In Support of Meaningful Assessment and Feedback: A study of Reasoning Tasks Used in Ambulatory Case Reviews

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Presenter: Azin Ahrari
Time: 10:00 – 10:15am

Background: One of the challenges when assessing and offering feedback to residents is lack of understanding of the metacognitive-tasks shaping clinical encounters. While most are familiar with the clinical tasks (history taking, physical examination, etc), few are familiar with the reasoning tasks that shape how we take histories, do physicals, or engage in decision making. In a prior study, we identified 24 reasoning tasks that physicians may engage in during clinical encounters.

Methods: The purpose of this study was to use Rheumatology clinic setting to identify reasoning tasks addressed by residents and those introduced by faculty. Data consisted of audio-recorded case reviews between attending physicians and PGY1-5 residents. Transcripts were analyzed using validated reasoning tasks and constant comparison approach.

Results: On average, 10 reasoning tasks were addressed/encounter. New consults focused more on tasks of identifying most likely diagnosis and establishing management plans. Follow-up encounters focused on assessing rate of progression, response to treatment, estimating prognosis, and determining follow-up. Tasks refined by factually included weighing alternative treatment options, identifying complications associated with treatment, and assessing response to treatment.

Discussion: These findings can be used in three ways: First, the common patterns of reasoning task omissions can be shared with residents to better prepare them. Second, having a shared language around the metacognitive tasks allows for more meaningful feedback. Finally, as we move forward, reasoning tasks can be used in the design of assessment instruments in the era of competence-based training.

Key words: Rheumatology, reasoning tasks, resident feedback

How the Addition of Multiple-Choice Questions Expands the Usability / Evaluation of An Online Medical Education Website

Authors: Connor Bohlken, Chris Galbraith, Paris Ann Ingledew, Ge Shi
Presenter: Connor Bohlken
Co-Presenter: Chris Galbraith
Time: 10:15 – 10:30am

Problem: Cancer is the leading cause of morbidity and mortality in the developed world, yet gaps are identified in all levels of medical education. Learnoncology.ca is an online learning resource originally developed to address the need for a standardized resource for medical students based on the Canadian oncology objectives. It has since expanded to 169 countries and multiple health professional programs.

Learnoncology.ca was created using Kern's framework for curriculum development. It features multiple instructional modalities including, modules, YouTube videos, podcasts, and virtual patients. To date evaluation of the website has focused on Kirkpatrick's Evaluation hierarchy: user satisfaction. Recently, self-assessment quizzes have been added to evaluate knowledge acquisition.

Description of the Methods: Between March 15, 2020 to June 30, 2020, 31 multiple choice quizzes were written to complement national oncology objectives and content on Learnoncology.ca. Quizzes were reviewed by practicing oncologists and hosted on Learnoncology.ca. Quiz users are provided with formative feedback in the form of written explanations. Users are also able to complete a brief evaluation of the quiz.

As of July 2020, the quizzes will be implemented in the 3rd / 4th year oncology clerkships at UBC. Evaluation of the quizzes will consist of analysis of user demographics, individual test scores, and user satisfaction surveys including perceived change in knowledge. Preliminary results will be reported.

Implications: As with most projects, Learnoncology.ca initially focused on the development of education content with only preliminary evaluation metrics. The development of the quizzes will allow for enhanced evaluation and may inform similar projects.

Key Words: Online Education, Evaluation, Oncology

Foregrounding Shadow Assessments and Hidden Curriculum to Improve CBME Practices

Author: Marcia Docherty
Presenter: Marcia Docherty
Time: 10:30 – 10:45am

The goal of competency-based medical education (CBME) is to make the criteria for entry-to practice explicit Successful implementation of CBME requires alignment between the identification and assessment of competencies. However, emerging research suggests a misalignment between the explicit and implicit aspects of practice. In particular, that the culture of the workplace can impact competent practice (the hidden curriculum) and that clinical supervisors can use local, contextually relevant assessment practices (shadow assessments) instead of prescribed approaches. This research project investigates the alignment between the implicit and explicit aspects of competent emergency medicine practice.

Data was collected in a large, inner city emergency department using a case study method that included semi-structured interviews of the interprofessional team and a document review of a sample of daily resident evaluations. 184 unique terms describing competence were identified and thematically analyzed into 9 themes. The themes were then cross-referenced to the RCPSC CanMEDS for Emergency Medicine and they aligned to 73 of the 165 competency statements.

The nine themes illuminate how shadow assessments and hidden curriculum prevail in practice. While the interprofessional team had a consistent understanding of resident competence, their understanding aligned to only 44% of CanMEDS and included hidden curriculum. Residents had a very limited view of competence. In this sample, 32% of the reviewed daily evaluations were fully completed by supervising physicians and 47% by the resident. This investigation recommends improving the alignment between the explicit practices articulated in CanMEDS and the implicit practices found in the field. (246 words)

Key Words: Competency-Based Medical Education, Shadow Assessment, Hidden Curriculum

Behaviours Associated with Ratings of Ineffective Teaching in Undergraduate Medical Education

Authors: Kiran Veerapen, Katherine Wisener, Dajana Labas, Wilson Luong, Kevin Eva
Presenter: Dajana Labas
Co-Presenter: Kiran Veerapen
Time: 10:45 – 11:00am

Problem: The field of Health Professions education was created to provide guidance regarding how education practices can be improved. That implies there are problems that need to be addressed, but there is surprisingly little systematic data on what frustrates students in their day-to-day experiences with teaching. Where things go awry according to learners is particularly important information for supporting those most in need of faculty development.

Methods: In UBC's distributed Undergraduate Medical Education program, 332 Teacher Assessment forms recorded learners selecting 'disagree' or 'strongly disagree' to the statement: "Overall, the instructor is an effective teacher" in the 2018-2019 academic year. Narrative comments in approximately 30% of the forms were independently analysed by the research team. A codebook containing superordinate and subordinate categories and their definitions was developed where resolution among the team was reached through two rounds of consensus seeking.

Findings: Narrative comments accompanying low performance ratings represented one of three areas: interactions with students (e.g. disrespectful, authoritarian, negative attitude, lack of responsiveness); educational support (e.g. suboptimal support of learning, inadequate or absent feedback, unclear expectations); and process issues (e.g. time management, facilitation and delivery concerns). With considerable overlap, the prevalence and particulars were somewhat context-specific to the learning environment from which the narratives were collected.

Implications: Through identification of issues resulting in ineffective teaching in different teaching contexts (clinical, large & small groups) the data gathered will inform foundational faculty development and the approach to teachers in difficulty.

Key Words: Teacher Assessment, Faculty Development, Student-Driven Feedback