

## PD36 Assigning GRADE Levels To An Overview Of Reviews Using General Principles Identified From Current GRADE Guidelines

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**Introduction:** Existing guidelines on overviews of reviews and umbrella reviews recommend an assessment of the certainty of evidence but provide limited guidance on how to apply GRADE to such a complex evidence synthesis. We present one approach to applying GRADE to an overview of reviews developed using general principles derived from current GRADE guidelines.

**Methods:** The methods were developed in an iterative and exploratory fashion following discussion with 11 methodologists and health services researchers. Key principles were distilled on the five GRADE domains (risk of bias, inconsistency, imprecision, indirectness, and publication bias) from the relevant GRADE guidelines, particularly those on test accuracy.

**Results:** A 'general principles' approach of applying the five domains of GRADE to an overview of reviews and arriving at an overall summary judgment for outcomes was developed. These methods were successfully applied to an overview of reviews on 18F-prostate specific membrane antigen positron emission tomography and computed tomography in the staging of patients with high-risk or recurrent prostate cancer.

**Conclusions:** Our approach distilled key principles from relevant GRADE guidelines and allowed us to apply GRADE to a complex body of evidence. Such an approach may be of interest to other researchers working on overviews of reviews or umbrella reviews.

## PD37 Development Of A Tool For Quality Assessment Of Health Economic Evaluations

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**Introduction:** Health economic analyses compare the necessary investments and health outcomes for two or more technologies, assisting in resource allocation. How these analyses are conducted directly affects the results obtained. Therefore, it is essential to consider their quality during decision-making. The aim of this study

was to develop a domain-based tool for the critical assessment of cost-effectiveness and cost-utility studies.

**Methods:** We conducted a scoping review to identify tools available for the critical assessment of health economic analyses and extracted their recommendations. Based on the tools' items and the discussions of a working group, we identified domains related to the methodological quality of health economic analyses for inclusion in the new tool. The items extracted during the scoping review were classified according to the previously defined domains and were used to identify complementary aspects that should be included in the new tool.

**Results:** We identified 21 tools, all of which were checklists containing seven to 80 items. The following four quality domains were established for the new tool: (i) applicability of the research question; (ii) model structure; (iii) model parameters; and (iv) precision of the results. Assessment of each domain was guided by signaling questions. The first domain assessed the applicability of the research question to the desired setting; the second evaluated whether the model adequately represents the complexity of the clinical condition; the third assessed the quality (certainty) of the key parameters used in the model; and the fourth evaluated the certainty of the incremental cost-effectiveness or cost-utility ratio.

**Conclusions:** The tool was developed to integrate critical aspects that affect the methodological quality of health economic analyses, which are often missing in other tools. The quality of reporting was not included as a domain because it is already covered by existing tools. A multidisciplinary panel with different key stakeholders is being organized to review and refine the first version of the tool.

## PD38 Ensuring Study Validity To Inform Health Technology Assessments Globally

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**Introduction:** Assurance that supporting evidence is based on valid and unbiased assessments, evaluated using rigorously developed risk of bias (validity assessment) tools, is fundamental to good decision-making. Among those available, selecting and correctly using the best tool that is fit-for-purpose is challenging. Collaboration across the global evidence synthesis and health technology assessment (HTA) communities promotes best practices and harmonizes tool use across jurisdictions.

**Methods:** We have established the LATITUDES Network (<https://www.latitudes-network.org/>), a publicly available website library of validity assessment tools and resources to guide decision-makers in selecting and applying tools appropriate for particular contexts, including informing HTA reimbursement decisions, clinical guideline development, and stand-alone evidence synthesis projects. The internationally representative leadership team comprises five evidence synthesis experts who have been supported by a competitively awarded academic innovations grant. The 23-member advisory panel representing five continents provided expertise to finalizing criteria for tool inclusion, identifying key tools, and suggesting inclusion of