

Before you begin designing a protocol for stakeholder-engaged evidence prioritization activities, it will help to identify the stage of evidence prioritization you need.

There are several types of evidence prioritization activities. These include:

- 1) Identifying the mission, objectives and measures for research
- 2) Identifying and prioritizing research topics, including priority populations, conditions, interventions and strategies
- 3) Identifying and prioritizing research questions.

These stages of evidence prioritization are sequential. It will help to complete work on earlier stages before moving on to latter stages.

Step 1

Identify the mission, vision and objectives for research

An example of this type of prioritization is the PCORI Draft National Priorities for Research and Research Agenda (<http://www.pcori.org/assets/PCORI-Draft-National-Priorities-and-Research-Agenda.pdf>). This document sets forth five draft objectives for patient-centered outcomes research, but does not go further into specifying specific key questions or research questions.

Step 2

Identify and prioritize research topics, including priority populations, conditions, interventions and strategies

Several steps can be followed to move from a general topic area to a topic that has been developed with key questions in mind.

- **Topic identification.** Topics for research may be very general, such as the topic of childhood asthma. In this example, one might be speaking of the topic of screening, prevention or treatment of childhood asthma. One might be concerned more with incident or prevalent cases, with older or younger children.
- **Topic development.** To develop a topic further, it can be helpful to scan the research literature for work that has already been completed and to identify evidence gaps and key questions that have not been answered adequately.

An example of this type of prioritization is the AHRQ priority health services, conditions and populations (<http://www.effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>), which is not developed into specific key questions, but can be used to guide researchers and communities to consider populations and conditions for which much research is needed. AHRQ's Evidence-based Practice Centers engage in topic development work when they take up a topic and develop key questions that can be examined further in a systematic review.

Step 3

Identify and prioritize research questions

Several steps can be followed to move from a high-level key question to a specific, researchable question:

- **Develop key questions.** These are high level questions, such as, “What research is needed to address evidence gaps about primary prevention of incident asthma in children?”
- **Refine your key questions** by assessing them against the PICO framework. PICO stands for Populations, Interventions, Comparators, Outcomes. This framework is helpful to fill in missing information about your key question and to refine it into a researchable question, or set of questions. For instance, to further refine the key question about primary prevention of incident asthma in children, you might proceed to identify what is known and what is not known about the population(s) of interest, intervention(s) of interest, comparator(s) of interest and outcome(s) of interest:
 - **Populations** – What populations are of interest, i.e., infants, children ages 2 to 6, 6-12, 13-18, or all children; subgroups of interest including urban/suburban/rural populations or racial and ethnic groups; regions of interest including national, state, county or metropolitan area; risk groups of interest such as previously-, currently- and never-diagnosed populations?
 - **Interventions** – What interventions are relevant, including screening interventions, diagnostic interventions, school-based interventions, primary care-based interventions, home-based interventions?
 - **Comparators** – After the interventions of interest are identified, what interventions can serve as the comparator(s) of interest?
 - **Outcomes** – Which outcomes are of interest, i.e., surrogate outcomes, clinical outcomes, patient-reported outcomes?
- **Identify specific future research needs.** On the basis of your efforts to refine key questions using the PICO framework, are there any specific future research needs that can be outlined for consideration in a prioritization exercise?
 - Examples: In urban K-8 school settings, what is the comparative cost effectiveness of annual spirometry screening for at risk youth (previously or currently diagnosed) compared to annual or semi-annual spirometry screening for all youth (previously-, currently- and never-diagnosed)?

An example of this type of prioritization can be viewed in any AHRQ Future Research Needs report, for example in Future Research Needs for Diagnosis of Obstructive Sleep Apnea

(http://www.effectivehealthcare.ahrq.gov/ehc/products/412/952/FRN11_SleepApneaDiagnosis_20120207.pdf).