Steps

Steps for Updating JBI Evidence Summaries

Scientific Writers follow the JBI approach to updating Evidence Summaries to ensure both a high quality approach and reliable evidence is available for health care practitioners. Six steps are involved, which are detailed below (there is also a quick reference guide outlining the steps of the Evidence Summary update process).

Step 1: Searching
Evidence Summaries are based upon searching for the highest level and quality of evidence. Scientific Writers conduct searches for evidence that informs best practice relevant to the topic. While the search should focus on evidence published since the Evidence Summary was last updated, do not discount relevant evidence from the previous five years.

The following electronic databases MUST be searched using a range of keywords and subject headings appropriate to the specific topic:

- JBI Evidence Synthesis
- Cochrane Library
- Medline - searched via PubMed or another platform such as Ovid, EBSCO, etc.
- CINAHL (Cumulative Index to Nursing and Allied Health Literature)
- Additional databases may be searched, where relevant, for specific topics e.g. PsycINFO (mental health), Physiotherapy Evidence Database (PEDro), etc.

For resources to improve your literature searching, please see this guide to searching health databases. This PubMed tutorial on conducting a search may also be helpful, for example learning how to use Boolean operators.

In updating content, the Scientific Writer undertakes a three-phase search:

1. Firstly, searching to establish if any new systematic reviews or evidence-based guidelines (see searching for guidelines below) have been published on the topic. If additional reviews or guidelines have been published, these are incorporated into the Evidence Summary as per the methods described in Step 3 below; no further searching is required if the included systematic reviews answer the clinical question. NOTE: It is also important to establish if any systematic reviews or guidelines already included in the Evidence Summary have been updated; if so, the reference should be replaced with the updated version.

2. Secondly, if the first search establishes that no new systematic reviews have been published on the topic, a broader search is undertaken for primary research. The aim of this search is to retrieve the highest level of relevant evidence to answer the clinical question. If multiple new primary research studies are found, incorporate the most relevant studies into the summary, taking into account the information the study contributes, the level of evidence (see Step 3 for information of JBI Levels of Evidence), and the quality and size of the study.

3. If no research studies on the topic are found then a search for expert opinion evidence is conducted.

Searching for guidelines and opinion papers

When searching for evidence-based guidelines or expert opinion papers the above databases should be searched first, however, it may be necessary to conduct a wider internet search for reputable organizations/affiliations. The following list below is a guide to potentially relevant sites that you may search for evidence-based guidelines or expert opinion. This is not a comprehensive list and it is necessary to tailor the search to the specific topic area:

- World Health organization http://www.who.int/
- National Institute of Clinical Excellence (NICE) https://www.nice.org.uk/guidance
- The Scottish Intercollegiate Guidelines Network (SIGN) http://www.sign.ac.uk/
- National Health and Medical Research Council (NHMRC) https://www.nhmrc.gov.au/guidelines/search
- Relevant organization and associations related to the topic area (e.g. European Society of Cardiology for cardiac related topics https://www.escardio.org/)
- It may be necessary to conduct a general search using Google https://www.google.com/

Please note that evidence from books/textbooks is not accepted. Other content related decisions are up to the discretion of the Research Fellow/Scientific Writer but the evidence reported must be related to answering the clinical question.

Step 2: Technical Development Report
For each Evidence Summary updated, a Technical Development Report is completed.
This report should include:

- The date range of the search (i.e. last 5 years)
- The names of the databases searched
- Search terms used
- Appraisal results for new evidence (any new evidence found is assessed for methodological quality using a short, standardized checklist).

**Step 3: Including new evidence in the Clinical Bottom Line**

For each new paper found, add a dot point to the existing Evidence Summary under the ‘Clinical Bottom Line’ section that concisely describes the objective and key findings of the study.

It is important that text is paraphrased (written in your own words), not simply copied verbatim from the paper or abstract.

When reporting the key findings:

1. Only report the findings that are relevant to the topic i.e. those that are explicitly related to the clinical question.
2. Include relevant numbers where appropriate.
3. Include some information on the clinical relevance of the results e.g. the conclusions/implications.
4. Cite the reference and include the JBI Level of Evidence in brackets (see Figure 3 and JBI Levels of Evidence). Only the major levels are applied in Evidence Summaries e.g. Level 1, Level 2, etc. (sub-levels not required).

An example of how a dot point in the ‘Clinical Bottom Line’ section should be constructed is as follows:

- A systematic review investigated the effects of asthma education on health outcomes in children who presented to the emergency department (ED) for treatment of asthma. Asthma education provided to children and/or parents resulted in a 27% lower risk of future ED presentation and 21% lower risk of hospital admission. However, the long-term effect of asthma education on quality of life, symptoms, and lung function are still unclear. Details of education content and method of delivery need to be further researched.\(^1\) (Level 1)

Please note:

- Evidence Summaries only include the current best available evidence, so delete older evidence in the summary that is superseded by new evidence (unless it is relevant and of high quality).
- If you find a new systematic review, check if other existing references in the Evidence Summary are included studies in the systematic review. Primary studies included in a systematic review should not be included separately in the Evidence Summary.
- Where systematic reviews have been updated, the older review should be replaced with the new version.

**Figure 3: Joanna Briggs Institute levels of evidence for effectiveness**

![Figure 3: Joanna Briggs Institute levels of evidence for effectiveness](image)

**Step 4: Characteristics of the Evidence**

Under the ‘Characteristics of the Evidence’ section, describe what type of study the new evidence is (e.g. systematic review, randomized controlled trial, etc.) and give some brief details about the study (e.g. the number of included studies, study designs, number of participants, etc.).

An example of the information to include in this section is as follows:

- A systematic review that included 38 studies (randomized controlled trials [RCTs] and quasi RCTs) with a total of 7,843 children (aged 5 months to 20 years).\(^1\)
Step 5: Best Practice Recommendations

If new evidence is added and/or old evidence deleted, check the ‘Best Practice Recommendations’.

Depending on the evidence, it may be necessary to:

- add a new recommendation, or
- remove/amend an old one, or
- modify the Grade of an existing recommendation.

Having looked at the ‘Best Practice Recommendations’ section, decide if any new evidence added to the ‘Clinical Bottom Line’ section warrants an alteration to any of the recommendations or the addition of a new recommendation. The inclusion of new evidence doesn't necessarily mean that the recommendations need to change.

If adding a new recommendation it should be worded as a specific recommendation that is actionable, with words like: “should”, “may”, “use”, “is recommended”, etc. A JBI Grade of Recommendation is then assigned. Grade A for a ‘strong’ recommendation or Grade B for a ‘weak’ recommendation (see Table 1 and JBI Grades of Recommendation).

An example of a Best Practice Recommendation is as follows:

- Immunization against measles is recommended for all susceptible children and adults for whom measles vaccination is not contraindicated. Contraindications include high fever or other signs of serious disease, pregnancy, history of anaphylactic reaction to vaccine components, or a severely compromised immune system. (Grade A)

Table 1. Joanna Briggs Institute Grades of Recommendation

Step 6: Referencing

Add new references to the reference list in Vancouver format. If there are less than six authors, list them all. If there are more than six authors, list the first six followed by ‘et al.’ Use sentence case for the article title. Use the abbreviated journal name. For example:


If the study has six authors or less then list them all. If there are more than six authors then list the first six followed by ‘et al.’ Use sentence case for the article title. Abbreviate the journal name; you can find recommended abbreviations via https://www.ncbi.nlm.nih.gov/nlmcatalog/journals.

For clinical practice guidelines, reference as follows:

*Name of Organisation or Author. Title of the guideline [number (if available)]. Publication year. Year updated (if applicable). Access date. Available from: URL*

Example:


When citing studies in the text, superscript all reference numbers. With Vancouver style referencing, articles are assigned a number in terms of when they first appear in the text. If the structure of the summary dictates that a new study needs to be added above any existing cited studies, then the reference numbers must be updated so they remain sequential.

Evidence Summary Style Guide

- Evidence Summaries use US spelling.
- Explain abbreviations in full when first using them, even if simple. Thereafter, the abbreviated term should be used throughout the Evidence Summary. Once abbreviations are defined, it is acceptable to start a sentence with an abbreviated term.
- Numbers from one to nine are written as words (except for numbers with decimals e.g. 3.5, or numbers that are accompanied by a symbol e.g. 4°C). Numbers 10 and above are written in digits except when starting a sentence.
• Use 'and' instead of '&'. 