Application of Implementation Science Frameworks to Guide Intervention Design

Part 1: Overview of Implementation Frameworks and Theories

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Behavioral approach to evidence translation

- Implementation depends on stakeholder behavior

- Improving the quality of healthcare requires changing behavior

- Changing behavior requires
  - Understanding determinants of current behavior
  - Understanding how behavior changes
Logic Model

- Personal Determinants
- Behavioral Factors
- Environmental Factors
- Contextual Determinants
- Societal
- Community
- Organizational
- Interpersonal
- Evidence Uptake
- Quality of Healthcare

Implementation Strategy
GET ALL THE INFORMATION YOU CAN, WE'LL THINK OF A USE FOR IT LATER.
Theories, Models and Frameworks

- Theoretical approaches used in implementation science
  - Describing and/or guiding the process of translating research into practice
    - Process models
  - Understanding and/or explaining what influences implementation outcomes
    - Determinant frameworks
    - Classic theories
    - Implementation theories
  - Evaluating implementation
    - Evaluation frameworks

Process Model Example: CIHR Knowledge Translation Model
Process Model Example: Knowledge to Action Framework for Public Health
Process Models = Planned Health Promotion

Step 1: Analysis of health and/or quality of life problem

Step 2: Selection of appropriate evidence related to problem

Step 3: Analysis of behavioral/environmental risk factors

Step 4: Analysis of determinants of risk

Step 5: Adaptation evidence/design of implementation strategy to target key determinants

Step 6: Evaluation of implementation
Implementation models/frameworks

- **Determinant Frameworks** (CFIR, PARIHS, etc.)
  - Specify determinants which act as barriers and enablers that influence implementation outcomes
  - AIM: Understand or predict implementation outcomes

- **Classic Theories** (Social Cognitive Theory, Theory of Planned Behavior, etc.)
  - Identify factors that help explain or understand implementation
  - ORIGIN: External to implementation science

- **Implementation Theories** (COM-B, Organizational Readiness, etc.)
  - Identify factors that help explain or understand implementation
  - ORIGIN: Developed by implementation researchers

## Implementation Theories/Frameworks: Alternate Classification

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<th>Application</th>
<th>Selected Examples</th>
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<tr>
<td></td>
<td>Classic Theories, COM-B/TDF</td>
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<tr>
<td>Identifying barriers/enablers</td>
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<td>Designing an implementation strategy</td>
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TDF: Theoretical Domains Framework; BCW: Behavior Change Wheel; CFIR: Consolidated Framework for Implementation Research; PARIHS: Promoting Action on Research Implementation in Health Services