

**The Brian D. Hodges Symposium**  
**Friday, May 26 2017**  
**<http://thewilsoncentre.ca/hodges-symposium-2017>**

**1:00-2:30 - Oral Presentations**

**Feedback Credibility in a Formative Postgraduate OSCE: Effects of examiner type**

Lynfa Stroud, Matthew Sibbald, Denyse Richardson, Heather McDonald-Blumer, Rodrigo B. Cavalcanti

**Introduction:** Feedback recipient's perspectives are a key determinant of feedback acceptance and effectiveness, and the credibility of the feedback provider is a critical element in perspective formation. This study was designed to systematically examine how residents perceive credibility of feedback providers during a formative OSCE. First we examined credibility ratings of faculty-examiners compared to standardized patient (SP) examiners. For faculty-examiners we also compared credibility ratings according to alignment between faculty expertise and OSCE station content.

**Methods:** During a formative, 5-station internal medicine OSCE, residents received immediate feedback after each station. Residents were randomized to receive feedback from either faculty-examiners or SP-examiners on a communication station, with feedback controlled for content. For faculty-examiner only stations, each resident received feedback from at least one specialty-congruent and either one specialty-incongruent or general internist faculty. After the OSCE, residents rated perceived credibility of all feedback providers on a 7-point Likert scale. Results were analyzed through multivariable linear regression.

**Results:** 192 residents, 72 faculty and 10 SPs participated. For communication stations, credibility of faculty-examiners was significantly higher than for SP-examiners (6.24 vs. 5.36/7;  $p < 0.001$ ). For faculty-only stations, credibility was highest for specialty-congruent faculty compared to general internists compared to specialty-incongruent faculty (6.44, 6.39, 5.86, respectively,  $p < 0.001$ ).

**Conclusion:** On communication stations, faculty examiners were perceived as more credible than SPs, despite controlling for content. Specialty-congruency with station content led to higher feedback credibility ratings for faculty. Future studies should seek to understand and explain these differences in perceptions. Practically, these perceptions may have potential implications for the acceptability, integration and selection of assessors into formative feedback activities for medical learners.

**“All the Ward's a Stage” - Observation and Feedback in the Setting of I-PASS Handoff: A Dramaturgical Perspective**

Zia Bismilla, Sarah Schwartz, Natalie Weiser, Shelly-Anne Li, Sanjay Mahant, Trey Coffey

**Background:** Direct observation of clinical skills is key to assessment and learning in a competency based medical education (CBME) model. However, little is known about how observation and feedback is experienced by learners and observers. Understanding this experience is important to ensure CBME achieves its full potential.

**Objective:** To examine how direct observation and feedback of patient handoff skills was experienced by faculty raters and observed trainees.

**Methods:** During the course of the I-PASS Study, verbal handoffs were observed by trained faculty using separate tools for the giver and receiver of handoff. The performance of these tools had been previously validated in a similar population of pediatric trainees. Each resident was observed a minimum of twice a month. We conducted semi-structured interviews and focus groups of faculty and residents at 8 institutions in North America who had implemented the I-PASS handoff bundle and participated in these observations. Data collection and analysis were conducted iteratively. We employed qualitative thematic analysis to interpret the data set related to direct observation and feedback.

Results: Residents and faculty describe handoff in two distinct ways: as a backstage activity and as a front-stage performance. Handoff is typically an activity residents perform amongst peers behind closed doors, and is considered part of the day-to-day work of patient care. This peer-to-peer activity is considered the typical “backstage” handoff. The driver for moving handoff from backstage to front-stage is the act of direct observation by faculty. Residents describe changing their typical style when an observer is present, often conducting handoff in ways that are not typical in peer-to-peer handoffs. Residents often performed this “front-stage” handoff in order to make a better impression on faculty.

Conclusions: Goffman's dramaturgical theory can be used to understand our findings. Trainees engage in “front-stage” behavior while being observed by faculty, often performing what they feel the observer wants to see. This is in contrast to “backstage” behavior, which is used in day-to-day non-observed encounters. This behavior must be taken into account when using direct observation to assess clinical competence in the context of CBME and as a measure of adoption and patient safety. Further research should be conducted to evaluate whether front-stage and backstage behavior change over time, as an intervention becomes more established within an institution.

### **Enhancing Family Medicine residents' performance in computerized settings through simulation-based training**

Aviv Shachak, Sharon Domb, Shmuel Reis, Amitai Ziv, Andre Kushniruk, Elizabeth Borycki

As electronic medical records (EMRs) become ubiquitous, concerns have been raised about their impact on patient-clinician communication. Research has shown that the use of EMRs affects the patient consultation in various ways. On the positive side, it improves the exchange of medical information between physicians and patients and it may be used for patient education and to facilitate shared decision making. However, it often interferes with maintaining eye contact, establishing rapport, and psychological and emotional communication. Through two scoping literature reviews and a cognitive task analysis we identified the challenges of using EMRs in the consultation as well as strategies and best practices employed by physicians to minimize the negative impacts and maximize the benefits of using them in the clinical encounter. We built on these findings to develop two simulation-based interventions in Family Medicine.

The first intervention with simulated patients (SPs) was developed at MSR- Israel Center for Medical Simulation (PIs: Dr. Shmuel Reis and Dr. Amitai Ziv) and tested in a pragmatic trial with 36 Family Medicine residents. Participants went through twelve identical simulated encounters, six pre and six post training. The experiment group received simulation based training while the control group received traditional lecture based training. Results show improvement from pre- to post-test in performance, attitudes toward using the EMR with the patient, and sense of competence; however there were no significant differences between control and intervention groups. It is unclear whether the lecture based training is as effective as simulation or the pre-test itself was sufficient to induce change.

Some limitations of the SP intervention include scalability, the need to recruit and train actors, and bringing residents to the simulation centre (or bringing the SPs to the clinic), which may be costly. In an attempt to overcome these limitations we developed a prototype computer-based (virtual patient) simulation to teach Family Medicine residents how to better integrate EMR use into the patient-physician interaction (PIs; Aviv Shachak and Sharon Domb). To evaluate the prototype, we conducted usability tests with 3 non-clinician students from the Faculty of Information at the University of Toronto, followed by a pilot study with 16 Family Medicine residents at Sunnybrook Health Sciences Centre. The pilot study included pre- and post-test surveys of competencies and attitudes related to using the EMR in the consultation and acceptability of the simulation, as well as ‘think aloud’ observations. After using the simulation prototypes, scores for both self-reported competencies and attitudes improved; however, only the difference for competencies was significant. Mean scores for perceived usefulness and ease of use of the simulation were good. Issues identified in usability testing included confusing interaction with some features, desire for more opportunities for shared decision making, and preferences for an interactive representation of the EMR in the simulation. To address the last issue, our team has proposed a process for integrating virtual patient simulations into EHRs using a combination of storyboarding and information systems’ modeling techniques.

Student Assistants (University of Toronto): Samer Safir Elamrousy, Nancy Fong, and Alison Skyrme.

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## **Assessment Drives Learning. . . or studying?**

Sarah Wright, Victoria Boyd, Cynthia Whitehead, Mahan Kulasegaram and Shiphra Ginsburg

**Background and Purpose of Study:** The introduction of competency frameworks such as CANMEDS, with its large emphasis on non-medical expert roles, indicates that as a medical education community we expect more caring doctors – or we at least want to reinforce behaviours that encourage more compassionate care at all levels. Assessment is a key way in which the medical community communicates its values system to learners. We hear repeatedly how ‘assessment drives learning’. At first glance, it might seem logical to simply include components on caring in our examinations to drive students to become more caring (or at least to behave in a way consistent with caring). However, it is not always what we teach and assess that influences what students actually learn. The purpose of this study was to explore the formal, informal and hidden ways in which assessment practices influence the messages students receive about the importance of caring in medical school.

**Methods:** Multiple sources of data were collected to comprehensively answer these research questions including: interviews with faculty involved in clerkship assessments, focus groups with 3<sup>rd</sup> year medical students, and document analysis of course syllabi. Faculty interviews focused on perceptions around the role of the medical school in developing caring and compassionate medical students. Focus groups with third year medical students elicited perceptions of what is valued by the medical school, particularly during clinical assessments in the clerkship, and how this value system influenced their own perceptions of what is important as developing medical professionals. Document analysis helped to contextualize the findings from the focus groups and interviews.

**Results:** Faculty members differed in their views on the role of the medical school in teaching students to be caring and compassionate, although many believed in the adage, *assessment drives learning*. Caring and compassion were recognized as being fundamental to the medical profession, with concern from faculty that not assessing it communicates to students that it is not important or valued by the medical school. However, there was recognition of the difficulty in assessing for authentic empathy/caring/compassion within current assessment frameworks (often skills, knowledge, professionalism) that require a reductionist approach.

Student focus groups revealed that a common approach to studying is indeed to prioritize facts and skills upon which they expected to be assessed. However, students also discussed finding importance in aspects of clinical care that were *not* assessed, namely the moments in clinical practice in which they felt that they were developing as caring and compassionate clinicians. Seemingly, students were able to recognize assessment as a medical school necessity, but that it was limited in its ability to (authentically) represent the entirety of learning that takes place in medical school. Thus according to students, assessment drives *studying*, not necessarily *learning*.

**Conclusions:** Faculty and students both agree that assessment represents a key way in which students interpret what is deemed important by the medical school. Assuming a definite link between what students are assessed on and what they learn, faculty members expressed concern about not assessing for caring and compassion but acknowledged the difficulty inherent in doing so. However, focus groups with students revealed that the medical school value system is only one piece of their own formulations of what it means to be a medical professional. While students admitted that assessments influenced their studying habits, they conveyed a more complex view of what was learned during clerkship and medical school, generally. This work raises some interesting questions about the future of clinical assessment approaches.

## **From Gestalt to EPA: Seeing the forest through the trees (and the flower)**

Sandra Monteiro, Debra Sibbald

Classic literature on the reliability and validity of the Objective Structured Clinical Exam (OSCE) indicates that the best design for assessment incorporates multiple stations or opportunities for observation as well as appropriately designed rating scales: checklists for novice trainees and global rating scales for more advanced learners or practitioners. Therefore in standardized assessment contexts there is some clarity as to the best practices. In workplace assessments, such as residency training, best practices are not easily understood or applied. Indeed, the context of the workplace may require the development of different principles. More recently, there has been growing research on the development of appropriate rating scales for the assessment of clinical competence in a

Competency By Design (CBD) framework. The need for research in this area is driven by the increasing need for high quality assessments of competencies and EPAs without leading to assessment overload. Added to this mammoth task of managing the growing volume of assessments is a sense of disappointment as emerging data from newly developed CBD aligned rating scales, using the recommended entrustability language, produce data with a lack of variance. Are we better off using checklists when evaluating EPAs? Or do we uphold the principles applied to standardized assessments? Can we navigate this CBD forest? The purpose of the presentation would be to discuss the practical and theoretical implications of checklist and global rating scales for CBD.

## **Development and Integration of a Common Interprofessional Care Competency Framework and Team Assessment Matrix across Health Care Organizations**

Dean Lising, Tracey DasGupta, Lindsay Martinek, Marilyn Ballantyne, Rani Srivastava, Irene Andress, Mandy Lowe, Maria Tassone

Background: Competencies define knowledge, skills, attitudes and behaviours required for professional practice in any health care profession. A competency framework is a structure that defines individual professional competencies and enables the achievement of care standards within organizations. Health professions education has seen a growth in the uptake of interprofessional (IP) competency frameworks and IP education (IPE) that facilitate a common lens through which professions can understand, describe, and inform team-based learning and care<sup>1-2</sup>. Though competency frameworks and IPE are embraced in many university IP programs, their adoption and integration in practice has been limited. Further work is therefore needed to determine the current state, and next steps for enabling competence in IP care in health care organizations.

Methodology: The Toronto Academic Health Science Network Practice (TAHSNp) Committee, representative of the University of Toronto and its 13 affiliated academic hospitals, embraces a mandate to lead IP practice transformation and advance academic practice within and across professions. In collaboration with the Centre for IPE, TAHSNp conducted a current state analysis of IP care. It surfaced the two needs: the need for a common IP care competency framework that defines the critical competencies required for individuals collaborating in care; and the need for a validated team assessment measure designed to assess individuals and teams in alignment with competencies. Two IP working groups of practice and education leaders met throughout 2016 supported by TAHSNp and Centre for IPE executive sponsors. One working group conducted an extensive literature review of local and international IP competency frameworks. The second working group reviewed, analyzed and compiled a list of the 13 most common team assessment tools, aligned with the competencies, in use across TAHSN. The team assessment tools were reviewed based on usability, reliability and validity testing. Following both reviews, additional input was sought from leaders and teams across TAHSNp, ethics faculty, and patient leaders. Following approval, working group survey and meetings were conducted for recommendations to support integration.

Results: The resulting IP competency framework adopted the six competency domains of the Canadian Interprofessional Health Collaborative National Framework<sup>3</sup> following working group consensus of its prevalence, support and applicability within the TAHSN hospitals. Key descriptors to complement competency domains were developed including behavioral examples and common language understandable to patients, clients and families. The team assessment tools analysis was integrated into a matrix including their psychometric properties and mapped to each competency domain. Organizational examples related to competencies and team assessment was collected and included the form of a toolkit.

Conclusions: IP competency frameworks are well poised to be adopted and integrated in practice organizations creating a venue for organizational collaboration in advancing IP care across practice settings. The framework and toolkit developed enabled new connections and shared collaborative learning across organizations. The next phase of this work will involve integration of the competency framework and assessment toolkit within intact clinical teams and organizational processes related to recruitment and performance evaluation. An evaluation plan will also be developed to study the impact of IPC competencies in practice.