

# Purpose and procedure

The general purpose of *Evidence-Based Nursing* is to select from the health related literature those articles reporting studies and reviews that warrant immediate attention by nurses attempting to keep pace with important advances in their profession. These articles are summarised in “value added” abstracts and commented on by clinical experts. The specific purposes of *Evidence-Based Nursing* are:

- To identify, using predefined criteria, the best quantitative and qualitative original and review articles on the meaning, cause, course, assessment, prevention, treatment, or economics of health problems managed by nurses and on quality improvement
- To summarise this literature in the form of “structured abstracts” that describe the question, methods, results, and evidence-based conclusions of studies in a reproducible and accurate fashion
- To provide brief, highly expert comment on the context of each article, its methods, and clinical applications that its findings warrant
- To disseminate the summaries in a timely fashion to nurses.

The Royal College of Nursing (RCN) Publishing Company and the British Medical Journal (BMJ) Publishing Group publish *Evidence-Based Nursing* under the editorship of Dr Donna Ciliska at McMaster University in Canada, Dr Nicky Cullum at the University of York in the UK, and Dr Andrew Jull at the University of Auckland in New Zealand. The Health Information Research Unit (HIRU) of the Department of Clinical Epidemiology and Biostatistics at McMaster University hosts the editorial office for the production of the abstracts and commissioning of commentaries. Dr Brian Haynes acts as coordinating editor to ensure that methods and procedures are consistent with other evidence-based journals prepared by HIRU.

## CRITERIA FOR SELECTION AND REVIEW OF ARTICLES FOR ABSTRACTING

All articles in a journal issue are considered for abstracting if they meet these criteria:

### Basic criteria

- Original or review articles
- In English
- Quantitative and qualitative studies
- About topics that are important to the clinical practice of nurses in any setting
- Analysis of each article is consistent with the study question.

### Quantitative studies

Studies of prevention or treatment must meet these additional criteria:

- Random allocation of participants to comparison groups
- Follow up (end point assessment) of >80% of those entering the investigation
- Outcome measure of known or probable clinical importance.

Studies of assessment (screening or diagnosis) must meet these additional criteria:

- Inclusion of a spectrum of participants, some, but not all of whom, have the condition of interest
- Objective diagnostic (“gold”) standard (eg, central venous pressure) or current clinical standard for diagnosis (eg, sphygmomanometer reading for hypertension), preferably with documentation of reproducible criteria for subjectively interpreted diagnostic standard (ie, report of statistically significant measure of agreement beyond chance among observers)
- Each participant must receive both the new test and some form of the diagnostic standard
- Interpretation of diagnostic standard without knowledge of test result
- Interpretation of test without knowledge of diagnostic standard result.

Studies of prognosis must meet these additional criteria:

- Inception cohort (first onset or assembled at a uniform point in the development of a condition or disease) of individuals, all initially free of the outcome of interest
- Follow up of >80% of participants until the occurrence of a major study endpoint or to the end of the study.

Studies of causation must meet these additional criteria:

- Observations concerning the relation between modifiable exposures and putative clinical outcomes
- Prospective data collection with clearly identified comparison group(s) for those at risk of, or having, the outcome of interest (in descending order of preference, from randomised controlled trials, quasi-randomised controlled trials, non-randomised controlled trials, cohort study with case by case matching or statistical adjustment to create comparable groups, or nested case control studies)
- Blinding (masking) of observers of outcome to exposure (criterion assumed to be met if outcome is objective, eg, all cause mortality or self administered psychometric test)

Studies of quality improvement or continuing education must meet these additional criteria:

- Random allocation of participants or units to comparison groups
- Follow up of >80% of participants
- Outcome measure of known or probable clinical importance.

Studies of the economics of healthcare programmes or interventions must meet these additional criteria:

- The economic question must compare alternative courses of action
- Alternative diagnostic or therapeutic services or quality improvement activities must be compared on the basis of

both the outcomes produced (effectiveness) and resources consumed (costs)

- Evidence of effectiveness must be from a study (or studies) of real (not hypothetical) patients, which meets the criteria for treatment, assessment, quality improvement, or a review article
- Results should be presented in terms of the incremental or additional costs and outcomes of one intervention over another
- Where there is uncertainty in the estimates or imprecision in the measurement, a sensitivity analysis should be done.

#### Clinical prediction guides must meet these additional criteria:

- The guide must be generated in >1 set of real (not hypothetical) patients (training set)
- The guide must be validated in an independent set of real patients (test set)
- The guide must pertain to treatment, assessment, prognosis, or causation.

#### Review articles must meet these additional criteria:

- A clear statement of the clinical topic being reviewed
- A clear description of the sources and methods for identifying articles
- Specification of the inclusion and exclusion criteria for selecting articles for detailed review
- >1 article in the review must meet the above noted criteria for treatment, assessment, prognosis, causation, quality improvement, or economics of healthcare programmes.

#### Qualitative studies

- Content reflects the phenomenon of interest from the perspective of people experiencing it
- Data collection methods are appropriate for qualitative data
- Analyses are appropriate for qualitative data.

These criteria are subject to modification if, for example, it becomes feasible to apply higher standards that increase the validity and applicability of studies for clinical practice. The objective of *Evidence-Based Nursing* is to abstract only the very best literature, consistent with a reasonable number of articles "making it through the filter."

Articles meeting the criteria set out above are abstracted according to the procedure for more informative abstracts,<sup>1</sup> with the following modifications: abstracts are approximately 400 words in length; and each abstract is reviewed by an expert in the content area covered by the article. This expert writes a commentary in which she or he compares the study findings with previous research findings, identifies any important methodological problems that affect interpretation of the study results, and offers recommendations for clinical application. The author of the article is given an opportunity to review the abstract and commentary before publication.

On an ongoing basis, we will publish to the *Evidence-Based Nursing* web site ([www.evidencebasednursing.com](http://www.evidencebasednursing.com)) a selected list of articles that passed all criteria but were not abstracted because, in the judgment of the editors, their findings were less applicable to general nursing practice, the topic was of interest to only a select group of nurse specialists, or the topic was recently addressed in another abstract.

1 Haynes RB, Mulrow CD, Huth EJ, et al. More informative abstracts revisited. *Ann Intern Med* 1990;113:69-76.

### Journals reviewed for this issue

Acta Obstet Gynecol Scand	Arthritis Rheum	Heart Lung	J Pediatric Orthop
Acta Orthop Scand	Arthroscopy	J Adv Nurs	J Rheumatol
Age Ageing	Birth	J Am Acad Child Adolesc Psychiatry	J Trauma
Aliment Pharmacol Ther	BJOG	J Am Coll Cardiol	J Vasc Surg
Am J Cardiol	BMJ	J Am Coll Surg	JAMA
Am J Epidemiol	Br J Gen Pract	J Am Geriatr Soc	Lancet
Am J Gastroenterol	Br J Psychiatry	J Am Med Inform Assoc	Med Care
Am J Med	Br J Surg	J Arthroplasty	Med J Aust
Am J Obstet Gynecol	Can J Gastroenterol	J Bone Joint Surg Am	Midwifery
Am J Psychiatry	Can J Nurs Res	J Bone Joint Surg Br	N Engl J Med
Am J Public Health	Can J Surg	J Child Psychol Psychiatry	Neurology
Am J Respir Crit Care Med	Cancer Nurs	J Clin Epidemiol	Nurs Res
Am J Sports Med	Circulation	J Clin Nurs	Obstet Gynecol
Ann Emerg Med	Clin Orthop Rel Res	J Consult Clin Psychol	Oncol Nurs Forum
Ann Intern Med	CMAJ	J Fam Pract	Pain
Ann Rheum Dis	Cochrane Database Syst Rev	J Gen Intern Med	Patient Educ Couns
Ann Surg	Crit Care Med	J Hand Surg [Am]	Pediatrics
ANS Adv Nurs Sci	Diabet Med	J Hand Surg [Br]	Psychosom Med
Appl Nurs Res	Diabetes Care	J Infect Dis	Qual Health Res
Arch Dis Child	Fam Pract	J Manipulative Physiol Ther	Radiology
Arch Dis Child Fetal Neonatal Ed	Foot Ankle	J Neurol Neurosurg Psychiatry	Res Nurs Health
Arch Gen Psychiatry	Gastroenterol	J Neurosurg	Rheumatology
Arch Intern Med	Gut	J Nurs Scholarsh	Soc Sci Med
Arch Neurol	Health Educ Behav	J Orthop Trauma	Spine
Arch Pediatr Adolesc Med	Health Psychol	J Pediatr	Stroke
Arch Surg	Heart	J Pediatr Oncol Nurs	Thorax
			West J Nurs Res