

## L5

### Evidence-based management of people with chronic co-morbidity

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**Background:** Most people have more than one condition when seeking care for chronic diseases. Despite this, most layers of evidence (clinical trials, systematic reviews and clinical guidelines) are predominantly designed for people with one condition, making it difficult to provide evidence-based health care for the large proportion of patients with chronic co-morbidities.

**Purpose:** We aim to explore this multifaceted issue from the perspective of reviewers and guideline developers whose goal is to assess the effectiveness of interventions in people with chronic co-morbidity. We will also be introducing a novel co-morbidity framework for prioritising clinical questions around co-morbidity, both for research and clinical management.

**Methods:** Based on previous work around major disease combinations, we illustrate the specific challenges and a proposed methodology for systematic reviews in people with more than one chronic condition. We also present a framework for researchers to identify high priority disease combinations, and to guide clinicians' thinking on how diagnosis or treatment may change in view of chronic co-morbidity.

**Results:** Co-morbidity complicates patient management in a variety of ways, by affecting diagnosis, therapy, and follow-up. Moreover, co-morbidity has implications for all stages of the guideline and review creation process, including the selection of clinically important outcomes, methods used for search and appraisal of the literature, evidence rating and synthesis, and the formulation of recommendations. We will discuss the challenges of systematic reviewing for this population and propose solutions on how to deal with problems such as indirect or inconsistent evidence. Our framework provides a structured approach to co-morbidity for researchers and clinicians alike.

**Discussion:** Developing systematic approaches for searching, appraising, synthesising and applying the evidence base for people with chronic co-morbidity is a crucial global priority. Currently used frameworks and processes are likely to benefit from modification when applied to this ever expanding population.