Using an Applied Approach for Mixed-Methods Evaluation in PCTE Settings

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Why Use Mixed-Methods?

• Different ways of knowing; need for different types of data; triangulation of findings

• Quantitative
  – To understand the *what* of program components
    • outcomes, frequencies, examination of cause and effect

• Qualitative
  – To understand the *why* and *how* of program components - subtle meanings associated with attitudes, motivations, beliefs, behaviors
  – Process evaluation
  – Exploratory and explanatory data
When Designing Program Evaluations, Aim for

• A contextually comprehensive mixed-methods evaluation (why and how along with what)
• Evaluation that is “explanatory, attends to the context of [the program intervention component], and elicits the experiences of the diverse stakeholders.”
• Balance between comprehensiveness and feasibility

What to Consider when Designing an Evaluation

• What do you want to evaluate?
  – Which specific program elements?
  – Why evaluate these specific ones?
  – What will you do with the evaluation data for each element?
• How can the essence, progress, and outcomes of each element be best assessed?
  – Which methods are best suited for each one?
What to Consider when Designing an Evaluation

• Which methods will ensure a contextually comprehensive evaluation of each element?
  – Do you need more than one method?
  – Do different elements need different methods?
  – Do you need different methods at different time-points?
  – Why?
• Document decision-making throughout project

What to Consider when Designing an Evaluation

• How feasible is it that you will be able to:
  – Actually collect all the data you propose to collect?
  – Collect the data in a rigorous, high-quality manner?
  – Analyze all of the collected data?
  – Apply the analysis results for each evaluation element to your intended purpose?
  • e.g., HRSA data requirement reporting; programmatic quality improvements; professional conference presentations; publications; sustainability; formulating new evaluation questions
Potential Evaluation Methods
with patients, learners, teachers, community, other stakeholders

Qualitative measures
- Site observations
- Process pathways observations
- Interviews
- Focus groups
- Analysis of written materials

Quantitative measures
- Validated surveys
- Other existing surveys
- Surveys created for the PCTE project
  - e.g., knowledge, attitudes, beliefs, behaviors, satisfaction
- EHR patient outcome data
- Curricular evaluations
- PDSA cycles
- HRSA-required data

How to Select Methods
- Consider which methods are most appropriate for answering the questions you have about your program elements; do you need:
  - Number counts and/or percentages?
  - Precise frequencies or ratings?
  - Understanding of meaning and context of quantitative outcomes?
  - Understanding of program process and progress?
  - Understanding of individual participants’ experiences?
  - Understanding of how participants discuss an element of the program or subject addressed by the program?
- Also consider:
  - Suitability for use in the program setting
  - Access to the participants; burden on participants
  - Availability of evaluation staff, time, resources for collection, and analysis
Selecting the Evaluation Sample

- **Consider:**
  - **Whom** data will be collected from – paying attention to subgroups relevant to your project
    - Learners in training? (residents, students)
    - Faculty learners? (core and community faculty)
    - Patients? (ages, languages, diagnoses, etc.)
    - Community stakeholders? (local organizations, city govt., etc.)
  - **What sample size do you need?**
    - Quantitative
    - Qualitative
  - **Evaluation time points:**
    - **Whom** will you collect **what** from, **how**, and **when**?
    - Be sure you know **why**

Brown Dept. Family Medicine PCTE Evaluation

<table>
<thead>
<tr>
<th>Time Points</th>
<th>Methods</th>
<th>Data Types</th>
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</thead>
<tbody>
<tr>
<td><strong>RESIDENTS</strong></td>
<td></td>
<td></td>
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<tr>
<td>Y01-Y05</td>
<td>Document PDSA cycles</td>
<td>Quant/Qual</td>
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<tr>
<td>Y01-Y05</td>
<td>Evaluation of didactics</td>
<td>Quant/Qual</td>
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<tr>
<td>Y01-Y05</td>
<td>Annual assessment of BH and PCMH curricula</td>
<td>Qual-meetings</td>
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<tr>
<td>Y01-Y05</td>
<td>Quarterly reviews of BH and PCMH rotation evaluations</td>
<td>Quant</td>
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<tr>
<td>Spring Y01-Y05</td>
<td>Survey about PCTE curricular elements</td>
<td>Quant</td>
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<tr>
<td>Y01-Y05</td>
<td>Document engagement in community</td>
<td>Qual/Quant</td>
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<tr>
<td>Y01-Y05</td>
<td>Document HRSA-required demographics</td>
<td>Quant</td>
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<tr>
<td>Fall Y02-Y05</td>
<td>EHR patient panel analysis</td>
<td>Quant</td>
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<tr>
<td>Y02-Y05</td>
<td>Adolescent-friendliness survey in clinic</td>
<td>Quant</td>
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<tr>
<td>Spring Y04</td>
<td>Interview with PGY3s</td>
<td>Qual</td>
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<tr>
<td>FACULTY</td>
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<tr>
<td>Spring Y01, Y04</td>
<td>Survey about curricular elements</td>
<td>Quant</td>
</tr>
<tr>
<td>Spring Y04</td>
<td>Interview</td>
<td>Qual</td>
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<tr>
<td>PATIENTS</td>
<td></td>
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<tr>
<td>Y01-Y05</td>
<td>Track pediatric HEDIS measures and other patient outcome data</td>
<td>Quant</td>
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<tr>
<td>COMMUNITY</td>
<td></td>
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<tr>
<td>Y02-Y05</td>
<td>Survey Adolescent Health Advisory Council members (each 6 week series)</td>
<td>Quant/Qual</td>
</tr>
<tr>
<td>TBD</td>
<td>Community stakeholder survey or qualitative assessment</td>
<td>Quant/Qual</td>
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