Complex Interventions for Comparative Effectiveness and Health Technology Assessment

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What is a Complex Intervention?

Complex interventions (CIs) are defined as interventions with several interacting components. They are context-dependent and go beyond PICO:

- Context: How we assess the effect of context?
- Processes: How to collect and integrate this information?
- Theory: How to describe the causal pathway between the CI and the outcomes?
- Answers not only “what works?”, but also “how?” and “why?”

Characteristics

1. Number of interacting components within the case & control
2. Number/axiality of behaviours required by these interventions
3. Degree of flexibility or tailoring of the CI permitted
4. Degree of reachability or tailoring of the CI permitted
5. Number of organizational levels targeted by the CI
6. Number of stakeholders

**“Type” of CIs**

- Integrated care intervention
- Community-based and primary care intervention
- Guideline and clinical pathway implementation
- Population and public health intervention
- tele-health and e-health interventions

Theoretical framework development

Complex interventions for comparative effectiveness and health technology assessment.

Development and Evaluation Process

1. Identification of the CI
2. Collection of information
3. Data analysis
4. Interpretation of the results
5. Development of the CI
6. Evaluation and feedback

Case 1: Wound Interdisciplinary Teams (WIT) Study

1. Qualitative Comparative Case Study
2. Quantitative Descriptive Study
3. Quantitative CTS Data Linkage

Case 2: Telehomecare (TLC) Study

1. Conceptual Model of Telehomecare
2. System Design
3. Multi-level Evaluation Framework