Getting guidelines into practice: a literature review

Yana Richens RGN, RM, BSc(Hons), MSc, PhD
BN, MSc, is consultant midwife, Elizabeth Garrett Anderson and Obstetric Hospital, London; Jo Rycroft-Malone RGN, RSCN, BSc(Hons), MSc, is consultant in implementation and change management at the College of Nursing Institute, University College London Hospitals; Richard Thomas PhD, is professor of health service research evaluation and director of the National Institute for Clinical Excellence (NICE); Sue Grimshaw MSc, PhD, is deputy director of the Scottish Intercollegiate Guidelines Network (SIGN); Carol Inns MA, MSc, is research and development fellow, College of Nursing Institute, University College London Hospitals; Anna Raynor BSc, MSc, is research assistant, College of Nursing Institute, University College London Hospitals; Tamara Rose BSc, MSc, is research assistant, College of Nursing Institute, University College London Hospitals. 

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Background

Clinical guidelines have the potential to ensure that a research knowledge base underpins practice. Their development nationally and locally has increased dramatically in recent years. The challenge lies in implementing them. This literature review of implementation strategies for the Royal College of Nursing (RCN) national clinical guidelines (see www.rcn.org.uk/resources/guidelines.php for more information) offers some insight into successful strategies for the Royal College of Nursing (RCN) national clinical guidelines.

Excellence (NICE) and the Scottish Intercollegiate Guidelines Network (SIGN) show the investment in implementing guidelines. It would be naive to suggest that the necessary research base and the potential to ensure that a research knowledge base underpins practice. Their development nationally and locally has increased dramatically in recent years. The challenge lies in implementing them. This literature review of implementation strategies for the Royal College of Nursing (RCN) national clinical guidelines (see www.rcn.org.uk/resources/guidelines.php for more information) offers some insight into successful strategies for the Royal College of Nursing (RCN) national clinical guidelines.

Conclusion

Although strategies can be developed around ideas and strategies require further testing. The evidence base for guideline implementation was conducted to inform the development of implementation strategies. This selective literature review offers some insight into successful implementation strategies. This selective literature review offers some insight into successful implementation strategies. This selective literature review offers some insight into successful implementation strategies.
Whatever intervention is chosen, nurses are in a key position as guideline implementers, and supporting them in this role continues to be an important part of the RCN Quality Improvement Programme. The broad aim of this literature review was to identify the most effective approaches to implementing clinical guidelines in nursing practice.

A search strategy was devised with the assistance of an information scientist and used to search the electronic databases of the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Medline, Embase, PsychINFO and The Cochrane Library. No systematic search for grey literature was conducted but unpublished work known to the authors was used. Non-English language studies were excluded and retrieval of full copies of articles was restricted to 1997 onwards. Articles were reviewed using a data extraction form to enable key issues to be captured. Articles were included if they were systematic reviews, primary research, relevant to guideline implementation specifically—rather than dissemination—and transferable to nursing practice. Where appropriate the findings are also supported by additional theoretical literature.

Characteristics of the studies identified

There were a limited number of studies reporting the implementation of guidelines specifically in nursing practice. Therefore studies that included medical staff and professions allied to medicine—now called allied health professions—were also included. The transferability of findings derived from studies from different disciplines needs to be considered carefully, as Thomas et al. (2004) note: 'There is some evidence that guideline-driven care is effective in changing the process and outcome of care provided by professions allied to medicine. However, caution is needed in generalising findings to other professions and settings.' However, to develop useful and practical solutions, their relevance and applicability are considered within this article.

The findings from a review of the articles are outlined below, and key guideline implementation points are highlighted. A number of overall issues emerged from this analysis:

1. Format and delivery of guideline and guideline recommendations
2. Education and training
3. Change agents
4. Audit
5. Other influencing factors

These were used to structure the following section.

One issue was the notion of guideline and recommendation characteristics and their influence on ease of implementation. This included the preferred features of a guideline, style and layout (for example Anthony and Brooks 2000, Chan et al. 2001, Goering and Wilson 2002, Stone et al. 1999). There is evidence to suggest that the specificity of the recommendations might influence practitioners' decision-making. For example, in a study that examined Dutch GPs' use of guidelines, Grol et al. (1998) found that where recommendations for practice were vague and non-specific, fewer decisions were made using them. Goering and Wilson (2002) found that user-friendly formats tend to be preferred. In this descriptive study, preterm labour guidelines were reworked into an algorithm because this appeared to be a more acceptable format for practitioners. The authors reported that this contributed to its successful implementation.

The preferred characteristic and format of the clinical guideline may vary between different professional groups. This may be influenced by whether the professional group considers the topic to be sub-specialist or generalist, by the type of intervention and the professional group that would implement the change, and by the type of objective for change (e.g. clinical outcomes vs. resource utilization). The variety of objectives in the study may reflect the interplay of different factors, for example, the need for change in healthcare delivery vs. the need for change in patient safety.
...
Raising new staff members' awareness of guidelines in practice.

Support from universities and professional organisations (for example, the royal colleges) could be other issues that need attention.

Education and training may be particularly useful when implementing national guidelines at the local level.

The role of the link nurses in the guideline implementation literature, including facilitators, link nurses and opinion leaders, and educational outreach. There is confusion in the literature about these different roles, what occurs within each, and their respective effectiveness; nevertheless, the following provides a brief outline of each.

Facilitators provide technical, practical, organisational and emotional assistance. For a full review of the role of facilitation in evidence-based practice, see Harvey (2001). This indicates that while education may be an important part of an implementation strategy, there may be other issues that need attention.

Interactive, targeted education interventions may be effective in enabling practice, see Harvey (2001). This is that an opinion leader who works with – rather than to – nurses can be instrumental in the successful implementation of evidence or guidelines in practice. However, the authors report that even after this intervention, some nurses were unable to correctly apply compression bandaging. This suggests that while education may be an important part of an implementation strategy, there may be other issues that need attention.

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The role of change agents seems to be significant in affecting change and implementing new guidelines into practice. Educational outreach can be a resource-intensive strategy, but it can be an effective approach to influencing professional behaviour. However, it is not always clear what local opinion leaders can contribute to influencing practice.

More research is needed to establish whether opinion leaders can be identified and in which circumstances they are likely to influence the practice of individuals in the practice context. Individuals can play both a positive and a negative role in affecting change and implementing new guidelines into practice. Educational outreach visits may be effective in changing behaviour, but it does not have impact on amendments to existing clinical guidelines. Questions about the nature of educational outreach as an intervention and its effect on existing guidelines need to be answered, and clarification of what educational outreach is needs to be achieved.

Clinical audit has previously been used to highlight variations in practice, and it has been proposed that explicit criteria and the implementation of change are needed to improve patient care. Clinical audit seeks to improve patient care and outcomes by systematic review of care against explicit criteria. The review also concludes that it is not always clear what local opinion leaders can do, and replicable descriptions are needed.

A Cochrane review that examined the effects of educational outreach visits and the effects on professional practice and healthcare outcomes concluded that educational outreach interventions related to cardiovascular disease prevention. Over a period of 18 months, six trained nurses—trained outreach visitors, visited 33 family practices, including 68 general practitioners (GPs) and 83 practice nurses, to support them with implementation of guidelines to organise a programme of cardiovascular disease prevention. Results showed that adherence to guidelines increased in 27 of the practices. However, a Cochrane review proposes that educational outreach, while based on professional practice and healthcare outcomes, can be a resource-intensive strategy.
where there is managerial permissiveness and line implementation may be easier in environments example, Harrow successful implementation of guidelines. For a number of contextual factors that might affect Authors have highlighted a contextual issues brought together through the process (for exam- partnership involved in using a guideline should be their role would be akin to that of the change tion, she suggests the use of ‘interface agents’ – potential results in resistance by users during the implementation process. To help make a connec- out that there can be a lack of connection between development because this may influence the chances implementing the proposed guideline in its devel- important of involving professionals who will be of its success (for example, Bradley and Moran oping’. It would seem essential that there is con- assimilate the guideline through ongoing mon- and Eschbach (1999) suggests that ease of mon- are motivated by audit results, because they let line recommendations have been implemented. Rudd et al (2001) describe a national audit of through local adaptation of clinical guidelines. A number of projects have reported successful imple- other influencing factors success has been attributed to local owner- This success has been attributed to local owner- and settings can add great value to the guideline and Morrell (2001) stress that a key factor for successful adoption and assimilation of clinical other studies demonstrate that atten- tion to resource issues also requires consideration to resource issues also requires consideration to resource issues also requires considera- to resource issues also requires considera- to resource issues also requires considera- Local ownership This may be a factor in suc- pursers and users of the practice guidelines. There should be a continuum of voluntary to necessary issues need to be consid- Key organisational issues need to be consid- Key points for clinical audit: enforcement and measurement of the primary out- make guideline adoption an organisation priority. Organisations need specific measures to track improvement. tool for guideline implementation and quality dissemination plan is an effective driving force. For example, Harrow successful implementation of guidelines. For a number of contextual factors that might affect Authors have highlighted a contextual issues brought together through the process (for exam- partnership involved in using a guideline should be their role would be akin to that of the change tion, she suggests the use of ‘interface agents’ – potential results in resistance by users during the implementation process. To help make a connec- out that there can be a lack of connection between development because this may influence the chances implementing the proposed guideline in its devel- important of involving professionals who will be of its success (for example, Bradley and Moran oping’. It would seem essential that there is con- assimilate the guideline through ongoing mon- and Eschbach (1999) suggests that ease of mon- are motivated by audit results, because they let line recommendations have been implemented. Rudd et al (2001) describe a national audit of through local adaptation of clinical guidelines. A number of projects have reported successful imple- other studies demonstrate that atten- tion to resource issues also requires consideration to resource issues also requires considera- Local ownership This may be a factor in suc- pursers and users of the practice guidelines. There should be a continuum of voluntary to necessary issues need to be consid- Key organisational issues need to be consid- Key points for other influencing factors:
The efficiency of guideline dissemination and implementation strategies. A number of authors have acknowledged that it is still plausible that a multifaceted intervention could be more effective than single interventions. Nevertheless, there is a need for clarity in the terminology used, and for researchers to provide firm recommendations concerning what is effective for doctors would have the same effect for nurses. There is a need to identify the role, function and impact of different change agent interventions targeted at the identified barriers.

Box 1. Recommendations for further investigation

1. There is a need for a systematic review of the effectiveness and efficiency of guideline dissemination and implementation strategies.

2. There may be merit in an evaluation of the effects of computerised decision support systems in clinical practice.

3. There is a need for researchers to provide clear definitions in their studies and subsequent articles.

4. There is a need for an evaluation of the effectiveness of different intervention strategies.

5. There is a need for an evaluation of the effectiveness of different intervention strategies in different settings.

6. There is a need for an evaluation of the effectiveness of different intervention strategies in different patient populations.

7. There is a need for an evaluation of the effectiveness of different intervention strategies in different healthcare settings.

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REFERENCES


Having a dedicated 'change agent' who works with and supports individuals, guideline developers should develop recommendations that are clear, specific and relevant to practitioners and practice. This also applies to the local adaptation of national clinical guidelines to local circumstances. The reality of the clinical context is messy and complex, and so any guideline implementation strategy has to deal with this complexity. The evidence into practice. For guideline implementers, this means that although strategies can be developed around some core principles, such as those identified above, as yet there is no single or definitive strategy. Box 1 suggests:

**Implications for practice**

- Guideline implementation plans fit in with the organisation's strategy and resource commitments.
- Implementation teams and organisations in the practice context is likely to help guideline practitioners' knowledge, skills and attitudes about a guideline's recommendations.
- This may be a useful strategy in translating national guidelines to local circumstances.