Process Evaluation: Time for a Rethink?

Nancy Edwards, RN, PhD, FCAHS
Professor
School of Nursing
U Ottawa
Ottawa, Canada
A contentious assertion: Process evaluation is caught in a time warp

http://chinookers.blogspot.ca/2015/05/time-warp.html
Process Evaluation Description Reflecting Donabedian’s Framework (1966)


• Assess program implementation to determine programme strengths, weaknesses, and areas that need improvement:
  – What intervention activities are taking place?
  – Who is conducting the intervention activities?
  – Who is being reached through the intervention activities?
  – What inputs or resources have been allocated or mobilized for programme implementation?
Qualitative process evaluation in service of RCTs

“Process evaluations were previously synonymous with qualitative research alongside trials and were conducted to provide a deeper understanding of the disease condition, implementation issues and mechanisms of the intervention.”

(Lewin et al., BMJ, 2009; as cited in Liu et al., Sys Rev, 2016)

http://researchpedia.info/what-is-quantitative-and-qualitative-research/
• Peripheral (opportunistic) model

• Add-on model

• Integral models
  – ‘integral-in-theory’ studies
  – ‘integral-in-practice’ studies
Review of trials of complex care interventions
Lewin, Glenton et al., BMJ. 2009, 339.

• 30 of 100 trials had associated qualitative work; 19 of these were published studies.
• 14 qualitative studies were done before the trial, 9 during the trial, and 4 after the trial.
• 13 studies reported an explicit theoretical basis and 11 specified their methodological approach.
• Approaches to sampling and data analysis were poorly described; quality of qualitative studies varied.
• For most cases (20 of 30) there was no integration of qualitative and quantitative findings in either analysis or interpretation.
Review of RCTs

• 2% of 2812 trials in metaRegister of Controlled Trials (2001-2010) used qualitative methods
• 32 trial proposals included in review
• Qualitative research primarily focused on the intervention or trial conduct.
• 25% used less than a single paragraph to describe the qualitative research.
• 56% included explicit rationale for conducting the qualitative research with the trial.
Delivery systems for malaria control
Webster et al., BMC Health Services Research, 2010

• Only 3 of 50 published malaria control evaluations examined delivery systems at the national level.

• Authors identified need for a better understanding of links between the delivery system involved and the proximal or distal coverage achieved.
Where does process evaluation begin and end?

- Process evaluation for adequacy of intervention
- Context evaluation for transferability
- Effects evaluation for impacts and unintended consequences
- Economic evaluation to address efficiency considerations

(Hanson, Cleary, Schneider, et al. (2010). BMC Health Services Research)
Where does process evaluation begin and end?

- Process evaluation for adequacy of intervention
- Context evaluation for transferability
- Effects evaluation for impacts and unintended consequences
- Economic evaluation to address efficiency considerations
- …and what about adapting interventions?

- (Hanson, Cleary, Schneider, et al. (2010). BMC Health Services Research)
Improving process evaluation for health behaviour interventions
Morgan-Trimmer, Evaluation and Health Professions, 2013

• Three approaches to strengthen process evaluations:
  – Incorporate/examine contexts of interventions;
  – Engage with the concept of “process” in process evaluation
  – Work with [integrated] theory to understand interventions.
Should we identify priorities for process evaluation for population health interventions?

- Sustainability
- Engaged communities and political support
- Scalability (equitable reach and outcomes)
- Use approaches consistent with complexity and systems thinking – dynamic, non-linear and nested changes across systems (vertically and horizontally)

(Gunderson & Holling, 2002; Best, Greenhalgh et al., 2012; Willis, Best et al., 2014; Clark, 2013; Hawe, 2015; Kelly et al., 2014)
## Process Evaluation: Where might we be heading?

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<tr>
<th>From</th>
<th>To</th>
<th>Supporting Ref</th>
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<tbody>
<tr>
<td>Assessing intervention fidelity</td>
<td>Understanding what moderates and influences intervention fidelity across system levels</td>
<td>Hasson et al., 2012; Webster, 2010; Clark, 2013</td>
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<td>Being poor quality, peripheral add-ons to RCTs</td>
<td>High quality and robust process evaluation approaches that are an integral part of population health intervention research</td>
<td>Grant, Treweek et al., 2013; O’Cathain et al., 2014; Liu, Muhunthan et al., 2016</td>
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<td>Focused on questions of attribution (and causation)</td>
<td>Focused on questions of adaptation and scalability (taking contextual influences into account)</td>
<td>Edwards &amp; Barker, 2014; Greenwood-Lee et al., 2016</td>
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<td>Assess intervention reach</td>
<td>Assess disparities in program/policy reach and underlying reasons for same</td>
<td>Hanson et al., 2010</td>
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A deep understanding of historical context, informed by process evaluation, needs to be taken into account in population health intervention design

Best Practices in Long-term Care

Process evaluation can inform how and why interventions are adapted and the consequences

Session 3
Discussion Questions

• What is the temporality of process evaluation?
• How might process evaluation be nested in a trial or is it an alternative design?
• How can (and should) process evaluation inform the adaptation of population health interventions?
• Which methodologies should be combined in process evaluation and how?
• How does a systems perspective shape methods used for process evaluation?
Some Additional References

- De Savigny, Kasale et al. (2004). Fixing Health Systems, Ottawa: IDRC.
- Shiell, Hawe & Gold (2008). BMJ.
ADDITIONAL SLIDES

*Figure 2: Pattern matches for importance and feasibility of scalability factors for physical activity interventions among key informants*

**Fig. 5.** Approaches that emphasize complexity (ii).