Clinical guidelines and their implementation

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Summary

Within the UK there has been increasing interest in the development and implementation of guidelines, as the emphasis on clinical effectiveness is gathering momentum. This paper outlines some of the practical issues encountered in developing and implementing guidelines, based on experiences within Liverpool. Developing local guidelines can be a lengthy process, but that process is not a waste of time if it means there is more likely to be compliance in the end. Dissemination of guidelines alone is not enough; it needs to be combined with an appropriate implementation strategy. There is a danger of primary care being overloaded with new guidelines; there needs to be a timed strategy for their introduction. More imaginative thought needs to be put into the marketing of new ideas in order to change practice. We need to encourage the ethos amongst healthcare professionals of expecting to have to constantly update knowledge and practice.

Keywords: clinical guidelines, primary healthcare, audit

One of the priorities of the National Health Service (NHS) is to move towards an improvement in the effectiveness of clinical services. The principle behind this was clearly set out by Cochrane¹ in 1972: because resources will always be limited, they should be used to provide equitably those forms of healthcare which have been shown in properly designed evaluations to be effective.

Even though the ideas behind effective healthcare have been widely accepted for over 20 years, progress in achieving change in this direction has been slow. However, it seems to be gathering momentum in the UK at the moment, and a great deal of work is going on in this area.

One of the strategies for improving clinical effectiveness has been the development of national guidelines which have professional body support and which take account of research evidence of best clinically effective practice.² The NHS Executive has recommended a number of guidelines for implementation into clinical care³ and are working to recommend others in the future. The production of a national guideline is very much the beginning of a strategy for implementing clinically effective care. A guideline by itself is quite a blunt instrument for change, with a number of limitations.⁴ The challenge is to develop creative methods of changing practice in the field of everyday healthcare.

Most healthcare takes place out in the community, that is, in primary care. It is here that the most impact will be achieved by improving the effectiveness of clinical services, and it is here that we need the most creativity. This paper sets out some of the issues clinical colleagues may wish to consider before being involved in the writing and implementation of guidelines; it is based on experience within Liverpool in England.

Approaches to implementing guidelines

There are three stages to the introduction of guidelines⁵: development, dissemination and implementation strategy.

DEVELOPMENT

Research has shown that there is much greater compliance with guidelines if they are developed internally by the people who are going to use them.⁶ However, internal guidelines are less likely to be scientifically valid than external guidelines⁷ because local groups may lack the clinical, managerial and technical skills to produce guidelines. Local guidelines are also very resource-intensive and time-consuming: as an example, the Liverpool diabetes shared-care guidelines have taken two years to produce. This is simply because communication with a large number of 'experts' takes time, and so does the agreement on wording and format. However, the process of agreeing the content of the guidelines (see box 1) has itself been useful in increasing awareness amongst primary care professionals of the standards of care that are required.

As more nationally developed guidelines become available, it should increasingly be possible simply to modify these locally to reflect context and resources, giving the benefits of local ownership alongside the assurance of scientific validity.⁸

DISSEMINATION

There are various methods used for disseminating guidelines. These include posting items to relevant groups, holding seminars to launch them, and incorporating them within continuing medical education. In general, Grimshaw and Russell⁵ found that the more overtly educational the dissemination strategy, the greater the likelihood that the guidelines would be adopted within clinical practice. But dissemination needs to be associated with an appropriate implementation strategy to be effective. Too often, dissemination is thought to be all that is needed to effect implementation, but in practice dissemination has a limited effect on its own. For example, Forrest and Green⁹ showed that six

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The process of developing shared-care guidelines for diabetes in Liverpool	
1991–93:	18 family doctors and 4 practice nurses involved in a city-wide audit of diabetes care
1993–94:	5 family doctors, 3 practice nurses, 2 medical facilitators and 2 consultant diabetologists drew up guidelines. Discussion, drafting, re-drafting and amending the document took the time
1994:	guidelines accepted by relevant committees of family doctors, the medical advisor to the health authority and a consultant in public health
January 1995:	guidelines disseminated

Box 1

Guidelines in primary care
<ul style="list-style-type: none">• involve the primary care team in the development of guidelines• have a timed strategy for introducing guidelines• present guidelines clearly and concisely• use a primary care facilitator to help with implementation of guidelines• use audit as a tool for encouraging implementation

Box 2

months after postal dissemination of coronary heart disease guidelines, they were known to exist by about 40% of general practitioners but only 7% of junior doctors and 14% of practice nurses.

IMPLEMENTATION STRATEGY

Devising strategies for the implementation of guidelines is a newly developing area within the UK, still very much within the field of research and development. Possible methods to help clinicians include providing them with easily accessible reminders of the guidelines (eg, posters, stickers, or easily carried cards), embedding the guidelines in an investigation request form, and using computerised decision-support systems. The method which has been most commonly employed so far in Liverpool has been the clinical audit approach; the guidelines provide the standard against which to audit, and the results are fed back to the clinical team.

Another route to the implementation of guidelines could be through the education of the public. For example, media campaigns could be used for simple messages which are easily understood (eg, giving aspirin for acute myocardial infarction).

In order to achieve maximum effect for implementing guidelines the implementation strategy will need to include a number of different approaches.¹⁰ Different people learn and absorb new information in different ways: there is no set formula that will work for all members of a clinical team.

Practical issues

Work on developing local guidelines and trying to implement national guidelines has been going on in Liverpool over the past two or three years, and this experience has raised a number of practical issues which need consideration.

WORKING WITH PRIMARY CARE

Family doctors are in contact with the full range of clinical conditions. There is a danger that an increasing burden will be placed upon them, as hospital specialists develop more and more guidelines and expect them to be adhered to in primary care. This could lead to the new condition of ‘guideline-itis’ in general practice.

A general practitioner’s normal consultation time ranges between two and ten minutes, this does not give them time to consult detailed documents. Unless the guidelines are easily accessible, and relate to conditions that are commonly seen in primary care, or are perceived as an important issue to primary care, there will not be an incentive for general practitioners to use them. It is important that the whole of the primary care team is made aware of the guidelines that are being used, since much of the work (eg on asthma, diabetes, hypertension, and leg ulcers) is being undertaken by practice nurses, district nurses and health visitors.

Developing local guidelines

It is important to involve members of the primary care team in the *development* of guidelines. This will help to ensure that the guidelines are actually practical to implement in the primary care setting. General practitioners tend to work with *symptoms*⁴ more than specific *diagnoses*; it is important that the guidelines are written in a way that relates to their everyday practice.

Disseminating guidelines

Without careful planning, it is easy to bombard general practitioners with new guidelines. There needs to be a timed strategy, probably aiming at implementing no more than two or three guidelines within any one year. The format of the guidelines needs to be accessible to the primary care team. A thick tome is more likely to gather dust or to be put in the bin than to be read and put into practice.

Implementation strategy

For those guidelines which will make a big impact on practice and patient outcomes (eg, diabetes, asthma) there is value in employing a primary care facilitator who can spend time with the practice team explaining the guidelines and helping with the practical problems of implementing them. In Liverpool, a diabetes nurse facilitator is being employed to help with the implementation of the recently launched diabetes shared-care guidelines. Part of his role will also be to facilitate the audit of the use of the guidelines because specific feedback has been shown to be an effective way of influencing changes in practice.⁵

Some general practitioners will find it a great help to incorporate guidelines into the practice computer system so that they can instantly obtain access to the information at the time of the consultation. Computers can also help in ‘tagging’ patients’ records to remind primary care staff to give treatment according to

Using the audit of guidelines to improve clinical effectiveness

1985: national guidelines published on the prescription of oxygen concentrators for long-term oxygen therapy

1987: audit of adherence to guidelines showed:

- 47% of patients did not fulfill the criteria stipulated
- in only 29% of cases was both the prescription appropriate and the concentrator properly used

1988: results fed back to general practitioners; those prescribing oxygen concentrators were given regular details of their own patients' oxygen use

1991: repeat audit showed:

- increase in use of long-term oxygen therapy (ie, increased awareness)
- improved prescribing habits and patient compliance

Box 3

guidelines. (For example, this method could be used to tag the records of all appropriate patients with coronary heart disease, as a reminder to give them prophylactic aspirin.)

Keeping up the enthusiasm

One problem which can be encountered is 'burn-out' of interest in a particular topic, before reaching the stage of adequate standards of care according to agreed guidelines. For example, a topic may have been audited once, and it is difficult to generate the enthusiasm to re-audit, even though more change needs to take place to improve practice. This is a problem which is being grappled with in Liverpool.

WORKING WITH SPECIALISTS

Specialists have an important role to play both in helping to develop local guidelines and in helping to implement them. The ideal is that specialists are involved in a multidisciplinary team which agrees on the local guidelines (preferably modified from national guidelines) and then one or more of them acts as a 'product champion' to encourage implementation.⁵ In Liverpool this model has worked well so far for both the diabetes and the radiology guidelines.

In contrast, it is very difficult to implement national guidelines if local specialists are resistant to change or if they dispute the research evidence leading to the guidelines. In such circumstances, we have tried to use the tool of audit to develop dialogue on the subject, but it is an uphill road. Some clinicians feel threatened at the thought of sharing how well they are implementing guidelines, rather than seeing audit as a motivating factor for improving the service. What we hope to be able to move towards is a position of greater trust between clinical colleagues in purchaser and provider organisations so that audit information can be used as a basis for clinically led contracting discussions showing the need for more resources if necessary. Arguing from a base of measured clinical quality and outcomes should be more successful than purely citing more cases treated. Perhaps the audit process needs to be more clearly separated from the results of audit needed for negotiations between purchasers and providers.

An example of using audit to achieve improved practice in Liverpool is in the audit of national guidelines on the prescription of long-term oxygen therapy,¹¹ summarised in box 3. Although in this case secondary care was used to audit primary care, at least the results were fed back to primary care to achieve a change in practice. More and more we are becoming aware of the need for ownership of audits by those undertaking the work on the ground.

CONTRACTING

The implementation of guidelines needs to be clearly thought out and embedded in the contracting process. It is very easy to plunge headlong into developing and implementing guidelines and then gradually realise all the implications. For example, thought needs to be given to costs; the costs of the guidelines themselves and of any consequential effects on other budgets. This may be manageable because the costs are low or there are benefits elsewhere, but in some situations the costs pose dilemmas for policy-makers, especially if they have not been anticipated.

Another problem is conflict between different demands being made on providers of care. For example, the guidelines for the management of depression in primary care could lead to an increase in prescribing of antidepressants at a time when there is pressure to hold back costs within the prescribing budget. Such guidelines need to be costed and estimates made to allow for change in practice, otherwise a disincentive will exist in the system, which will not support good clinical practice.

The annual contracting process does not allow for the key success ingredient – time! Some guidelines need constant reinforcement, marketing and public persuasion. This may make it prudent to have longer than one-year contracts, to enable relationships to develop.

NHS care is now available on contract through the independent sector or in the case of Nursing Homes through Social Services. There is little experience of implementing clinical guidelines in such services, but it is clear that any views on the management of, for example, pressure sores, must incorporate these carers. These small businesses will scrutinise any financial considerations very carefully and the cost-benefit ratio will have to be well argued if there are implications such as the employment of more staff.

The most important message for clinicians and managers alike is that it is important to review practice and evolve contracts and clinical practice alongside each other.

Purchasers and providers of healthcare in the NHS

Purchasers

- District Health Authorities, Family Health Services Authorities
- general practitioner fundholders

Providers

- primary care teams (including general practitioner fundholders as providers of primary healthcare services)
- NHS Trusts (hospital services, community care, mental health care)

} combining as joint commissioners

Box 4

MARKETING

One of the areas which needs much more imaginative work within the Health Service is the marketing of new ideas in order to bring about changes in practice. The drug companies have worked on this for many years, and there is much we can learn from them. More recently, pharmaceutical advisers have started to use some of the tools developed by drug companies, eg, using pharmacy-trained representatives¹² to advise on the prescribing patterns of general practitioners.

Guidelines need to be packaged in different ways for different people. For academic colleagues, it may be adequate to publish them in a respected journal or in a document endorsed by a Royal College or a national advisory group. But such documents may not be read in detail by those whose job does not give time for a lot of reading. For example, junior doctors might find them most usefully presented on 'Filofax' pages, since most carry a 'Filofax' in their white coats. For general practitioners, various different formats could be considered as reminders of the key aspects of the guidelines, eg, wall posters, stickers or laminated sheets. For users of services, guidelines could be incorporated in patient- or parent-held records.

Much of the work which has been undertaken so far has been directed towards the gradual introduction of guidelines into the service, with slow improvement taking place as a result of continuing medical education, seminars, and audits. In some situations, however, it may be better to have a big campaign, well-timed in relation to other activities, during which all relevant means of communication are pushed at the same time. Thus, a launch of the guidelines would be timed alongside a media campaign to educate the public, along with seminars, and the dissemination of literature in various different formats, to suit the different healthcare workers. This would then be followed up with audit, to monitor the implementation of the guidelines. Further research is required on the usefulness of the different approaches.

FLEXIBILITY

Guidelines should not be seen as static documents but as flexible tools, which need to be constantly reassessed and updated.¹³ This can be demonstrated in the format of the guidelines. For example, a loose-leaf document can be much more readily updated than a glossy, expensively produced booklet. We need to support the ethos amongst healthcare professionals of expecting to have to update knowledge and practice constantly; to this end, further ways need to be developed for facilitating that process.

Conclusions

We are very much in the early stages of learning about how to improve clinical effectiveness in the health service. There is still a lot of work to be done to encourage confident dialogue between purchasers and providers about clinical effectiveness. Much innovative work needs to be developed in the area of marketing new ideas with healthcare workers, and presenting information in an acceptable format.

When developing this work, we need to be very sensitive to the numerous demands being made on health professionals, and therefore realistic both in the number of changes that we expect to take on and in the timescales within which we expect those changes.

Learning points

- do not overload the primary care team with guidelines
- it is important to review practice and evolve contracts and clinical practice alongside each other
- be imaginative in the presentation of guidelines
- support the ethos of expecting to have to constantly update knowledge and practice

Box 5

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