



Research Design

Evidence Based Medicine
Concepts and Glossary

Case series

A report on a series of patients with an outcome of interest. No control group is involved



Ecological survey

A survey based on aggregated data for some population as it exists at some point or points in time; to investigate the relationship of an exposure to a known or presumed risk factor for a specified outcome.



Cross-sectional study

The observation of a defined population at a single point in time or time interval. Exposure and outcome are determined simultaneously.



Case-control study

A study which involves identifying patients who have the outcome of interest (cases) and control patients without the same outcome, and looking back to see if they had the exposure of interest.



Cohort study

Involves identification of two groups (cohorts) of patients, one which received the exposure of interest, and one which did not, and following these cohorts forward for the outcome of interest.



Randomized controlled clinical trial

A group of patients is randomized into an experimental group and a control group. These groups are followed up for the variables/outcomes of interest.



Crossover study design

The administration of two or more experimental therapies one after the other in a specified or random order to the same group of patients.



Clinical decision analysis

The application of explicit, quantitative methods that quantify prognoses, treatment effects, and patient values in order to analyze a decision under conditions of uncertainty.



Cost–benefit analysis

Assesses whether the cost of an intervention is worth the benefit by measuring both in the same units; monetary units are usually used.



Cost-effectiveness analysis

Measures the net cost of providing a service as well as the outcomes obtained. Outcomes are reported in a single unit of measurement.



Cost minimization analysis

If health effects are known to be equal, only costs are analyzed and the least costly alternative is chosen.



Systematic review

A summary of the medical literature that uses explicit methods to perform a thorough literature search and critical appraisal of individual studies and that uses appropriate statistical techniques to combine these valid studies.



Meta-analysis

A systematic review that uses quantitative methods to summarize the results

