Resident Doctors of Canada

Médecins résidents du Canada

Mitigating Risks during Implementation of Competency-Based Medical Education in Canadian Residency Programs

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

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Background

- Competency-Based Medical Education (CBME) is becoming a reality nationally and internationally
  - Transition from strictly time-based training
  - Need to demonstrate competence and achieve ‘milestones’
- CanMeds 2015
- The Royal College of Physicians and Surgeons of Canada’s Competence-by-Design (CBD) project
  - Medical Oncology and Otolaryngology in 2016
  - Gradual implementation over next decade
- Must ensure our postgraduate system meets the needs of our patients, as well as our trainees

Methodology

- PubMed search
  - **Query:** *Medical residency OR graduate medical education AND competency-based medical education AND 2010-2015*
  - **Results:** 720 articles cross-referenced for relevance
  - Abstracts screened for relevance leading to 64 short-listed works
- Key paper on CBME (Frank et al. 2010) was cross-referenced identifying 21 additional articles
- Additional 18 papers of relevance identified through CFPC
- In total, 103 articles served for literature review

Key Themes

- Curriculum Design
- Faculty Development
- Assessment and Evaluation

Curriculum Design

- Rationale for CBME described as a need to focus on outcomes, not process
  - Educational shift away from knowledge synthesis and toward practice preparation
  - Graduated responsibilities, with focus on observable competency acquisition
- Will curriculum be beneficial to trainees?
- Will participation and simultaneous care provision affect training length or service hours?
- Who establishes curriculum? How is it validated?

Curriculum Design – Benefits

- Training that reflects future practice
  - Through Milestones and Entrustable Professional Activities (EPAs) that are well designed and valid to ensure competency
- Real-time feedback
- Clear expectations
- Self-directed learning
  - Through simulation opportunities, field notes, learning portfolios
- Accountability, flexibility, and learner-centredness
  - Individual focus, training design to reflect dynamic learner needs
- Hierarchical skills development

Curriculum Design – Risks

- Reductionism
- Overburdening
- Lack of buy-in
- Lowest-common-denominator approaches
- Construction of EPAs restricting current practice

Curriculum Design – Risks (cont.)

- Demands on faculty time
- Demands on learner time
- Difficulties implementing in current care system
- Insufficient evidence

Faculty Development – Risks

- Do faculty in today's system possess the capacity to participate in a CBME model?
- Shift from their educational roots
- Increased time commitments required
  - More robust and frequent assessments
  - Need for direct observation and formative feedback
- Limited resources for compensation
  - Divides service and education
  - Programs must be provided with time and remuneration for dealing with unique and unexpected challenges
  - Considerable focus should be placed on providing faculty training needed to succeed in these endeavours

Faculty Development – Best Practices

- Limited evidence
- Early adopters and faculty role models as trainers
- Faculty development focusing on reliable and valid assessment is critical to the successful implementation of CBME
- Academic Support Process (ASP) website by University of Ottawa is a well-received online resource
  - Expands vocabulary around competency assessment
  - Helps develop teaching framework-strategy
  - Supports development of customized learning plans
  - Preceptors felt more confident in their ability to develop a learning plan for a resident in need after having used the resources

Assessment - Risks

- Increased reliance on Direct Observation and Global feedback
  - Strains on Faculty's time
  - Assessment fatigue
- Faculty experience in new methods of assessment
  - Adoption of Goals and Objectives in day-to-day interactions
- Not all competencies are created equal
  - No single assessment tool will sufficiently evaluate all competencies
  - Common assessment tools fail in longitudinal assessment
- Likert scale evaluation shown to identify all as exceptional
- Who is ultimately responsible for promotion?
  - PD? Committee? College certification?

Assessment – Best Practices

- Assessment method(s) adapts to environment and to skills being evaluated
- Multiple evaluators and evaluation tools – 360 degree evaluation, formative feedback, guided self-assessment, regular face-to-face meetings and adequate training time for learners and mentors.
- Portfolios
  - Promotes self-reflection, cumulates evidence, teaches PBL skills
  - BUT - What goes in it? Who owns it? Who has access?
- Promotes formative experiences and self-evaluation
- Identifies trainees requiring additional supports to achieve competencies

The Ideal CBME Model

- Adapts to change
- Defines expectations
- Avoids reductionism
- Respects time demands
- Fosters self-reflection/self-direction

The Ideal CBME Model (cont.)

- Continuous quality improvement
- Service-to-Education balance
- Multiple, well-developed, valid assessment tools
- Multiple evaluators
- Faculty and learner buy-in
- Prioritizes faculty development

Thank you!
Any questions?

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