary interprofessional audit

**Research**

- Fund and stimulate more health services research into the effectiveness of audit and its alternatives

**Setting priorities**

- Ensure audit is influenced by national and local service priorities
- Ensure the results of audit inform service development
- Negotiate programmes and projects between purchaser and provider with inclusion in contracts
- Integrate audit into business planning and contracting cycles

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44 Hancock BD. Audit of major colorectal and biliary surgery to reduce rates of wound infection. BMJ 1990;301:911–2.