

Evidenced-Based Nursing – What Is It?

The nurse is the unsung hero—typically heroine—of medical care. Her (or his) job may be rewarding; it is doubtless demanding, perhaps even exhausting; it can be dangerous; it is certainly unglamorous. Patients are by definition needy—confined to a hospital, even those not drugged or brought there in the first place by violence in their lives may get cranky, and lash out at the nearest target. Doctors, themselves under enormous pressure, may consciously or not expect a degree of deference from nurses that can make negotiating the boundaries of authority a minefield. All the while, people's lives and future well being hang in the balance. Then there are the bodily fluids. Lots of bodily fluids.

On top of all this, the field is changing. Nurse practitioners now provide primary care, including for example the prescription of drugs, formerly reserved to physicians. And in another departure from centuries of nursing tradition, nurses may now be expected to be able to hold their own—at least—with doctors in being able to evaluate the latest clinical research and devise ways to incorporate it into patient care.

This is perhaps the most immediate practical effect on the nurse of what is called Evidence-Based Nursing, a subset of Evidence-Based Practice, which looks to research to guide problem solving and improvement in patient treatment and care. Hoped-for effects include: better risk assessment and response, fewer crises, fewer deaths, and better long-term health outcomes. Getting there—within or against the constraints of more than one tradition-laden profession, and of politically-charged and vulnerable public funding, or of the penny-pinching demands of insurance companies and for-profit system administrators—can be a long and daunting slog.

Training in research evaluation skills is by no means standard in nursing schools, whose accreditation may not require it. At present, EBN by its nature demands that nurses—and their employers—take ongoing responsibility for post-graduate education.

Suppose nurses want—or are expected or required—to adopt Evidence-Based Nursing in their own practice. Medical research is produced in enormous quantities. The National Institutes of Health's [PubMed](#) contains 20 *million* citations. Keeping up with studies in a broad specialty such as mental health, or even for a single disease, can be intimidating—and nurses are often expected to be generalists. A good place to begin is the professional quarterly, [Evidence-Based Nursing](#). From the publishers for the British Medical Journal and the Royal College of Nursing, each issue addresses findings culled from some 6000 articles from over 50 medical, research, and nursing journals. A particularly useful feature is the journal's "structured abstracts," twenty-four per issue, summarizing research results uniformly to facilitate quick comparisons and anticipate common questions. The *EBN* website offers current updates, including some free articles and a [Twitter feed](#) (rather sparsely populated as of this writing); there is also an [online archive](#) for the dozen years of the journal's

existence. *EBN* emphasizes implementing the most promising results in the clinical setting; here, of course, American readers may have to do a bit of translating into the peculiarities of the US medical delivery system.

Another curated resource is the [Cochrane Library](#), which vets research for soundness and also offers reviews and meta-analyses that help place research results in context. Although its resources are available for free in certain countries or US states, availability may vary. Subscriptions to these sorts of resources, or to more general or specialized clinical journals ([Clinical Evidence](#), [Evidence-Based Mental Health](#)), are typically to institutions, whose students, faculty, and clinicians then have access; in some cases, lobbying for access to these kinds of resources might be part of implementing an evidence-based program.

News-hungry media outlets watch medical research, too, and report the latest findings—too often in a sensationalist, simplistic, overly optimistic or pessimistic way, flaws that may be further amplified on the Internet—to the general public, who in turn bring an onslaught of new concerns and hopes to their health care providers. Much of this research, of course, is funded by drug companies, and far too often results reflect, and can even be over determined by, the narrow focus such funding brings. So not only must doctors and nurses be current, they must bring critical reading skills and an informed skepticism to their reading. Critical-reading education for both nurses and doctors may be uneven. In some cases, nurses who learn these skills may become better at them than the doctors they work with; in others, nurses may subject their ideas to a doctor's withering dismissal if they haven't thoroughly done their homework. Implementation of any change in nursing practice involves a lot of convincing; any and all attempts to propose an evidence-based change will founder without the basic ability to read research reports and assess both their intrinsic validity and their applicability to the clinical setting. Two online resources can help develop or sharpen these skills:

Science-Based Medicine may skew slightly towards an audience of medical professionals: the most current posts occasionally give one the feeling of having stumbled into a conversation among specialists. However, the editors are committed to addressing the general public, and the writing is typically accessible. The site offers a particularly useful critique of Evidence-Based Practice itself, addressing inherent limitations and fallacies in the way medical research is commonly conducted. Perhaps the best point of entry is the [topics page](#), where first-time visitors can orient themselves to some current issues and controversies.

A refreshing tonic to dry, eye-glazing research reports and sloppy journalism is Ben Goldacre's [Bad Science](#). Dr. Goldacre writes for a general audience, and particularly stays on top of bad science reporting and spurious claims that get gobbled up, half-digested, and spewed back out by the media.

With one's critical reading and thinking skills refreshed, browsing those 20 million citations at PubMed may be less overwhelming and more productive.

Nurses thoroughly prepared to raise evidence-based questions and proposals on matters of practice—or to meaningfully participate in their evaluation—must also be familiar with the structured protocols that govern such discussions. Ideally, this process would typically involve an interdisciplinary team, whose composition might change from one proposal to another. (Such a team might not even be a standing body with time allotted for its investigations and deliberations.) The process itself has been defined as including five broad steps, often expressed by the mnemonic the five As:

1. **Ask** an answerable (structured and focused) question based on research findings, patient needs, or some problem with current practice.
2. **Acquire** research information from other sources relevant to the question.
3. **Appraise** the available evidence for validity and applicability.
4. **Apply** the evidence to the clinical situation, allowing both for clinical expertise of the staff and the perspective of the patient in designing any intervention in care.
5. **Assess** the effects of the intervention through an audit or peer assessment.

Each of these steps is likely to have further protocols governing how it is carried out, either generally or specific to an institution. There are extensive online resources for exploring this process, often in the form of tutorials such as [this one](#) from the University of North Carolina at Chapel Hill.

While it may be easy to schematize Evidence-Based Nursing, implementing it in the context of real-world practice is much more challenging. In an [article](#) for *Nursing Leadership*, Alba DiCenso (RN, PhD) offers a compassionate, personal view of the alternative to Evidence-Based Nursing: worse outcomes for patients, whether prepping them for surgery or instructing new mothers in infant care. She also thoughtfully and realistically sketches an overview of the cultural and institutional barriers to, and the resources and changes required for, the full transformation of nursing into an evidence-based profession. Her article includes at least one informal and practical suggestion for working around institutional strictures, and a reading list for further exploration of the issues.

For any nurse or prospective nurse who might be discouraged by the slowness and difficulty of progress in this area, take heart: although written in the grim language that compares “the costs of increased nurse staffing levels with the benefits of reducing mortalities,” at least one outcome of Evidence-Based Nursing research seems clear: to save lives, [hire more nurses](#).

Resources

(please note: some links may lead to areas requiring subscriptions or institutional access)

[Evidence-Based Nursing](#), a quarterly journal with a particular focus on applying research to nursing practice

[The Cochrane Library](#), curated medical research, including reviews and meta-analyses by topic; full access may vary by geography

[Science-Based Medicine](#), a critical reading of published medical research, for professionals and lay people

[Bad Science](#), Dr. Ben Goldacre's breezy, irreverent, often polemical debunking of popular science reporting for *The Guardian*

[A tutorial](#) on implementing an Evidence-Based Nursing intervention, from the University of North Carolina at Chapel Hill

[Research: Evidence-based Nursing Practice: How to Get There from Here](#), Alba DiCenso's thoughtful, practical overview of steps toward and barriers to implementing EBN, from *Nursing Leadership*

[Increasing nurse staffing levels in cardiac surgery centres appears to be a cost effective patient safety intervention](#), a study from *Evidence-Based Nursing*