Developing effective clinical audit

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Clinical audit received a mixed press when it was formalized as part of the health-care reforms in the early 1990s, and has continued to mixed reviews ever since. However, the latest governmental stipulations on clinical governance envisage a revitalized role for clinical audit. This paper advises on avoiding some of the pitfalls that await the unwary in developing effective clinical audit projects.

INTRODUCTION

Clinical audit has its roots in professional self-examination dating back to the early years of this century and beyond — even to the work of Florence Nightingale in the 19th century (Crombie et al, 1993). However, it was not until the early 1990s that audit came of age, being included as a prominent part of the Thatcher inspired health-care reforms (Department of Health, 1989).

The latest 1998 white paper has reaffirmed the importance of effective clinical audit (Baker, 1998; Secretary of State for Health, 1998) and the demands of clinical governance should ensure renewed effort being devoted to the critical examination of the quality of local health-care delivery.

Even from its inception clinical audit has had its critics (Maynard, 1991; Miles et al, 1996). More recent critiques have called for a refocusing of effort to ensure that audit delivers real quality improvements (Hopkins, 1996). This short article addresses some of the key issues in the design and execution of audit studies, and advises on some of the steps to be taken to increase the likelihood of change flowing from audit projects.

PROFESSIONAL BUY-IN

Clinical audit often makes considerable demands on health-care professionals over and above their clinical commitments. Any increase in workload needs to be accompanied by benefits perceived as commensurate. For health professionals, the benefits arising from audit are many and diverse (Robinson, 1996).

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Benefits of audit

The most obvious benefits include improvements in service delivery and insights into clinical practice, but other valued effects include enhanced professional standing, better communication with colleagues, improved knowledge and work satisfaction, publication opportunities or even promotion. Securing professional commitment to any audit project may be aided by paying attention to this broad range of professional pay-offs.

Of course, not all health-care professionals are well disposed toward audit: many see it as boring, burdensome, time wasting and a distraction from patient care (Greenhalgh, 1992; Smith et al, 1992). Identifying and addressing such concerns is a crucial early task for those developing audit initiatives.

Group writing

Although many individuals do carry out valuable audit projects, such single-handed projects can be unduly onerous and run the risk that a lack of multiple perspectives may lead to inadequate critical reflection. Developing projects in small groups has much to commend it, but brings in train the problems of increased complexity, coordination and (at times) problematic group dynamics.

Multiprofessional projects in particular are at risk of fragmentation and disintegration. The size and composition of audit project groups should, therefore, reflect the need for balance between including all the key players and maintaining the flexibility and dynamism seen in small groups.

In particular, uniprofessional projects, unfairly decried by some funders and commentators, may allow those with limited time and resources to sidestep some of the difficulties experienced by multiprofessional studies.

CLARITY AND FOCUS

Many audit projects lack a clear purpose. Data on clinical practice are frequently interesting, and may be valued by clinical staff for a variety of reasons, but nonetheless can be ineffectual in securing change. It is the need to identify and implement changes in clinical practice which should lie at the heart of audit (Smith, 1990) — and other demands made of audit data should be subordinate to this overriding objective.

Research shows that would-be auditors frequently struggle to 'close the loop' in the audit cycle (Mitchell and Fowkes, 1985; Mugford et al, 1991). A natural tendency is to think of data first and then speculate on how such data could be used (Crombie and Davies, 1991). A more disciplined approach begins with service change in mind and then examines the nature of the data needed to underpin such change.

EXPLICIT STANDARDS

Defining explicit and objective standards has long been seen as a central part of audit (Fowkes, 1982). However, many projects pay insufficient attention to this stage or even omit it altogether. This may be misplaced: clear thinking about the audit standards (with thorough references to established sources of evidence) may do much to focus audit activity and aim it squarely at practitioner behaviour change or service reorganization.

Avedis Donabedian's classic categorization of audit topics as 'structure' (the resources and facilities available for care), 'process' (the activities of care) and 'outcome' (the resultant effects on patients) still retains value in clarifying the nature of audit standards (Donabedian, 1968, 1988). Yet for all the recent emphasis on 'health outcomes', many local audit projects may be better served by focusing on the process dimension.

Health outcomes by themselves can be difficult to collect and interpret (Davies and Crombie, 1997), and are insensitive to substandard practice (Mant and Hicks, 1995). Process measures in contrast are more readily collected analysed and interpreted, and can direct attention at the core features of medical practice which need to be altered (Crombie and Davies, 1998). Crucially, however, the advantages of process measures over outcomes are only seen when there is good research evidence to support the beneficial impact of those processes on important health status variables (Davies and Crombie, 1995).

PHASED DATA COLLECTION

A second approach to focusing audit projects is to approach data collection in a phased manner and, initially at least, to pare back the amount of data collected to a bare minimum. In essence, audit seeks answers to a number of linked questions: is there a deficiency in current health-care delivery? If so, why are things going wrong and what can be done to remedy matters? The data needed to answer these questions are as distinct as the questions themselves (Crombie and Davies, 1993).

The first question lends itself to quantitative analysis of the patterns of care among substantial representative groups of patients (for example, analysis of the proportion of patients investigated and treated in a timely and appropriate manner). In contrast, the latter questions — answers to which are needed if effective change strategies are to be designed — may focus on in-depth qualitative analysis of a few cases to explore the underlying reasons for sub-standard care.

Such an approach requires very different data collection strategies for the various stages of investigation. However, too many audit projects conflate the two phases, collecting too much detailed clinical data from the outset, overloading projects so that they collapse under their own weight. Others neglect the latter phases altogether, leading to poorly thought-out change strategies ill targeted at the underlying deficiencies (Johnston et al, 1999).

PROBLEM SOLVING

That good audits are problem solving in intent can be forgotten in the rush to collect interesting data. However, audit data do not have to be watertight or generalizable to still prove useful. Audit is not research, which seeks to persuade others; audit is concerned with solving problems and bringing about local service change. As such, audit data need to be persuasive at a local level, clearly aimed at highlighting, unravelling and improving deficiencies in local service delivery. Thus imaginative audits may embrace mixed approaches on relatively small numbers of patients: quantitative analysis, qualitative study and even anecdote can all contribute to such problem solving.

In order to achieve the primary goal of audit — effecting improvements in clinical practice — a key requirement is a clear understanding of the underlying problem (Crombie and Davies, 1993). Inadequate or incomplete understanding of this may lead to mis-targeted remedies. For example, many audit projects assume that clinical practice fails because of inadequate professional knowledge or ignorance of the failings. The solutions then sought usually embrace educational initiatives, guidelines and the feedback of comparative performance data. However, frequently the problems lie elsewhere: in lack of time, lack of resources, or patient pressure for example. In these cases, the feedback will be misdirected and the impacts are likely to be few (Mugford et al, 1991; Bero et al, 1998).

DRIVING CHANGE

Accurate problem identification is only the start of developing effective change strategies. Managing change is a complex and uncertain process, requiring attention to the many human factors that will either impede or facilitate change (Thornhill et al, 1999):

1. Changes need to be introduced with tact and sensitivity: audit can often imply a criticism of past practice that may be very threatening to established professionals
2. There needs to be broad agreement within the clinical team about the need for change, the nature of that change, and the specific requirements that will bring such change about
3. Some thought needs to be given to the potential resource implications and knock-on effects of change — otherwise losers in the system (or those who perceive themselves as such) may consciously or otherwise undermine the change strategy.

TECHNICAL SUPPORT

Effective audits that tackle clinically worthwhile problems can pose significant difficulties during design, data collection and analysis. To experienced researchers, issues arising during data collection and analysis — such as questionnaire design, sample size and statistical inference — are familiar problems with well-recognized solutions.

As the infrastructure supporting clinical audit and clinical effectiveness ini-

tiatives is strengthened, making use of this to ensure effective audits is only sensible. In particular, experienced audit facilitators may be able to offer much guidance and practical support.

CONCLUSIONS

For all the interest and money thrown at audit, results to date have been largely equivocal or even disappointing. Many projects have failed to deliver significant change to clinical practice — being long on ambition, short on resources and expertise, and diffuse in design. This does not mean that such projects are without value. Health-care professionals report many and varied benefits from participation in audit projects even when no changes in clinical practice result (Robinson, 1996).

That audit has to date been limited in impact is perhaps unsurprising given the generally unstructured and ad hoc manner of its introduction. Wringing information from data is no simple matter, and changing health-care delivery in the face of many forces of inertia is harder still. The experience of the 1990s has affirmed that such activities require skill and care, and frequently demand competencies from health-care professionals that they lack. Experience from the USA shows a similar pattern of limited effectiveness from continuous quality improvement activities (Shortell et al, 1998).

Nonetheless, checklists and texts are available to support health-care professionals as they develop audit projects (Bhopal and Thomson, 1991; Crombie and Davies, 1992). Thus, before the baby is dispatched with the bath water, properly resourced, well-focused and competent change projects built around the audit cycle should be given a chance to succeed. This will only happen when health-care professionals develop the skills and secure the support (financial, practical and attitudinal) needed for continuous service examination and change. HM

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KEY POINTS

- Revitalized clinical audit will be an essential plank of clinical governance plans.
- Audits often fail because of insufficient attention to the underlying precepts.
- Effective audits are focused on delivering real service improvements.
- Explicit standards can help focus audit activity.
- Audit needs to move beyond describing potential clinical deficiencies and should emphasize identifying the reasons for these deficiencies and designing suitable remedies.
- Uncovering the underlying reasons for care failings may require imaginative and diverse data collection.
- Change strategies need to bring all the care team on board and should pay attention to the potential for change to be undermined.