

Challenges in assessing the quality of scientific evidence for public health interventions

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The Swedish National Institute of Public Health (SNIPH) was commissioned by the government to propose an evidence grading system for assessing public health interventions in Sweden. The answer was GRADE. But what are the challenges?

Following an international workshop and GRADE training workshop the following major challenges were identified:

1. Complex nature of public health interventions

- Public health interventions are complex and multi-component, operating at different levels and sectors
- This creates difficulties in defining the PICO question, conducting searches, interpreting results, and assessing indirectness and inconsistency
- Potential co-interventions must be considered

- Outcomes may exist at both individual and community levels and be of non-health character
- Causal pathways often long

2. Selecting outcomes of interest

- An outcome framework can clarify the relationship between various outcomes and to decide acceptable levels during rating

- Likely change in settings and communities across included studies may result in significant heterogeneity
- A higher level of heterogeneity may need to be tolerated when assessing inconsistency

3. Higher level of heterogeneity

The SNIPH, in partnership with the GRADE working group, will address these challenges as implementation continues at the national level. The SNIPH is also investigating how the GRADE system can be used to recommend guidelines for public health interventions, and will report findings to the government in 2013.



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