

## PURPOSE AND PROCEDURE (ABBREVIATED)\*

The purpose of *Evidence-Based Medicine* is to alert clinicians to important advances in internal medicine, general and family practice, surgery, psychiatry, paediatrics, and obstetrics and gynaecology by selecting from the biomedical literature those original and review articles whose results are most likely to be both true and useful. These articles are summarised in value-added abstracts and commented on by clinical experts.

The procedures we follow as we attempt to achieve this purpose are:

1. Detecting, using prestated criteria, the best original and review articles on the cause, course, diagnosis, prevention, treatment, quality of care, or economics of disorders in the foregoing fields;
2. Introducing these articles with declarative titles and summarising them accurately in structured abstracts that describe their objectives, methods, results, and evidence-based conclusions;
3. Adding brief, highly expert commentaries to place each of these summaries in its proper clinical and health care context; and
4. Disseminating these summaries in a timely fashion to clinicians.

Journals are reviewed based on the proportion of articles that meet *Evidence-Based Medicine* criteria and are listed in each issue.

### Criteria for Review and Selection for Abstracting

1. General criteria: All English-language original and review articles in an issue of a candidate journal are considered for abstracting if they concern topics important to the clinical practice of internal medicine, general and family practice, surgery, psychiatry, paediatrics, or obstetrics and gynaecology. Access to foreign language journals is provided through the systematic reviews we abstract, especially those in the Cochrane Database of Systematic Reviews, which summarizes articles from over 800 journals in several languages.
2. Criteria for studies of prevention or treatment: random allocation of the participants to the different interventions; outcome measures of known or probable clinical impor-

tance for  $\geq 80\%$  of the participants who entered the investigation.

3. Criteria for studies of diagnosis: clearly identified comparison groups,  $\geq 1$  of which is free of the target disorder; either an objective diagnostic standard (e.g., a machine-produced laboratory result) or a contemporary clinical diagnostic standard (e.g., a venogram for deep venous thrombosis) with demonstrably reproducible criteria for any subjectively interpreted component (e.g., report of better-than-chance agreement among interpreters); interpretation of the test without knowledge of the diagnostic standard result; interpretation of the diagnostic standard without knowledge of the test result.
4. Criteria for studies of prognosis: an inception cohort of persons, all initially free of the outcome of interest; follow-up of  $\geq 80\%$  of patients until the occurrence of either a major study endpoint or the end of the study.
5. Criteria for studies of causation: a clearly identified comparison group for those at risk for, or having, the outcome of interest (whether from randomised, quasi-randomised, or nonrandomised controlled trials; cohort analytic studies with case-by-case matching or statistical adjustment to create comparable groups; or case-control studies); masking of observers of outcomes to exposures (assumed to be met if the outcome is objective [e.g., all-cause mortality or an objective test]); observers of exposures masked to outcomes for case-control studies OR masking of subjects to exposure for all other study designs.
6. Criteria for studies of quality improvement and continuing education: random allocation of participants or units to comparison groups; follow-up of  $\geq 80\%$  of participants; outcome measures of known or probable clinical or educational importance.
7. Criteria for studies of the economics of health care programs or interventions: The economic question must compare alternative courses of ac-

tion; the alternative diagnostic or therapeutic services or quality improvement strategies must be compared on the basis of both the outcomes they produce (effectiveness) and the resources they consume (costs); evidence of effectiveness must come from a study (or studies) that meets criteria for diagnosis, treatment, quality assurance, or review articles; results should be presented in terms of the incremental or additional costs and outcomes incurred and realised by one intervention over another; and a sensitivity analysis should be done.

8. Criteria for review articles: The clinical topic being reviewed must be clearly stated; there must be a description of how the evidence on this topic was tracked down, from what sources, and with what inclusion and exclusion criteria; and  $\geq 1$  article included in the review must meet the above-noted criteria for treatment, diagnosis, prognosis, causation, quality improvement, or the economics of health care programs.

*Evidence-Based Medicine* has a related journal, *ACP Journal Club*, in which abstracts are restricted to internal medicine. It is generated using procedures identical to those used for *Evidence-Based Medicine* and is published by the American College of Physicians. Approximately half of the abstracts in *ACP Journal Club* will be published in *Evidence-Based Medicine*, and the abstracts not published will be listed, by their declarative titles, in the section titled Additional Articles Abstracted in *ACP Journal Club*.

Each abstract is reviewed by an expert in the content area, and a commentary is added to provide the contexts of previous knowledge and clinical practice within which the results of the abstracted study will be applied, any important methodological problems that affect interpretation of the study results, and recommendations for the clinical application of the study findings. The author of the original article is given an opportunity to review the abstract and commentary before publication.

\* The detailed version of Purpose and Procedure appears in issues of *Evidence-Based Medicine* with 4-page EBM notes.