

## Introduction to Systematic Reviews and Meta-Analysis

### Day 1

- Introduction to Systematic Reviews and other Knowledge Synthesis (KS) products
- The role of Systematic Reviews in decision making throughout the health care continuum; from patient care to government policy
- Characteristics of a good review question
- Protocol development: determining PICO elements; defining inclusion criteria and outcomes.
- Literature searching: Where and how to search for (and manage) evidence

### Day 2

- Quality assessment of systematic reviews and meta-analyses
- Organizing and managing a systematic review, including software options
- Study selection: methods, processes, management, applying inclusion criteria
- Risk of bias assessment: randomized trials and non-randomized studies
- Data extraction: refining criteria, managing the process, managing data
- Common data conversions

### Day 3

- Basics of meta-analysis: dichotomous and continuous data
- Software options for meta-analysis
- Clinical and statistical heterogeneity
- Publication bias
- Issues related with rare events or skewed data
- Introduction to network meta-analysis
- Incorporating observational data in systematic reviews

### Day 4

- Overview of qualitative review methods
- Formulating a qualitative review question and protocol
- Searching for qualitative studies and study selection
- Critical appraisal of qualitative studies
- Data extraction, synthesis and reporting of qualitative reviews

For more information, please contact the Knowledge Synthesis Platform at [Knowledge.Synthesis@umanitoba.ca](mailto:Knowledge.Synthesis@umanitoba.ca)