Clinical guidelines

Using clinical guidelines

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This is the last in a series of four articles on issues in the development and use of clinical guidelines

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In this series we have discussed the advantages and disadvantages of clinical guidelines, methods of guideline development, and the legal, political, and emotional aspects of guidelines. Assuming that the overriding purpose of clinical guidelines is to improve the quality of care for patients, in this final article we discuss how healthcare organisations (hospitals, general practices, etc) and individual clinicians can use clinical guidelines to improve clinical effectiveness.

The development of good guidelines does not ensure their use in practice. Systematic reviews of strategies for changing professional behaviour show that relatively passive methods of disseminating and implementing guidelines—by publication in professional journals or mailing to targeted healthcare professionals—rarely lead to changes in professional behaviour.[1 2] Lomas observed that the failure of passive dissemination strategies is unsurprising given that many factors influence healthcare professionals' behaviour,[3] and this has led to increased recognition of factors that help or hinder implementation at various levels: the organisation, peer group, and individual clinician. Therefore, to maximise the likelihood of a clinical guideline being used we need coherent dissemination and implementation strategies to capitalise on known positive factors and to deal with obstacles to implementation that have already been identified.

Summary points

The implementation of clinical guidelines within a clinical governance setting requires time, enthusiasm, and resources

Local groups should adopt pre-existing valid guidelines

Implementation activity should draw on the available evidence

Clinical guidelines can also be used within continuing medical education or to answer specific clinical questions

Using clinical guidelines within healthcare organisations

In the same way as topics for guideline development need to be prioritised,[4] organisations need a process by which they can set and pursue their clinical priorities. These can reflect national priorities or can be set at a local level by health authorities, trusts, primary care groups, or individual general practices. Whatever the level at which priorities are set, explicit criteria can help guide a rational choice. Criteria for prioritising clinical topics usually reflect considerations such as avoidable morbidity and mortality, inappropriate variation in performance, and expenditure on health services.[5] Such criteria then inform questions such as, "Is there a problem in healthcare provision or in health outcomes (informed by the availability of audit data), and are there guidelines that cover this problem?"

When clinical guidelines to improve patient care are introduced, several characteristics of the organisation will be important. An organisation that can adapt to frequent change will offer different barriers and facilitators than will one that is oriented towards maintaining the status quo. At the simplest level, the size and complexity of the organisation will affect the feasibility of different strategies. Strategies for a primary care group or a single general practice may be inappropriate in a large acute trust. For example, a strategy that involves face to face contact between a guidelines facilitator and all clinicians may be realistic for general practices but more difficult, if not impossible, within a large acute trust.

The introduction of clinical guidelines requires resources. These include the costs of producing the guidelines—but this is dwarfed by the time of the appropriately skilled and experienced people who will disseminate and implement them. The skills needed at an organisational level are: knowledge of the theoretical basis of behaviour change among healthcare professionals and the empirical evidence about the effectiveness of different dissemination and implementation strategies[2]; good interpersonal skills; and knowledge of methods of guideline development and appraisal. Specific skills for monitoring the use of guidelines—data processing skills for audit and feedback data or data collection skills for non-routine clinical data—may also be needed.

Finding valid guidelines to use

Most healthcare organisations do not have the resources and skills to develop valid guidelines from scratch.[4 6] They should try to identify previously developed rigorous guidelines and adapt these for local use.[6]

Identifying published clinical guidelines is problematic. Many guidelines are not indexed in the commonly available bibliographic databases. Some clinical guidelines are catalogued on the internet (box), and such sites may become the best source for identifying guidelines. An increasing number include full text versions or abstracts.

If organisations cannot find published valid guidelines relevant to their identified priorities they can amend their priorities or develop a guideline themselves. If they decide to develop a guideline, they should use as rigorous a method as possible within the resources available[4] and be explicit about the method of development and its potential limitations. The increasing availability of high quality systematic reviews in the Cochrane database of systematic reviews

and the Cochrane controlled trials register (both available in the *Cochrane Library*[7]) makes this task slightly less daunting than previously.

Identifying guidelines

Search terms for common bibliographic databases:

Medline and Healthstar—"guideline" (publication type) and "consensus development conference" (publication type). Healthstar includes journals not referenced in Medline and grey literature such as AHCPR guidelines

CINAHL—"practice guidelines" (publication type). Includes full text version of some guidelines, including AHCPR guidelines

EMBASE—"practice guidelines" (subject heading). This is used for articles about guidelines and for those that contain practice guidelines; the term was introduced in 1994

Useful websites:

Agency for Health Care Policy and Research guidelines—full text versions of guidelines, quick reference guides, and versions for patients can be downloaded from http://text.nlm.nih.gov/ftrs/dbaccess/ahcpr or ordered from the AHCPR website (http://www.ahcpr.gov/cgi-bin/gilssrch.pl)

Canadian Medical Association Clinical Practice Guidelines Infobase—index of clinical practice guidelines includes downloadable full text versions or abstracts for most guidelines (http://www.cma.ca/cpgs/)

Scottish Intercollegiate Guidelines Network—full text versions of guidelines and quick reference guides (http://pc47.cee.hw.ac.uk/sign/home.htm)

Appraising guidelines

When an organisation has identified relevant guidelines, it should appraise their validity before deciding whether to adopt their recommendations.[8] Adopting recommendations from guidelines of questionable validity may lead to harm to patients or waste of resources on ineffective interventions.[9] Within the United Kingdom, appraising the validity of existing guidelines will be facilitated by the recently established NHS Appraisal Centre for Clinical Guidelines and by the establishment of guideline development programmes which use rigorous methods and include formal appraisal within the programmes—for example, the Scottish Intercollegiate Guidelines Network[10] and the work proposed under the auspices of the National Institute for Clinical Excellence in England and Wales.

If appraised guidelines are not available from these sources, organisations should undertake their own appraisal. Cluzeau and colleagues have developed and validated a critical appraisal tool for guidelines in Britain,[8] and other appraisal criteria are available.[11] Healthcare organisations should consider only those guidelines that include a methods section within the guideline or supporting papers.[12 13] Although this filter would exclude most current British guidelines, without such information it is impossible to appraise the validity of guidelines and have confidence in a guideline's recommendations.

Adapting valid guidelines

Once a group has identified guidelines of acceptable quality these need to be adapted for use within the local healthcare setting. For most clinical conditions good health care depends on a multidisciplinary team, so guideline implementation should be planned from this perspective. The composition and function of this multidisciplinary group will parallel that of the original guideline development group,[4] but members will not need systematic reviewing and evidence summarising skills. The task of the group is to adapt the guideline and then plan the presentation, use, and evaluation of the guideline within the local setting and its services. Adapting the guideline involves reformatting the recommendations in terms of measurable criteria and targets for quality improvement.[14] Local adaptation groups may want to change recommendations that are based on weak evidence. If recommendations based on good evidence are changed, the reasons for this should be explicitly stated.

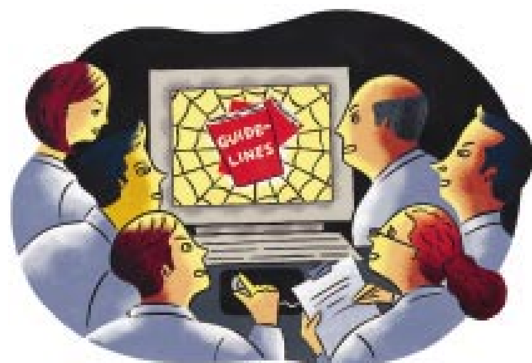
Coherent guideline strategy

Guidelines can be presented as the full version, summary sheets of all or part of the guideline, or reminder sheets in patient records. Prompts such as guideline related logos on mugs, pens, or Post-it pads will overlap with use of the guideline when reminder sheets or computer templates are embedded within the patient record[15] or when the forms used for ordering tests are redesigned to encourage the gathering of appropriate clinical data.

Dissemination and implementation

Since there is no single effective way to ensure the use of guidelines in practice,[16–18] organisations should use multifaceted interventions to disseminate and implement guidelines. The choice of strategies should be informed by available resources, perceived barriers to care, and research evidence about the effectiveness and efficiency of different strategies.[19] The best evidence about effectiveness and efficiency comes from systematic reviews of rigorous evaluations of dissemination and implementation strategies, such as those by the Cochrane Effective Practice and Organisation of Care Group,[2] which undertakes systematic reviews of interventions designed to improve quality of care, including professional interventions (continuing medical education, audit and feedback, reminders, etc), organisational interventions (for example, the expanded role of pharmacists), financial interventions (for example, professional incentives), and regulatory interventions.

Various professional and organisational strategies can be used to overcome different barriers. For example, educational approaches (seminars and workshops)



MARK MCCONNELL

may be useful where barriers relate to healthcare professionals' knowledge. Audit and feedback may be useful when healthcare professionals are unaware of suboptimal practice. Social influence approaches (local consensus processes, educational outreach, opinion leaders, marketing, etc) may be useful when barriers relate to the existing culture, routines, and practices of healthcare professionals. Reminders and patient mediated interventions may be useful when healthcare professionals have problems processing information within consultations. Information about existing barriers can be collected by interviews with individual patients or clinicians, in group interviews, or during direct observation.

The presence of organisational barriers may require specific interventions. For example, in east London, the development of guidelines on dyspepsia in primary care led to general practitioners having direct access to testing for *Helicobacter pylori*.

Evaluation

Evaluation ensures that the process of care reflects guideline recommendations. The data needed for this should be specified at the outset and should be linked to areas of strong evidence within the guideline.[20] Reminder or prompt sheets can be designed to encourage the recording of specific data items.[15 21]

Medical or clinical audit advisory groups for general practice and clinical audit/clinical effectiveness departments in trusts have a key role to play in collecting, analysing, and feeding back these data. Clinical governance—a central concept in a recent policy paper on the health service[22]—will depend on accurate and meaningful data about quality of care. We believe that criteria for clinical governance should be derived, at least in part, from the recommendations framed in evidence based clinical guidelines.

Use of guidelines by clinicians

Outside a formal structure for the implementation of clinical guidelines within an organisation, individual clinicians may use guidelines as an information source for continuing professional education. Valid clinical guidelines provide an overview of the management of a condition or the use of an intervention. They usually have a broader scope than systematic reviews, which tend to focus on an individual problem or intervention. They may also provide a more coherent integrated view on how to manage a condition. Guidelines can also be used as instruments for self assessment or peer review, to learn about gaps in performance. This is particularly relevant when the recommendations have been turned into specific measurable criteria,

Clinicians may also use guidelines to answer specific clinical questions arising out of their day to day practice. A key step is to frame the clinical question of interest in such a way that it can be answered by specifying the patient or problem, the intervention of interest, and possible comparison interventions, and the outcomes of interest (see Sackett et al for a further discussion of this[23]). This allows the clinician to identify what sort of evidence to search for. Under these circumstances clinical guidelines are only one type of relevant evidence—along with systematic reviews, individual trials, and expert advice.

Conclusions

Clinical guidelines are increasingly part of current practice and will become more common over the next decade. Great care needs to be taken both to maximise the validity of guidelines and to ensure their use within clinical practice. The latter requires adaptation for a local setting and tailoring evidence based implementation strategies to local factors. However, guidelines will not address all the uncertainties of current clinical practice and should be seen as only one strategy that can help improve the quality of care that patients receive.

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