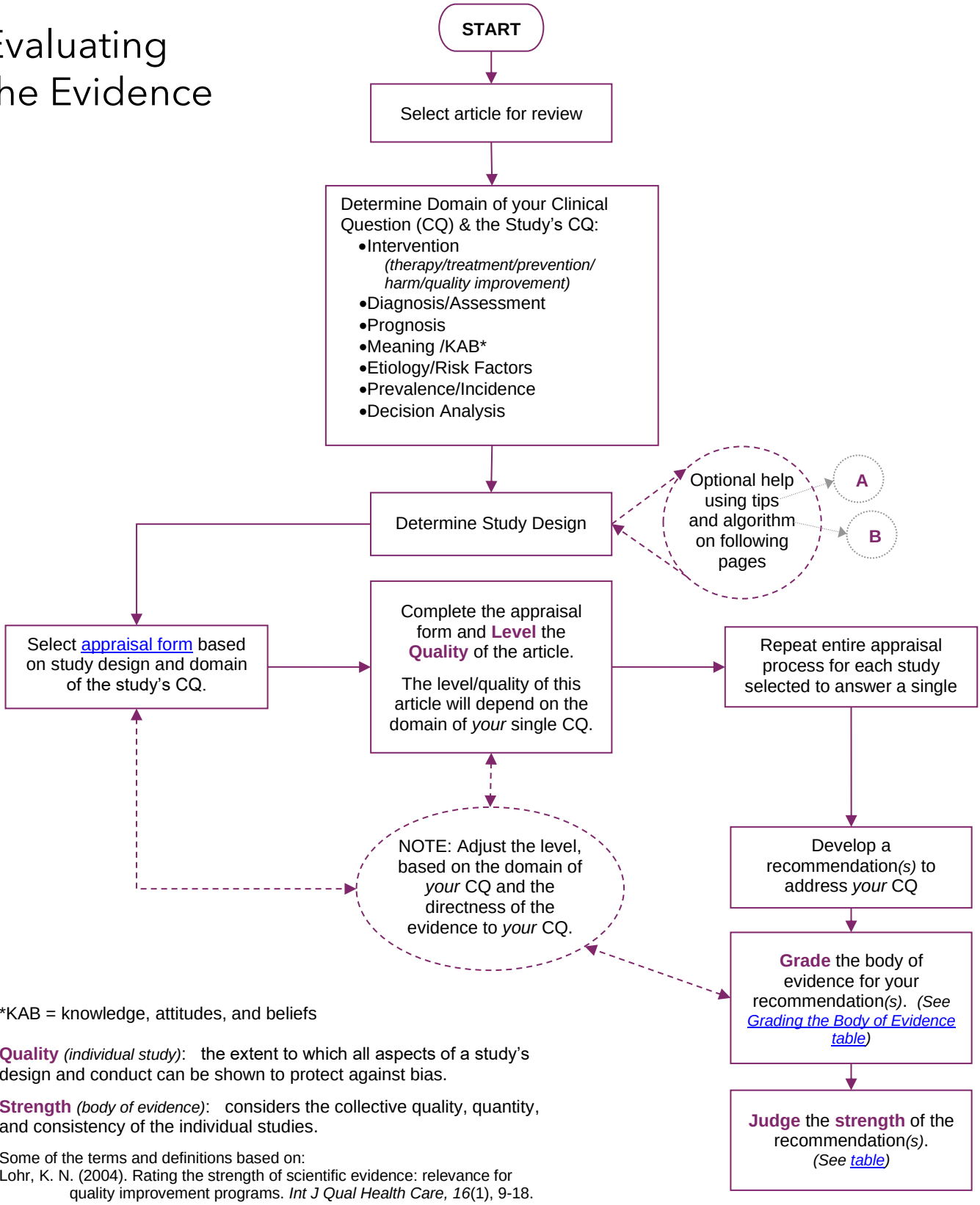
Evaluating the Evidence



*KAB = knowledge, attitudes, and beliefs

Quality *(individual study)*: the extent to which all aspects of a study's design and conduct can be shown to protect against bias.

Strength *(body of evidence)*: considers the collective quality, quantity, and consistency of the individual studies.

Some of the terms and definitions based on:
Lohr, K. N. (2004). Rating the strength of scientific evidence: relevance for quality improvement programs. *Int J Qual Health Care, 16*(1), 9-18.

A Tips for Determining Study Design:

All Users:

Selection of the appropriate appraisal form is based on the domain of the study design and the study's clinical question. Some study designs share the same form, and the terminal boxes in the algorithm on the following pages represent one appraisal form per box.

Note that:

- Study designs are not always obvious from the publication.
- Some studies are mixed types.
- Some authors use misleading words to describe their studies.

THEREFORE, if the user is unsure that the correct study design is selected, *IT'S NOT A BIG DEAL*. The user may:

- Pick one and if the appraisal form isn't helpful, try another.
- Use questions from more than one study design, if appropriate.
- Omit answers to questions if they don't apply to the study.

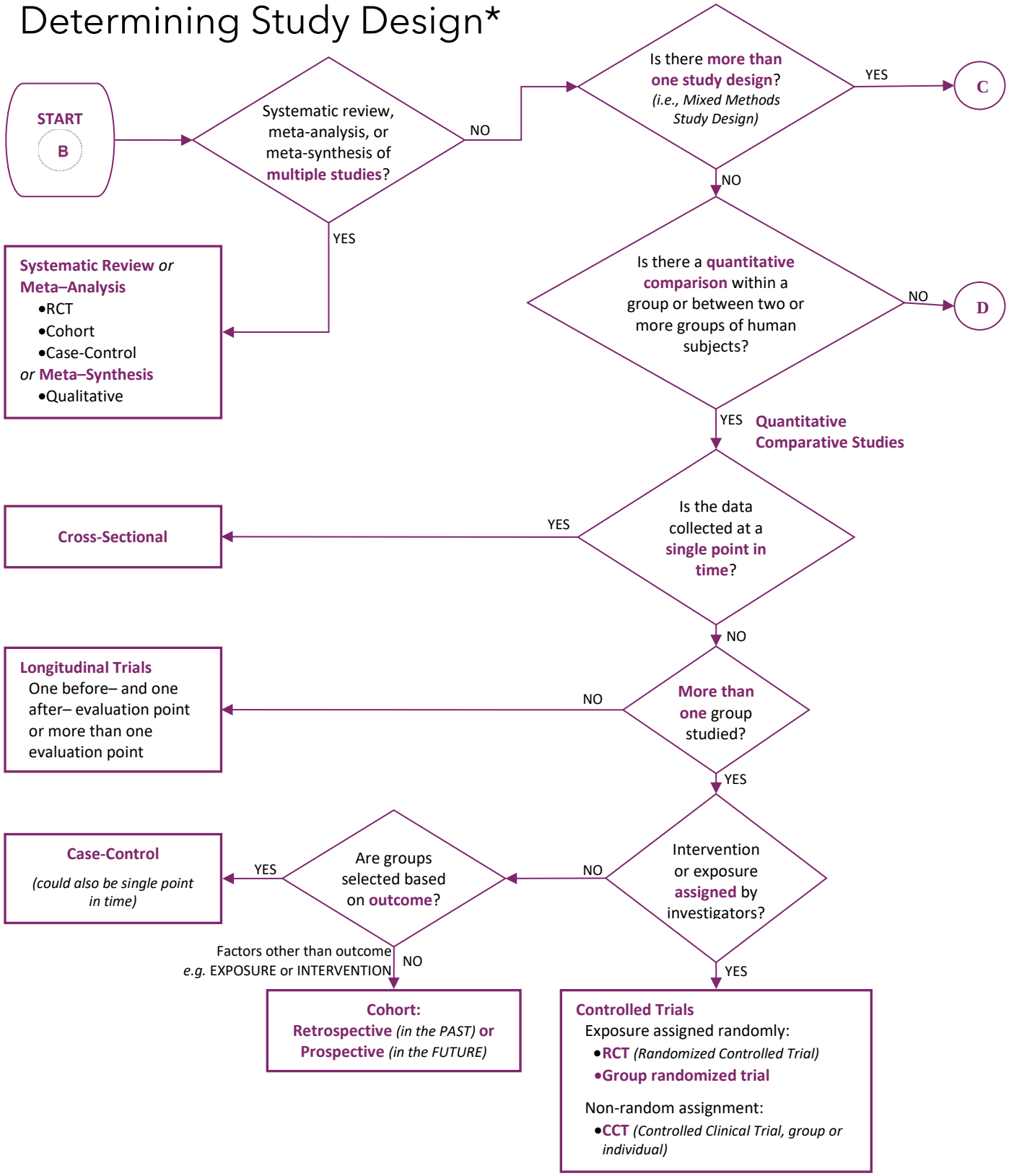
Users somewhat familiar with study designs:

- Scanning the title or abstract may provide the answer immediately.
- For clarifying details, the methods section will be very helpful.
- For less obvious study designs, a careful reading of the methods will be necessary.
- The use of the algorithms on the following pages may help confirm the answer or help decide between two or more possible designs.

Users very unfamiliar with study designs:

- Look at the terminal boxes on the following pages—these are the possible types of study designs.
- Scanning the title or abstract may provide the answer immediately.
- For additional details, the methods section will be very helpful.
- For less obvious study designs, a careful reading of the methods will be necessary.
- The use of the algorithms on the following pages may help confirm the answer, help to decide between two or more possible designs, or consider going step-by-step through the algorithm as a learning process.
- Many of the terms in the algorithm are technical, and the user may need to ask for help or use other information resources.

Determining Study Design*



**Not all studies fit neatly into this algorithm.*
Please refer to the Tips for Determining Study Design for additional help.

Briss, P. A., Zaza, S., Pappaioanou, M., et al. (2000). Developing an evidence-based Guide to Community Preventive Services--methods. The Task Force on Community Preventive Services. *Am J Prev Med, 18*(1 Suppl), 35-43.