Program Evaluation on the frontline of CBME: How to use rapid cycle evaluation at the program level

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Objectives

After participating in this education rounds, participants will be able to

1) Report on the value of evaluating CBME implementation;
2) Describe important steps and considerations in implementing RCE in practice; and
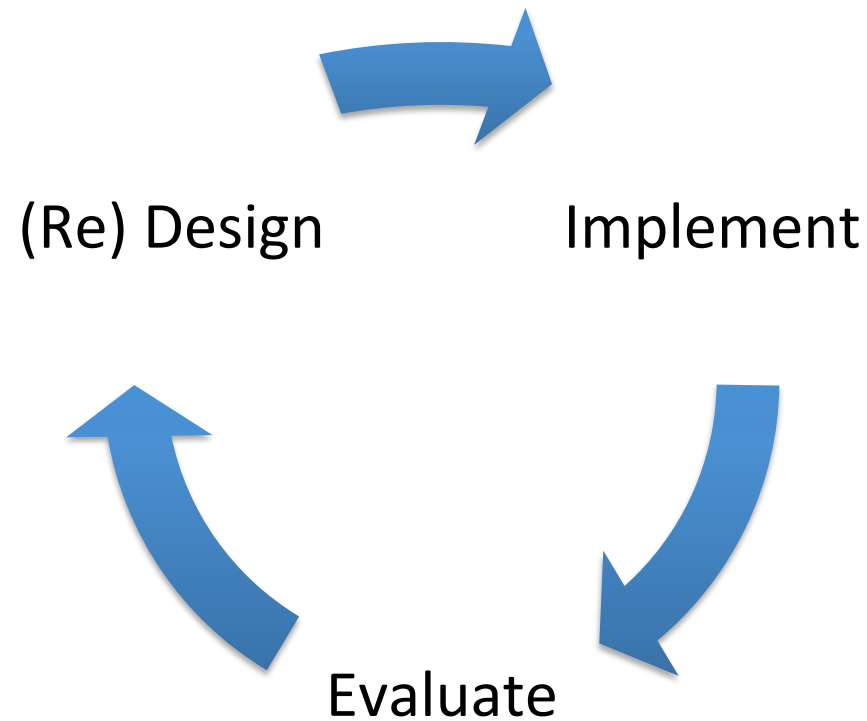3) Summarize the benefits and challenges in its initial implementation in EM at Queen's University.

Overview

1. Introduction to Rapid Cycle Evaluation
2. Approach – Queen's Emergency Medicine
3. Findings, Implications and Next Steps

What is Rapid Cycle Evaluation?

(Re) Design → Implement → Evaluate →

Gold, Helms and Guterman, 2011.

Why Rapid Cycle Evaluation?

❖ Innovations rarely remain fixed over time.

❖ Key features are likely to be modified

❖ Documenting - implemented versus planned is critical

Gold, Helms and Guterman, 2011.

Key Evaluation Question

Are we implementing as intended?

Helps to avoid Type III errors:
Interpret failure to achieve outcomes as
"CBME does not work"

When it is really because it is a
"Failure of implementation"

Mowbray et al, 2003

Why Rapid Cycle Evaluation?

❖ Innovations rarely remain fixed over time.

❖ Key features are likely to be modified

❖ Documenting - implemented versus planned is critical

Unfortunately such clarity is often lacking or limited . . .

Gold, Helms and Guterman, 2011.

What is Rapid Cycle Evaluation?

"Clear articulation of the Essential logic of the innovation – How it is intended to operate"

(Re) Design

Implement

Evaluate

Gold, Helms and Guterman, 2011.

CBME – 5 Core Components

COMPETENCY FRAMEWORK
- Defined list of competencies for area of practice

SEQUENCED PROGRESSION
- EPAs and milestones been sequenced into a progressive continuum

TAILORED LEARNING EXPERIENCES
- Curriculum plan that facilitates acquisition of competencies?
- Learners explicitly engaged

COMPETENCY-FOCUSED INSTRUCTION
- Teachers equipped with to use competencies to guide their teaching

PROGRAMMATIC ASSESSMENT
- Master plan or blueprint for assessment activities

RCE in EM at Queen's

RCE in EM at Queen's

Purpose

1) Describe the EM program's critical features, contextual characteristics, and planned implementation strategy;

2) Assess the first six-months of implementation for program improvement and broad feedback

Evaluation Questions

- What do EM training program stakeholders perceive as the strengths and challenges of implementing CBME on the ground?

- To what extent is the competency-based EM program being implemented as intended?

- How can lessons learned inform ongoing implementation of CBME at the local and national levels across training programs and disciplines?

RCE in EM at Queen's

- Creating a team...D to add more

RCE in EM at Queen's

Phase 1:

Planning and preparation

April, May, June 2017

Phase 2:

Three-month implementation

July, August, September 2017

Phase 3:

Six-month implementation

October, November, December 2017

Phase 4:

Report writing and knowledge mobilization

January, February, March 2018

Phase 1:

Planning and preparation

April, May, June 2017

Phase 1

- Detailed description of EM CBME Program and Implementation Strategy
- Core Components Framework[2]
  - Framework, Progression, Tailored Experiences, Competency-focused Instruction, Programmatic Assessment
- Contextual characteristics

2. Van Melle E. Core Components of CBME ¬— An Organizing Framework. Ottawa, ON: Royal College of Physicians and Surgeons of Canada; 2016.

Phase 2:

Three-month implementation

July, August, September 2017

Phase 2

- Interview key stakehoders
  - perceived strengths and challenges associated with their role(s) in the program;
  - experiences and concerns with program implementation
  - suggestions for refining ongoing program development and implementation
- Audio-recorded, transcribed, and member-checked for accuracy.
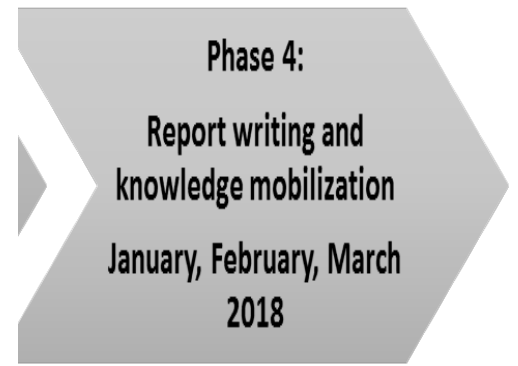- Abductive - allowing for themes and novel insights to emerge.

Phase 3:

Six-month implementation

October, November, December 2017

Phase 3

- Findings from Phase 2 -> protocol for repeat interviews
- Thematic analysis of 3 and 6 month data
- Triangulation with quantitative data / metrics

Phase 4:

Report writing and knowledge mobilization

January, February, March 2018

Phase 4

- Comparative analysis of intended and enacted program:

1) Innovation Report
2) Evaluation Report – our approach to evaluating early program implementation of CBME

RCE in EM at Queen's

- Results

RCE in EM at Queen's

- Results

RCE in EM at Queen's

- Results

RCE in EM – 3 month results

Framed Questions:
- Residents
- Faculty
- AA's
- CCC
- Leadership

COMPETENCY FRAMEWORK
SEQUENCED PROGRESSION
TAILORED EXPERIENCES
COMPETENCY-FOCUSED INSTRUCTION
PROGRAMMATIC ASSESSMENT

Milestones - too detailed
- not well sequenced
Where is the flexibility in learning?
What is the utility of Personal Learning Plan?

Role of off service instruction?

Lens for analyzing results, refining the program & focusing next set of questions

Rapid Cycle Evaluation – Next Steps

"Clear articulation of the Essential logic of the innovation – How it is intended to operate"

(Re) Design

Implement

Evaluate

Rapid Cycle Evaluation – Next Steps

"Clear articulation of the Essential logic of the innovation – How it is intended to operate"

(Re) Design

Implement

"Clear indicators of progress"

Evaluate

"Clear articulation and measurement of how activities are linked to outcomes"