CBME Program Evaluation Forum

Detecting smoke before the fire: How can CBME better identify and help the *Resident in difficulty*?

Wednesday, June 9, 2021 | 11:30AM – 1:00PM EST

11:30 – 11:45am	Welcome & Introduction **Anna Oswald, MD, MMed, FRCPC** Professor, Division of Rheumatology, Department of Medicine Director of CBME, PGME, University of Alberta Clinician Educator, RCPSC **Andrew Hall, MD, FRCPC, MMed** Associate Professor & Interim Residency Program Director Department of Medicine, Queens University CanMEDS Clinician Educator Chair, Program Evaluation Operations Team
11:45 – 11:55am	*Managing residents in difficulty within CBME residency educational systems* **Dr. Susan Glover-Takahashi, PhD** Director, Education & Research, Postgraduate Medical Education Wilson Centre Cross-Appointed Researcher Associate Professor, Department of Family & Community Medicine Associate Professor, Dalla Lana School of Public Health Temerty Faculty of Medicine, University of Toronto
11:55 – 12:05pm	*Residents in difficulty: A sociocultural perspective* **Dr. Rune Dall Jensen, PhD** Assistant Professor Department of Clinical Medicine – Clinical Skills Laboratory Aarhus University, Denmark
12:05 - 12:15pm	*Comparing trends in the detection of residents in difficulty before and after implementation of CBME* **Dr. Shelley Ross, PhD** Associate Professor, Department of Family Medicine Director, Research & Innovation, CBAS Support Program President, Canadian Association for Medical Education Faculty of Medicine & Dentistry, University of Alberta
12:15 - 12:30pm	Q&A Session | Questions for speakers
12:30 - 12:55pm	Open program evaluation community discussion
12:55 - 1:00pm	Closing remarks Anna Oswald, MD, MMed, FRCPC Andrew Hall, MD, MMed, FRCPC

Speaker Biographies

Susan Glover-Takahashi, MA(Ed), PhD

Dr. Glover Takahashi is the Director of Education, Innovation & Research for PostMD Education. Dr. Glover Takahashi has both a Masters and a Doctorate degree in Education – with a focus on curriculum planning and performance assessment.

Dr. Glover Takahashi is an Associate Professor in the Department of Family and Community Medicine and is also cross-appointed as an Associate Professor in the Dalla Lana School of Public Health and the School of Graduate Studies.

Her areas of research and practice include studying performance, competence and faculty development in health and medical professionals; designing curriculum programs and systems to support competence; competency assessment, enhancing the culture of feedback, online learning and program evaluation.

Rune Dall Jensen, PhD, MSc

With a big emphasis on development of expertise, his research area centers on surgical skill acquisition and performance in the operation room. His area of research aims to bridge the gap between technical skills and 'non-technical skills', emphasizing the importance of person-environment fit.

The holistic ecological approach derives from a personal interest in philosophical perspectives and psychological influences on performance. These thoughts have Rune actively adapted to the elite sport sphere where he worked devotedly with since 2008. Hence, Rune's research is highly influenced by the comparison of different performance domains.

Rune's research on expertise, simulation, and talent management in surgery includes selection of medical students, residents in difficulty, and development of professional identity. Collectively, these elements are aimed at the transition from undergraduate to postgraduate, hence investigating the best possible transition and performance of residents.

Shelley Ross, PhD

Shelley Ross is an Associate Professor in the Department of Family Medicine at the University of Alberta, where she is the Director, Research and Innovation, for the Competency-Based Achievement System program, and the Education Strategic Planning Team Lead. Dr. Ross is from Vancouver originally, and completed a PhD in Measurement and Evaluation at the University of Victoria in 2008. She joined the Department of Family Medicine the same year. Dr. Ross' main research program focus is competency-based education and assessment, and she has worked with the College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, and the Medical Council of Canada in this area. Dr. Ross is the current President of the Canadian Association for Medical Education.

Abstracts

Susan Glover-Takahashi, PhD

Managing residents in difficulty within CBME residency educational systems

Abstract

This presentation describes a scoping review looking at residents in difficulty within CBME residency educational system. We screened article titles and abstracts for inclusion, after calibrating for consistency. Forty-three of the 129 articles identified from our search were included for review.

Key Findings

- Many articles sought to identify and define common deficiencies in a range of competencies, as a first step to early identification of residents in difficulty (N=19; 44%).
- Despite the increasing popularity of CBME systems globally, very few articles explicitly discuss remediation and/or residents in difficulty within competency-based frameworks (N=6; 14%).
- Systems to oversee the promotion of residents from year to year or phase to phase were also rarely discussed (N=2, 5%).

In summary

- While the findings of this review are largely based in traditional, time-based models of education, they can still offer general principles to guide implementation of CBME-based systems for managing residents in difficulty. Universities and programs will need to translate the research findings around resident remediation to make them applicable and/or functional for their CBME frameworks.

Rune Dall Jensen, PhD

Residents in difficulty: A sociocultural perspective

Medical residents in difficulty struggle to comply with educational requirements. They pose a liability to patient safety and they have problems to adapt to the professional role of a doctor. Consequently, being a resident in difficulty may cause identity crisis and have the potential to disrupt the resident's professional identity as a doctor. Through qualitative interviews and focus groups, we found that stress, insecurity, lack of time, lack of mutual expectation, and lack of role clarity are key elements when a trainee experience difficulty. Based on sociocultural perspectives this talk will investigate strategies to mitigate challenges for residents in difficulty.

Shelley Ross, PhD

Comparing trends in the detection of residents in difficulty before and after implementation of CBME

Competency Based Medical Education (CBME) continues to be a somewhat controversial approach, despite widespread adoption across multiple health professions education programs. Among the criticisms of CBME is the gap in literature of published evidence to support CBME approaches. As part of our program evaluation of our CBME implementation, we examined the impact of CBME on identification of, and support for, learners in difficulty. Our research question was: To what extent does CBME have an impact on early detection of residents in difficulty?

Method: This retrospective cross-sectional cohort study used secondary data analysis of archived resident files from a large, urban family medicine residency program in Canada. Cohorts of residents who started training between the years of 2006-2008 (pre-CBME) and 2010-2016 (post-CBME) were included in the study. We examined the following variables pre- versus post-CBME implementation: 1. Proportion of residents with at least one performance or professionalism flag. 2. Proportion of residents receiving flags on multiple distinct rotations. 3. Proportion of residents classified as in difficulty. 4. Proportion of residents with flags addressed by the residency program.

Results: There was a reduction in the proportion of residents receiving at least one flag during training post-CBME implementation X^2(1, N=458) = 28.4, pX^2(7, N=454) = 47.04, pX^2(1, N=458) = 17.22 to 29.08, p There was also an increase in documentation that a flag was discussed with the resident between the pre-CBME and post-CBME conditions, X^2(2, N=155) = 16.83, p

Conclusions and Relevance: We found that our identification of residents in difficulty significantly improved post-implementation of CBME. Post-CBME implementation, residents in difficulty were better supported as evidenced by the finding that their deficiencies were not observable on later rotations. These findings contribute to proof of concept for the value of competency-based assessment and fill in the gap in the literature for evidence behind CBME.