Webinar: Implementation vs. intervention outcomes

AH-TRIP stands for allied health translating research into practice. In the previous webinar we discussed some overarching concepts to consider and how a logic model might help when planning evaluation. Implementation outcomes can be confusing so support for an experienced implementation and evaluation mentor will be useful particularly if you are new to this.

Evaluation can be broken down into three parts and will depend on the evidence to practice gap or the problem you are looking to address. And don’t forget the purpose and the audience of your evaluation may impact which outcome measures you collect.

There are three potential types of outcomes include
- Implementation outcomes
- Intervention outcomes (including service and client outcomes)
- Process outcomes or process measures (process measures can be used in lieu of intervention outcomes in some translation projects)

Let’s work through an example
Another way of thinking about your intervention could be:
1. Does ‘it’ work here? Questions such as “did the change or intervention improve the care delivered?”, or “did you improve the patient’s overall health and wellbeing?” are examples of intervention outcomes. Intervention outcomes refer to the success or effectiveness of the intervention. This might be measured by process measures or process outcomes throughout implementation, or outcome measures before and after implementation.

For example, thinking about my previous problem needing a coffee to improve alertness
- What would be the intervention outcome?
- What could be used as a process measure?

<table>
<thead>
<tr>
<th>Inputs/resources</th>
<th>Activities</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money, Time</td>
<td>Going to the café to get a coffee&lt;br&gt;Getting a cup of caffeinated coffee</td>
<td>Drinking the coffee</td>
<td>Less tired</td>
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In this case it could be difficult to measure the outcome ‘increased alertness’ but we know there is good evidence that coffee can improve alertness instead depending on my audience, purpose, time and resources measuring the output ‘coffee consumption’ may be an adequate process measure.

The second question to consider in evaluation is
2. Why does or doesn’t ‘it’ work here? Questions such as did you implement what you intended, how you intended to implement it? Are important ones, it is difficult to measure effectiveness of an intervention if your implementation didn’t go as planned – in these cases understanding the implementation
Outcomes may assist in explaining why things did or didn’t work or provide the detail around step 2 in this picture.

For example, thinking about the feeling-tired example there may be many reasons why we did not see a change. For example, was the coffee shop open, was the change affected by local context like being interrupted on the way to the coffee shop OR did the coffee not contain enough caffeine. These measures assist in explaining why the practice change did or didn’t work. While this is a silly example, thinking in more depth about the implementation outcomes will assist with understanding why does or doesn’t it work here and will provide rich information about the implementation process.

Proctor’s et. al explain these outcomes in more detail particularly around implementation outcomes which are often left as the big question mark like this picture

Proctor [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068522/pdf/10488_2010_Article_319.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068522/pdf/10488_2010_Article_319.pdf)

Proctor et. al. provides a nice visual outlining types of outcomes in implementation research. Now you may not be doing a full research protocol for your TRIP project, but you can draw on the definitions to inform your evaluation.

In this visual you’ll notice implementation outcomes precede both service OR intervention outcomes and client outcomes, as the latter sets of outcomes will be effected based on implementation— It would be difficult to measure intervention outcomes such as effectiveness if you don’t know if you implemented what you intended to how you intended to implement it.
If we were translating research into practice into a new context or with new people involved, then you may need to collect more information about ‘does it work here’ or the service/client outcomes, alternatively if there is strong evidence that the intervention is effective you may need to focus on measuring implementation outcomes ie: why does it or doesn’t it work here. For example, feasibility is defined as the extent to which a new treatment, or an innovation, can be successfully used or carried out within a given context or setting. If the coffee shop was shut or the line too long getting a coffee may not be feasible. whereas fidelity is defined as the degree to which an intervention was implemented as it was prescribed in the original protocol or as it was intended by the program developers. If I got a decaf coffee, then fidelity wasn’t met. If you are interested in more information, I’ve included the Proctor paper in additional resources that elaborates on these definitions.

If you are unsure if the intervention is effective and high-quality evidence doesn’t exist, then you are not undertaking a TRIP project but instead this is a research question that requires further evaluation and exploration.

We’ve said it before, and we’ll say it again: this can be a complex concept and seeking support from a mentor early in planning stages of change will assist in determining the purpose and audience of your evaluation and then how to evaluate your practice change.

Acknowledgements: Adrienne Young, Prue McRae, Alison Mudge and Sally Barrimore