Improving Clinical Effectiveness through an Evidence-based Approach: Meeting the Challenge for Nursing in the United Kingdom

Kate Gerrish and Jane Clayton

Improving clinical effectiveness is a major challenge currently facing nurses working in the United Kingdom and requires a coordinated approach in order to ensure that the information about which interventions work is made available to those in a position to use it. This means that policy makers, administrators, and nurses need to base decision making on the best available evidence. In this article we explore the background to the drive for evidence-based practice and discuss how a group of nurse researchers have begun working with nurse administrators and practitioners in a large acute hospital to help change the rhetoric of evidence-based practice into reality. Key words: clinical effectiveness, evidence-based practice

SHIFTING the focus onto the quality of care so that excellence is guaranteed to all patients is one of the essential principles guiding the new Labour government’s recently launched proposals for the future direction of the National Health Service (NHS) in Britain. Some 50 years after it was first created, the proposals for a “new NHS” outline a 10-year program of modernization that responds to patients’ aspirations for an up-to-date, responsive service in the twenty-first century. The overall aim is to establish a national health service offering high-quality treatment and care both when and where people need it.

The state-funded NHS forms the mainstay of health care provision in the United Kingdom (U.K.) with a comparatively small independent sector for those who choose to pay. Like any health care system of the modern postindustrial world, it is facing enormous challenges as it seeks to ensure excellence in an era of financial constraint and limited resources. Technological advances in health care, an aging population with increasing health needs, and higher consumer expectations of health care services all serve to put additional strain on an already pressured public service. Improving efficiency and effectiveness, so that every pound spent in the NHS maximizes the quality of patient care, is therefore high on the agenda of purchasers and providers of health care. The concern, however, is not only with cost-effectiveness but also with ensuring clinical excellence through improving quality in its broadest sense. This involves a focus on clinical effect-

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tiveness in order to ensure health care interventions are appropriate and maximize health gain. Clinical effectiveness needs to be measured to establish how well clinical interventions work. Moreover, it is also necessary to demonstrate that such interventions are capable of producing worthwhile health benefits in practice settings as well as controlled research environments. As the government's proposals point out, "It is about doing the right things, at the right time, for the right people, and doing them right the first time."

Improving the clinical effectiveness of services is a major challenge currently facing all those working in the NHS and requires a coordinated approach in order to ensure that the best information about which interventions work is made widely available to those in a position to use it. This means that policymakers, administrators, and practitioners need to base decision making on the best available evidence. The evidence is derived from three key sources: the patient experience, professional judgment and expertise, and research findings. However, it is not just a case of having appropriate research evidence available; that evidence needs to be widely disseminated and used by physicians, nurses, and other members of the health care team in their everyday practice. Change strategies need to operate at both an institutional and an individual level so that the organizational climate and the attitudes and behaviors of individual practitioners are receptive to change. Moreover, both organizations and individuals need to be equipped to handle the process of change necessary to establish effective evidence-based health care. In the light of these challenges affecting the U.K. health care agenda, this article explores the background to the drive for evidence-based practice and then discusses how a small group of nurse researchers have begun working with nurse administrators and practitioners in a large acute hospital to help change the rhetoric of evidence-based practice in nursing into reality.

A Growing Concern: Marrying Efficiency, Effectiveness, and Evidence-based Practice

The current directive to promote evidence-based practice has not occurred in a vacuum; rather it reflects an evolutionary developmental concern with the overall quality of health care services in the U.K. During the 1980s, the health care agenda was firmly embedded in a concern for efficiency and quality improvement. Financial constraints on the NHS exacerbated by an economic recession in the late 1980s created an era in which policy makers and administrators became increasingly cost-conscious and were exhorted by central government to increase efficiency and productivity. The impetus was to reduce costs by ensuring that health care was delivered in the shortest time, in the least expensive location, and at the lowest professional cost while ensuring effectiveness and safety. At the same time, however, there was growing concern about the need to deliver on quality improvement. The trend toward consumerism meant that as patients became better informed about health and health care, their expectations rose. Increasingly patients were asserting their demands for a more accessible, effective, and responsive health care service. Quality initiatives set up to improve service delivery became the order of the day.

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provide a more coordinated approach to research activity and the implementation of research findings.

By integrating closely with the wider health care agenda of effectiveness, efficiency, and quality improvement, the research and development strategy was intended to provide a more coherent approach to supporting evidence-based practice. Nationally agreed research priorities were identified. These have led to large-scale commissioned research in such areas as cancer, cardiovascular disease, primary care, mental health, and the evaluation of new technologies. Additionally, the need to disseminate research findings so that they are more accessible to policy makers, administrators, and practitioners has been recognized. A national Centre for Reviews and Dissemination has been established at the University of York to undertake systematic reviews of the research on which to base recommendations for health care practice. The findings of these reviews are published in the form of “clinical effectiveness bulletins” and distributed widely throughout the NHS.

Making It Happen: Achieving Evidence-based Practice

The increasing focus on enhancing the effectiveness of clinical practice emphasizes the importance of professionals using evidence-based practice as a means of improv-
ing care. This research focus is stressed by von Degenberg, who points out that achieving clinical effectiveness depends on the following precepts:

1. the production of evidence through research and scientific review;
2. the production and dissemination of evidence-based clinical guidelines and pathways;
3. the implementation of evidence-based, cost-effective practice through education and change management;
4. the evaluation of compliance to agreed practice guidance and evaluation of practice outcomes, including audit.

Evidence-based practice is essentially about using the best available evidence to ensure clinically effective and cost-effective treatment of patients, thereby increasing the proportion of clinical care shown by that evidence to be effective. Ideally, the evidence needs to be drawn from systematic research and detailed evaluations of healthcare interventions. However, it is also recognized that clinical expertise and patient preferences have a part to play.

Achieving evidence-based practice is a complex and ambitious undertaking. Appleby and colleagues identify the four main stages involved:

1. There is a need to generate evidence by carrying out clinical and economic evaluations of healthcare interventions. These should be rigorous, large-scale studies, the findings of which are generalizable.
2. Evidence from multiple trials and evaluations needs to be systematically reviewed and brought together in a way that allows conclusions to be drawn and recommendations to be made for practice.
3. The findings from systematic reviews should be disseminated and made available to those with interest or involvement in the area and in a format they can use.
4. The evidence has to be used to change behavior and influence decision making, not just by practitioners but also by administrators and policy makers.

Changing the rhetoric of evidence-based practice into reality is, however, far from straightforward. Each of the above steps presents its own challenges and nurses need to be aware of the pitfalls.

First, there is comparatively little evidence to support the effectiveness of healthcare interventions, especially nursing interventions. Decisions about what treatment to use or care to provide have traditionally been left to practitioners who have drawn on personal experience, established practices, and professional knowledge. There is now growing pressure to ground both clinical and managerial decision making more firmly in scientific evidence.

Therein lies a problem for nursing. The majority of nursing research in the U.K. is small scale, often using limited methods, and tends to be focused on local need. Consequently, the findings from such research may not be generalizable. There is also an issue for nursing research about the current emphasis on evidence-based practice, which uses research findings derived chiefly from randomized controlled clinical trials or other experimental designs to evaluate specific interventions. Some aspects of nursing care, for example therapeutic effects, do not easily lend themselves to these research methods.
Qualitative research studies examining the dynamics of caring are arguably equally important in determining a knowledgebase to inform practice. Moreover, the major focus of the Department of Health’s research agenda has been on addressing medical issues to the neglect of the broader health care services of which nursing is part. While this is primarily a result of medicine’s long-standing domination of health care research, it is also a reflection of nursing’s failure in the past to define its own clear research agenda. The urgency of such work is paramount if nursing in the U.K. is not to lose out.

Second, the actual process of systematically reviewing research on a particular topic is an extremely time-consuming process and requires considerable knowledge of research methods and statistical analysis together with sophisticated appraisal skills, many of which are currently beyond the repertoire of the majority of nurse administrators and practitioners. While at a national level the Department of Health’s Centre for Reviews and Dissemination is undertaking this work, its output is limited in relation to the numerous potential areas of clinical relevance. Moreover, not all reviews of research provide definitive recommendations for practice. For example, a recent extensive review of the prevention of decubitus ulcers highlighted the lack of conclusive evidence about the most effective pressure-relieving devices. Nursing research varies enormously in terms of its quality, and not all published research may have been carried out sufficiently rigorously. There is also the problem of how appropriate some evidence is with reference to a particular patient or patient group. The evidence from much large-scale research is based on a carefully selected and well-defined population whose characteristics may differ from those patients the practitioner has contact with. For example, most clinical trials exclude co-morbidity, yet nurses rarely care for patients who have only one thing wrong with them.

Third, the process of dissemination is far from straightforward. In a recent evaluation of the progress made with the evidence-based practice agenda, Walshe and Ham observed that despite information on systematic reviews of research being circulated to all NHS hospitals, there was limited proof that it had infiltrated the organization. Senior administrators were unsure how to use the “evidence” to inform local policy development, and administrators and practitioners at grass roots level were often not aware of its existence. Moreover, effective dissemination requires adequate information retrieval and library services; not all hospitals had these resources readily available on site.

Finally, the process whereby evidence influences decision making and changes behavior is complex and requires both an organizational and an individual response. At an organizational level, adopting an evidence-based approach necessitates a significant change in culture, which can only happen if those individuals who lead health care organizations appreciate the importance of knowing about effectiveness and incorporate that information into their own actions and decision making. A commitment to evidence-based practice needs to be incorporated into policy directives. Although it may be supported through specific projects, it has to become an integral part of the ongoing dialogue between administrators and practitioners. Nursing has a poor track record for getting evidence into practice, in part because of
organizational structures that work against it. Moreover, evidence-based practice makes the individual practitioner increasingly accountable for his or her own actions. On the one hand this can be viewed positively; however, unless nurses receive appropriate support and are empowered to take forward evidence-based practice, it can place them in an invidious position of being responsible for issues that are beyond their control. Nurse administrators therefore have a crucial role to play in facilitating the development of evidence-based practice by maximizing the responsiveness of the organization to change and facilitating the empowerment of nurses.

It is also important to recognize the different influences that research has on policy and practice. The evidence-based approach assumes that research findings can be directly applied to health care problems, but the influence of research is often less direct. In contrast to the assumptions underpinning the evidence-based initiative, an enlightenment model of research utilization proposes that research findings inform policy development via a process of diffusion in which the findings of research are gradually assimilated into the everyday thinking of policy makers. Nurses need to be aware of this in reviewing the progress they make toward achieving evidence-based practice.

Despite the difficulties described above with an evidence-based approach to health care, it still represents an enormous opportunity for nurses. Appleby and colleagues propose an agenda for action that needs to be addressed in order to achieve evidence-based practice. This includes

- providing clear leadership and commitment from the top of the organization;
- developing a planned approach to promoting evidence-based practice that is properly resourced and staffed;
- maximizing and further developing information systems;
- providing appropriate staff training on appraising and using evidence to influence clinical practice;
- incorporating evidence into clinical guidelines and ensuring that mechanisms for agreeing, disseminating, and monitoring guidelines are in place;
- establishing an effective clinical audit program throughout the organization that is capable of addressing clinical effectiveness and bringing about appropriate changes in practice.

Nurse administrators have a crucial part to play in making this agenda a reality.

At an individual level both administrators and practitioners must be willing to adapt and move away from established traditional practices and procedures. Nursing in the U.K. has a poor track record of getting research evidence implemented because of organizational constraints and a lack of knowledge and skills among practitioners. Nurse administrators need therefore to be supportive of a climate of change that encourages and rewards innovation and empowers practitioners to develop their practice. Likewise, practitioners must seize the opportunity that the evidence-based practice initiative provides to improve the quality of care. However, it is inappropriate to place the responsibility for developing evidence-based practice in nursing on the shoulders of administrators and practitioners alone. Nurse researchers arguably have a responsibility not just to contribute to the development of a knowledge base, but also to facilitate the utilization of research findings in practice. Collabora-