

Evidence-based Practice: A short tour

Undoubtedly, you are hearing a lot these days about Evidence-based Practice. For those of you who don't have a sense for what this means, the following description may bring you up to date and provide some ideas for further exploration.



What is Evidence-based Practice?

It is professional understanding and action that is based on the thoughtful use of knowledge and information from all available, relevant and dependable sources. These sources include: the patient, the clinician's experience, research, quality monitoring by the agency, expert opinion, and deductive reasoning. Research findings play an important role in evidence-based practice (e-bp), because they are a particularly dependable form of knowledge. Their dependability rests on the fact that they were produced by systematic and controlled methods that are set forth in a publicly available report for others to judge. However, research findings, even those from large well-designed studies, should not dictate practice in isolation from the other forms of knowledge. When designing a plan of care (e.g., a care map or a clinical guideline) for a population of patients, the general knowledge produced by research should be considered in concert with agency-specific quality improvement information. The agency-specific information about actual care processes and patient outcomes may come from quality monitoring programs already in place or from a special data collection initiative undertaken to focus on a particular aspect of care. At the point-of-care, the standardized plan of care may need to be adjusted based on situation-specific evidence such as the patient's condition, preferences, values, and individual characteristics.



Isn't Evidence-based Practice just the latest buzz-word?

Yes and no. Yes in that the benefits to patients of using research findings as a basis for care action have been recognized in health care and in nursing for a long time. In the 1970s and 1980s, the term "research utilization" was used to describe both organizational projects and individual efforts to base nursing care actions on research findings. At that time, however, the amount of clinically relevant research being conducted was limited. When clinicians went to look for research on a topic of interest, they often found few if any studies about their topic. Now, the situation is quite different: there is a great deal of research on a wide variety of topics of interest to nurses. Moreover, for many topics there is quite a bit of research, so that summaries of the research findings on many clinical topics are being produced.

The current movement has several other important differences from earlier movements. First, in e-bp, all sources of knowledge that are used to design care are recognized and considered together. Although research findings are considered the best form of evidence, they do not determine practice in isolation from the other sources. In fact, e-bp requires that the forms of the evidence supporting various courses of action be explicitly acknowledged. For instance, reviewers of evidence frequently state whether the research evidence in support of a particular action is strong, weak, or mixed. Other times they will state that no research on the issue is available, thus the recommendation is based on reasoning from physiological or behavioral science and/or expert consensus. Another difference in the

current movement is that relevant research evidence is much easier to access than it was just a few years ago. Computerized search engines make it easy to identify relevant studies, and fax capability and inter-library loans make research reports easy to obtain.



What is meant by the term “research evidence”?

Research evidence comes in several different forms. There are: 1) single study reports, 2) state-of-the-science reviews, and 3) research-based clinical guidelines. The problem with a single study report is that it is just one piece of evidence. You have to read several of them (sometimes many) to find out if a particular finding is widely supported across settings and variations in delivery.

In contrast, state-of-the-science reviews (also called synthesized research reports and evidence reports) provide an overview of all the studies conducted on a topic, thus they provide more complete evidence. They also save time because the reviewer has done much of the work of assembling, analyzing, and summarizing the findings from several (or many) studies. Based on the findings set forth in a state-of-the-science review, your group can often proceed to develop a standardized plan of care or care map.

Research-based guidelines go a step further than reviews. In addition to reviewing and summarizing the research findings on a topic, an expert panel also translates the evidence into a clinical guideline or protocol. In the best ones, the strength of the evidence in support of each recommendation is explicitly stated. (Is there strong research evidence, weak research evidence, or just expert opinion?). Of course, you still need to decide whether the recommendations are feasible for your situation and develop a plan for implementing them.

State-of-the-science reviews and research-based clinical guidelines are being produced by specialty organizations and by care giving institutions with federal support, and are appearing in clinical journals and on the Internet with increasing frequency. However, clinicians do need to be discerning consumers as not all reviews and clinical guidelines are carefully produced. The credentials of the individuals who produced the review or guideline are worth noting, but you should be able to go beyond this in judging the trustworthiness of these kinds of research products. If you make no effort to evaluate the methods that were used to produce the summary or recommendations, you cannot be sure that the conclusions and recommended actions are reliable enough to use as a basis for practice.

The annotated resource list at the end of this article provides you with several sources that will help you evaluate the quality of these reviews and guidelines. It also includes several websites that will help you locate studies, reviews, and clinical guidelines of interest. If you would like to talk with me or obtain other information about evidence-based practice (in general or on a specific issue), please feel free to contact me.

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Print Reference List

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Brown, S.J. (2001). Managing the complexity of best practice health care. *Journal of Nursing Care Quality*, 15(2), 1-8. [Sets forth professional activities and organizational processes by which best practice care is produced. Emphasizes the role of research in pre-specification design of care (e.g. care maps and standardized plans of care) and point-of-care design.]

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Internet Resource Links

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=PubMed> [A service of the National Library of Medicine, this site is a search engine that accesses citations from a wide variety of health care journals. It also provides links to many sites that provide full text articles.]

<http://www.guideline.gov/index.asp> [A public resource for evidence-based clinical practice guidelines; the site is sponsored by the Agency for Healthcare Research and Quality (AHRQ)]

<http://www.ahrq.gov/> [This AHRQ site has a variety of links and resources related to research findings, clinical information, quality assessment, preventive services, funding opportunities.]

<http://ebn.bmjournals.com/> [This online and paper subscription journal publishes short summaries of a wide variety of single study reports and research reviews published in full in other journals.]

<http://www.cinahl.com/cexpress/ojcionline3/> [This online, subscription journal provides thorough, up-to-date research reviews and innovation implementation reports.]