Using a Rapid-Cycle Approach to Evaluate the Implementation of Competency-based Medical Education Curriculum and Assessments

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I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Je n’ai aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
Background

• With shift to competency-based medical education (CBME) comes many changes
  > Increased opportunities for direct observation
  > Multiple data points
  > Multiple assessors
  > Learner centered

• Queen’s residents transitioned to CBME on July 1st, 2019

• Ophthalmology is preparing for national launch in 2021/2022
Purpose

To describe key stakeholders lived experiences of CBME implementation for the Foundations of Discipline Stage in one Department of Ophthalmology.

• Aimed to identify the strengths and barriers to implementation
  > Curriculum
  > Assessment Plan
  > Assessment Tools
  > Learning opportunities (e.g. half-day assignments/rotations)
Rapid Cycle Evaluation

• Systematic process to evaluate new innovations and changes
• Data collected is analyzed ‘rapidly’
• Findings and key recommendations fed back to key stakeholders for integration and ongoing refinement

(Gold et al., 2011)
Methods

- Qualitative case study
- One stage → Foundations
- 2018-2019 academic year
- Department of Ophthalmology
- Key stakeholders: Residents, faculty, program administrator, competence committee members, academic advisors, program director, and educational consultant
Methods

• Each round consisted of focus groups and interviews with stakeholders
  > Audio-recorded and transcribed verbatim

• Emergent thematic analysis (Patton, 2016)
  > 3 main themes emerged across both time periods
# Recommendations and Action Plan

**Purpose:** To better understand key stakeholders lived experience of the Foundations of Discipline Stage (includes ER eye-clinic, comprehensive clinic, and subspecialty clinics) within the implementation of CBME in a Department of Ophthalmology.

## Strengths Identified

1. Regular and explicit feedback
2. More frequent assessments
3. Goals for number of assessments
4. Early identification of learning needs
5. Formal learning plans
6. Increase engagement and self-awareness from residents
7. Harder to fall through cracks
8. Increased transparency

## Concerns Identified

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<tr>
<th>Recommendation/ Concern</th>
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<th>Timeline</th>
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</table>
| Explain acronyms used in relation to CBME | - Faculty and resident development  
  o Referenceable emails  
  o Individual meetings (if requested)  
- Helpful documents (like EPA lists) will be posted in the ER Eye clinics and in subspecialty rooms | Jan and ongoing
|                                     | January  |             |          |
## Recommendations and Action Plan

| Cheat sheets on how to trigger assessments at computer for staff | **-** Create poster and post in ER Eye clinic  
**-** Copies can be made for any other clinic. Ask Tessa if you would like one | **Done** |
|---|---|---|
| **Triggering of assessments**  
(Residents provide faculty with advance notice; Encourage staff to trigger) | **-** Creation of guidelines  
**-** Share guidelines with all faculty and residents  
**-** Faculty and resident development  
  - Referenceable emails  
  - Posters in clinics  
  - Individual meetings (if requested) | **Done**  
January  
January |
| **Assessment from different stakeholders** | **-** Add detail to Assessment plan to clarify who can assess each EPA  
**-** Resident Teaching session  
  - Clarification around who can assess which EPAs  
  - Resident training on how to trigger assessments to non Queen’s stakeholders | **January**  
**January 22** |
Theme 1: Developing a shared understanding

“But we have also been trying to coach the faculty to look at some of the softer things that they might not otherwise think to assess.” (Round 1 Interview1)

“But I find that residents do not often tell you when they will be performing a specific task and therefore I do not observe it and cannot provide useful feedback or a complete assessment.” (Round 2, Faculty 4)
“Punctuality and efficiency in clinic I feel isn’t on here. Sometimes that is a huge issue. One person can meet all this criteria but they are only seeing 3 patients while another person is seeing 10 patients. And so there is no way to identify that.” (Round 1, Resident 6)

“It has improved the confusion/overlap among EPAs.” (Round2, Faculty 1-Speaking about changes following first cycle)
Theme 3: Feedback

“So overall, I see the strengths as being a lot of feedback, catching things early, making more formal plans for residents which otherwise didn’t necessarily happen.” (Round 1, Interviewee 5)

“I think there are a certain number of staff who have become more invested in not only the quantity of feedback but also the quality.” (Round 2, Resident 1)
Conclusions and Impact

• Rapid-cycle evaluation has been a valuable process for identifying key strengths, as well as areas that required further attention

• Using a rapid-cycle evaluation resulted in immediate, positive improvements to the residency program

• **Next steps:** Continue with improvements that require more time to implement, including enhancing the quality of feedback provided to learners
  > We intend to identify opportunities for our Department by analyzing the collected resident assessment data
Questions?

- Thank you to all of the participants for their time and feedback in this study.
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