

JBI LEVELS OF EVIDENCE

Developed by the JBI Levels of Evidence and Grades of Recommendation Working Party October 2013

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PLEASE NOTE: These levels are intended to be used alongside the supporting document outlining their use. Using Levels of Evidence does not preclude the need for careful reading, critical appraisal and clinical reasoning when applying evidence.

LEVELS OF EVIDENCE FOR EFFECTIVENESS

Level 1 – Experimental Designs

- Level 1.a Systematic review of Randomized Controlled Trials (RCTs)
- Level 1.b Systematic review of RCTs and other study designs
- Level 1.c RCT
- Level 1.d Pseudo-RCTs

Level 2 – Quasi-experimental Designs

- Level 2.a Systematic review of quasi-experimental studies
- Level 2.b Systematic review of quasi-experimental and other lower study designs
- Level 2.c Quasi-experimental prospectively controlled study
- Level 2.d Pre-test post-test or historic/retrospective control group study

Level 3 – Observational – Analytic Designs

- Level 3.a Systematic review of comparable cohort studies
- Level 3.b Systematic review of comparable cohort and other lower study designs
- Level 3.c Cohort study with control group
- Level 3.d Case controlled study
- Level 3.e Observational study without a control group

Level 4 – Observational –Descriptive Studies

- Level 4.a Systematic review of descriptive studies
- Level 4.b Cross-sectional study
- Level 4.c Case series
- Level 4.d Case study

Level 5 – Expert Opinion and Bench Research

- Level 5.a Systematic review of expert opinion
- Level 5.b Expert consensus
- Level 5.c Bench research/ single expert opinion

LEVELS OF EVIDENCE FOR DIAGNOSIS

Level 1 – Studies of Test Accuracy among consecutive patients

- Level 1.a Systematic review of studies of test accuracy among consecutive patients
- Level 1.b Study of test accuracy among consecutive patients

Level 2 – Studies of Test Accuracy among non-consecutive patients

Level 2.a – Systematic review of studies of test accuracy among non-consecutive patients

Level 2.b – Study of test accuracy among non-consecutive patients

Level 3 – Diagnostic Case control studies

Level 3.a – Systematic review of diagnostic case control studies

Level 3.b - Diagnostic case-control study

Level 4 – Diagnostic yield studies

Level 4.a – Systematic review of diagnostic yield studies

Level 4.b - Individual diagnostic yield study

Level 5 – Expert Opinion and Bench Research

Level 5.a – Systematic review of expert opinion

Level 5.b - Expert consensus

Level 5.c – Bench research/single expert opinion

LEVELS OF EVIDENCE FOR PROGNOSIS

Level 1 – Inception Cohort Studies

Level 1.a - Systematic review of inception cohort studies

Level 1.b – Inception cohort study

Level 2 - Studies of All or none

Level 2.a – Systematic review of all or none studies

Level 2.b – All or none studies

Level 3 - Cohort studies

Level 3.a – Systematic review of cohort studies (or control arm of RCT)

Level 3.b – Cohort study (or control arm of RCT)

Level 4 – Case series/Case Controlled/ Historically Controlled studies

Level 4.a - Systematic review of Case series/Case Controlled/ Historically Controlled studies

Level 4.b – Individual Case series/Case Controlled/ Historically Controlled study

Level 5 – Expert Opinion and Bench Research

Level 5.a – Systematic review of expert opinion

Level 5.b - Expert consensus

Level 5.c – Bench research/ single expert opinion

LEVELS OF EVIDENCE FOR ECONOMIC EVALUATIONS

Levels

- 1. Decision model with assumptions and variables informed by systematic review and tailored to fit the decision making context.
- 2. Systematic review of economic evaluations conducted in a setting similar to the decision makers.
- 3. Synthesis/review of economic evaluations undertaken in a setting similar to that in which the decision is to be made and which are of high quality (comprehensive and credible measurement of costs and health outcomes, sufficient time period covered, discounting, and sensitivity testing).
- 4. Economic evaluation of high quality (comprehensive and credible measurement of costs and health outcomes, sufficient time period covered, discounting and sensitivity testing) and conducted in setting similar to the decision making context.
- 5. Synthesis / review of economic evaluations of moderate and/or poor quality (insufficient coverage of costs and health effects, no discounting, no sensitivity testing, time period covered insufficient).
- 6. Single economic evaluation of moderate or poor quality (see directly above level 5 description of studies).
- 7. Expert opinion on incremental cost effectives of intervention and comparator.

LEVELS OF EVIDENCE FOR MEANINGFULNESS

- 1. Qualitative or mixed-methods systematic review
- 2. Qualitative or mixed-methods synthesis
- 3. Single qualitative study
- 4. Systematic review of expert opinion
- 5. Expert opinion