Adopting a realist review approach to conceptualizing the implementability of clinical practice guidelines

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Outline

- Background
- Methods – Realist Review
- Preliminary Results
- Next steps
- Conclusions
Background

Guideline implementation
## Guideline Implementation

### Problem
- Clinical practice guidelines are inconsistently used
- Quality improvement interventions have variable costs and impact

### Solution
- Make guidelines easier to use
- Modify the guideline itself
- Potentially highly cost-effective
Implementability

“A set of characteristics that predict the relative ease of implementation of guideline recommendations” (Shiffman et al., 2005)

- Under-theorized concept
- Previous work has focused on the medical literature
- Many other disciplines study how format and content of messages affect behaviour

Deep conceptualization of implementability could improve uptake of CPGs
Objectives

- Review the literature to:
  - Determine the attributes of recommendations that impact uptake
  - Combine different disciplinary understandings of implementability
Methods

Realist review
Realist Review

- Qualitative approach
  - Iterative, interactive, purposive
- Explicitly theory-driven
  - Interrogates theories that underline the programs or interventions being studied
- More appropriate than traditional systematic review for:
  - New and under-theorized topics, complex interventions, and poorly classified literatures

Pawson, 2005; Greenhalgh, 2005
Theory of Implementability

Recommendation → Recommended Behaviour

Attributes of Recommendations

Context

User perceptions of recommendations
Realist Review Search Strategy

Level 1: Core articles search

Level 2: Expert identification of articles

Level 3: Bibliography searching

Level 4: Related articles search
Data Extraction

- Review and selection of articles done independently and in duplicate by 3 researchers
- Standardized form used to extract and organize data
Synthesis Methods

Step 1: Realist Review Synthesis
- *What* is it about recommendations that affect behaviour, for *whom*, under what *circumstances*, in what *context*, and *why*

Step 2: Other Qualitative Methods
- Sorting and interpreting of “storylines” or “narratives” in various disciplines (meta-narrative)
- Identify distinct attributes and the relationships between them (reciprocal translation analysis)

Pawson, 2005; Greenhalgh, 2005; Noblit & Hare, 1998
Preliminary Results

Results of the ongoing realist review
# Preliminary Search Results

<table>
<thead>
<tr>
<th>Level of Searching</th>
<th>Yield</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td><strong>Level 1: Core articles</strong></td>
<td>17</td>
<td>Data collection complete. Reviewed in duplicate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Review of management/marketing literature complete)</td>
</tr>
<tr>
<td><strong>Level 2: Expert Identification</strong></td>
<td>52 (27)</td>
<td>Three experts consulted to date.</td>
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<tr>
<td><strong>Level 3: Bibliography searching</strong></td>
<td>151</td>
<td>Potentially relevant articles extracted from search of core articles bibliographies.</td>
</tr>
<tr>
<td><strong>Level 4: Related articles search</strong></td>
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<td>Using PubMed Related Articles feature for core articles.</td>
</tr>
<tr>
<td>TOTAL</td>
<td>~1717</td>
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Guideline Attributes

- 111 attributes & definitions extracted
- 27 distinct attributes
- 5 clusters of attributes
- Information overload, Gain/loss frame, Vagueness, Precision, (45 total)
- Simplicity, Framing, Actionability, Clarity
- Wording cluster
Preliminary Framework of Implementability

Wording
(simplicity, clarity, actionability, framing)

Values
(flexibility)

Context
(feasibility)

Guideline Implementability

Presentation
(style, format)

Evidence
(evidence-use, risk-benefit)

Uptake
Next Steps

Refine Framework of Implementability

Empirically Ground Framework

Complete Realist Review
Operationalize attributes that can be changed by guideline developers

Conduct Focus Groups and Interviews with:
1. End-users (i.e. Family Physicians)
2. Guideline developers
Conclusions

- Realist review combines different disciplines to conceptualize implementability
- Attributes cluster into: wording, values, context, presentation, and evidence
- Empirical work will ground and refine framework for application to guideline development and implementation
- More implementable guidelines will lead to better care