PHARMACOEPIDEMIOLOGY: A REVIEW OF ITS EMERGING ROLE IN OUTCOMES RESEARCH
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Pharmacoepidemiology is defined as the application of epidemiological reasoning methods and knowledge to the study of the uses and effects (beneficial and adverse) of drugs in human populations. OBJECTIVES: The purpose of this paper is to review the emerging role of pharmacoepidemiology in outcomes research. METHODS: This review has been based on a systematic literature search using Medline (PubMed), including the abstracts of the International Conference of Pharmacoepidemiology since 1990, and a review of core texts recommended by the International Society for Pharmacoepidemiology (ISPE).

RESULTS: Three core functions were highlighted by review of the literature. The major role was found to be in the field of pharmacovigilance and its function in phase IV clinical trials or postmarketing surveillance. This was reflected by the predominance of pharmacovigilance abstracts accepted by the ISPE—90% (201/223) of abstracts in 1990 and 72% (222/309) in 2001. Pharmacovigilance, the process of identifying and responding to drug safety issues during phase IV of drug development, is a key requirement of many drug regulatory authorities, including the FDA. Pharmacoepidemiology was also found to play a role in drug utilisation review studies and decision analytic modeling, although its use was found to be less substantial, constituting the balance of the accepted abstracts. CONCLUSION: Although pharmacoepidemiology has mainly been used in the field of pharmacovigilance, its use in decision analysis and drug utilisation review was found to be on the increase.

OPTIMIZING CLINICAL EFFECTIVENESS THROUGH ACTUARIAL MODELING IN HOSPITALS
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OBJECTIVES: Current data support the use of low molecular weight heparin (LMWH) in lieu of unfractionated

BEST PRACTICES: EVALUATING MODELING RESEARCH AT ISPOR USING BMJ AND ISPOR GUIDELINES
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OBJECTIVE: To evaluate whether the modeling posters presented at the 2002 ISPOR Seventh Annual International Meeting met the standard of good research practice criteria established by British Medical Journal (BMJ) and ISPOR. METHODS: Posters presented at the meeting were collected onsite or from the ISPOR website. Of the total 337 posters presented, 133 posters (39%) were evaluated. Of the 133 posters collected, 26 were classified as modeling. Nine (9) modeling posters were excluded because they focused exclusively on the denominator or numerator. The remaining 17 posters were evaluated in 3 major sections: a) study design (7 items for BMJ; 3 for ISPOR); b) data validity (14 items for BMJ; 13 for ISPOR); c) analysis and interpretation (14 items for BMJ; 23 for ISPOR). RESULTS: More than half of the posters satisfied 75% or more of the ISPOR and BMJ criteria for study design, and only 5 failed to satisfy at least 50% of the study design criteria. Only six posters satisfied 50% or more of the BMJ data validity criteria, and none of the posters satisfied 50% or more of the ISPOR data validity criteria. More than half of the posters satisfied 50% or more of the BMJ and ISPOR criteria for analysis and interpretation. Posters were slightly more likely to satisfy the BMJ, rather than ISPOR criteria for data validity. Overall, the 17 posters met 51% (18/35) of the BMJ criteria and 46% (18/39) of the ISPOR criteria. CONCLUSIONS: The number of posters reviewed and the number of evaluators limit this study. Reviewed posters revealed satisfactory performance in the study design elements of the ISPOR and BMJ guidelines, but could be improved in data validity and analysis. Generally, the posters performed better when rated using the BMJ rather than the ISPOR guideline.