

The below is a transcript of a Recent Inquiry on RE-AIM usage in an addiction treatment model in primary care project:

The inquiry, from the investigator: How to address the use of RE-AIM in this paragraph:
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"A separate issue relates to the utility of implementation models and frameworks. As mentioned earlier, we abandoned many of these because they did not serve the needs of our customers. This is not to say that the models were inaccurate but at their broad conceptual level we found them lacking. As an eminent statistician George Box often said "all models are wrong, but some are useful". One framework we did try stay with was RE-AIM. It makes so much sense; but even there, we struggled.

One example is the "adoption" element of RE-AIM which we hoped would help us address target staff in the three clinics. There were ??42?? primary care clinicians at one site. But typically, when a patient admits to substance abuse, the primary care clinician quickly refers them to one of the two primary care addiction medicine MD specialists who in turn provide medication assisted treatment and sometimes refer the patient to: an outside specialty addiction treatment center or to a Behavioral Health consultant at the clinic. RE-AIM ensured that we think about clinician roles in implementing our computer based system SEVA. But in this context it was a struggle to decide what adoption really means. Is it the 42 clinicians most of whom never heard about Seva? Or is it the 2 addiction medicine specialists, one of whom was much more active than the other? Or was it the 14 behavioral health professionals or only the much smaller number of them who supported the two addiction doctors? What do we do with the behavioral health staff who, once in a while, would support the BH staff primarily assigned to the addiction medicine specialists? There is no right answer, of course, and the framework forces us to think about these issues. But the fit of such models can take some work. Would we have thought about clinician involvement without RE-AIM? Probably. How about patient acceptance? In that area the representativeness focus of RE-AIM would not have received the attention that it did.

But in essence we walk away from this study feeling that a better use of our time rather than thinking about broad conceptual models, might have been to have a two hour meeting with ~7 key staff in the organization in which we asked them to think about the major barriers we would likely face and the major facilitators we should build on in this organization to get that innovation adopted. We would have gotten advice like "watch out for Jim - Seva will not stick without his support" or "turnover is a big deal in our organization - don't rely on one or two people to champion this through for you cause they won't be here that long."

(See next page for the consultation guidance)

The Response from our experts:

I have several thoughts about your description/story about at trying to use RE-AIM below... but overall think it important that you share this experience- in writing-as your quote from Box that 'all models are wrong' is very apt.....I might add 'and challenging to identify the key elements in a given case, and often difficult if not impossible to operationalize or apply due to their complexity or lack of specificity and clear guidance' :-)

So- here are a string of generally unrelated reactions and off top of my head (or other body parts) reactions:

You have illustrated a key challenge to employing RE-AIM..... The issue of 'appropriate denominators'. I see 2 issues in the description below- how to determine relevant # (e.g. All or only those 'exposed' who could have participated, etc. and – which 'level' or type of adoptee or setting to use. (May be more issues, and things I am not understanding also?).

For the first one about the relevant # in denominator- we encourage people to do 'sensitivity analyses' and use both a conservative estimate- e.g. All those in a setting; and a 'liberal estimate' of those you know were exposed or invited to participate.

For the second, RE-AIM is strongly multi-level and we like to say 'you can never have too many levels'..translated this means that in an ecologic model perspective you have: patient recipients; individual staff- e.g. Behavioral health or nurses- the intended intervention agents; the providers they work for; the clinics in which the providers work; and then the overall organization in which the clinics are part of...Each of these is nested within the other and dependent upon higher levels- e.g. if the organization declines to participate, the clinicians behavioral health delivery staff do not have chance to participate, so their adoption is irrelevant/not possible.

These multi level issues are probably best illustrated in what we call 'our Extended CONSORT diagram'- think I can find and send a cc to you if interested).... in which one shows the # or organizations invited, number participating; reasons for declining for those who do not; then moving to next level down- clinics- what percent participate; how representative are they (realizing often do not have key data you might want but only general demographics); then down to providers, etc. on down until finally reach patients.

In real world/ practical application it is often not possible (although ideal from a comprehensive understanding perspective) to analyze or have data on all these levels... SO we recommend specifying- A PRIORI- the key levels you are interested in; and providing rationale for this (instead of just ignoring other levels :-)

You implicitly raise at least 2 other excellent points that we are now TRYING to address:

Pragmatic vs. 'Full' Use of RE-AIM

in a given case, and especially if you have limited dollars, small grant, few data collectors, limited time, analyses budget, or are in low resource setting (e.g. CHCs) wanting to apply RE-AIM, this evaluation task can be overwhelming or just not feasible.

In such cases we recommend a 'pragmatic application' of RE-AIM...rather than a 'full application' or RE-AIM ala Kessler et al, 2013. A pragmatic application involves A PRIORI specifying which RE-AIM dimensions are most relevant to your question; e.g. Is it Reach, or Adoption; implementation or maintenance... and then focusing on these. KEY- from our defensive perspective, is that a) you describe this transparently; and b) that you say 'we are applying these dimensions or parts of the RE-AIM model', and describe why not using others ...rather than 'we used the RE-AIM model' without qualification

Usefulness of Qualitative Approaches and Assessment to understand and inform RE-AIM Analyses

In our review of use of RE-AIM (Gaglio et al, 2013, AJPH) we analyze which components and RE-AIM recommendations for comprehensive or optimal use of RE-AIM have actually been conducted/reported in the literature. Lack or absence of good qualitative data- e.g. The informal approach you recommend of sitting down with key stakeholders and staff and having discussion is highly recommended and seldom done, and almost never done proactively BEFORE the implementation, as we would recommend to 'design for dissemination' (and implementation and sustainability).

_ These qualitative discussions, which are critical for understanding HOW and WHY different RE-AIM results are obtained, can be conducted to focus on each RE-AIM level- e.g. Why is reach so low, what are/were the barriers to it; did different clinics try different things; how did that work, etc.

NEW – and generally not published/ extensions/ evolution of RE-AIM

Dave, most of the issues and answers above were hinted at, but not at all prominent in our publications to date. We are currently revising our REAIM website and within 4-6 weeks we hope that it is going to be more current and to have FAQ that addresses issues like these. ***Would you consider allowing us to include this exchange as one of our illustrative cases?***

We are also considering (no decision yet) having an 'Ask the RE-AIM expert' for a brief, one time generally on-line consultation like this one. Stay tuned.

Anyway, a few new things are are working on now and should have publications submitted within 1-2 months are: a paper on 'pragmatic applications' of RE-AIM with better guidance for

application AND translation to a 'who, what, where ,when why' format more understandable to community leaders, etc. with less jargon, some illustrative 'case studies/examples', etc.

Second, we are working on a paper on 'Qualitative applications of RE AIM with interview guide and specific template, questions to ask about each RE-AIM dimension; and to help interpret and understand different 'patterns' of RE-AIM results.

Finally, we are focusing now on how to use RE-AIM interactively for pre-implementation PLANNING; for periodic use to INFORM ADAPTATIONS, and finally for SUMMATIVE OUTCOME evaluations including assessments of sustainability, to extend the way it has been largely used for retrospective applications (after projects have often experienced potentially preventable failures).

****So OVERALL**, I really appreciate your note- and think most important is that RE-AIM not become calcified; inflexible, or stagnant. It needs to continue to evolve based upon lessons learned, new questions and contexts, become easier to apply, have better guidance, etc. (e.g. We are considering and may or may not turn to applying it to environmental issues, in similar way that Environmental Impact Assessments are now conducted.