Competence by Design in Canadian Neurosurgical Residency Programs: The Beginning

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Disclosure

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Introduction

• The Royal College of Physicians and Surgeons of Canada (RCPSC) has recently redesigned the Canadian neurosurgery residency training curriculum by implementing a Competence by Design (CBD) training program centered around evaluating Entrustable Professional Activities (EPAs).

• Objectives
  1. To assess the feasibility of EPAs
  2. To evaluate the potential benefits and pitfalls of CBD in Canadian neurosurgery residency education

Image modified from the RCPSC website
Methods

• A pre-piloted survey was distributed to all current first year neurosurgery residents in Canada from September to October 2019.

• The survey was comprised of six themes of 29 Likert-scale questions that assessed three major facets of educational program implementation:
  1) **CBD knowledge of the key stakeholders**
  2) **Potential system barriers**
  3) **Educational and psychological impacts on residents**
Results

• The response rate was **84%** (n=25)

• **79%** of respondents agreed or strongly agreed that their residency program seemed ready for CBD implementation ($\bar{x} = 4.10$)

• However, **71%** thought their staff surgeons were not entirely willing to complete EPAs ($\bar{x} = 3.24$) and **19%** respondents (n=4) stated that their attendings had refused to complete their EPAs
Results

SELECTED BENEFITS BY RESIDENTS

- The evaluation is more objective
- I have a more active role in my learning
- I receive more feedback
- There is improved relations with attendings
- There is a clear assessment of my own performance
- Other
Results

SELECTED PITFALLS BY RESIDENTS

- It is too time consuming
- It is too intimidating to ask the attendings
- The evaluation form does not represent my true competence
- I forget to initiate the forms
- The attendings do not complete the forms
- Other
Discussion

- This work heralds an ongoing national longitudinal study on the effect of CBD
- It sets the stage for real-time modifications of CBD by the RCPSC to improve overall user experience.

Summary points

- Adequate preparation is essential for CBD rollout
- **Feedback** and resident-driven learning progression are positive highlights of CBD
- Still, barriers for instant success exist
  - Faculty buy-in
  - Resident **time management** to request EPA assessment forms