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Medical Education Scholarship Forum Proceedings

Evaluating the evaluations in an orthopedic surgery residency program

Nicholas Smith, Division of Orthopedic Surgery, Discipline of Surgery; Vernon Curran, Academic Research and Development, Faculty of Medicine; Mark Hayward, MD Student; Andrew Furey, Division of Orthopedic Surgery, Discipline of Surgery

Purpose: Surgical training demands that academic centres develop validated assessment tools for their residents. In 1993 the Royal College of Physicians and Surgeons of Canada set out to create a series of core competencies that all specialist physicians must demonstrate during the years of their practice. This became known as the CanMEDS framework and included a number of competency domains in medical and non-medical expert areas. As a result, a need to develop validated and reliable assessment strategies arose for use in postgraduate programs. The purpose of this project was to explore an approach to assessment of the CanMEDS collaborator role within an orthopedic surgery residency program as defined by the CanMEDS framework.

Methods: A critical appraisal was undertaken that indicated a dearth in assessment strategies/tools for evaluating collaborator competencies in an orthopedic training setting. A general, validated Interprofessional Collaborator Assessment Rubric (ICAR) was adopted in order to assess performance of collaborator competencies through direct observation by orthopedic preceptors. Face validity was evaluated by the program director, research coordinator, and clerkship coordinator. After ethics approval was obtained, ten staff surgeons assessed six residents on 25 competencies, using a four-point Likert scale in both clinical and operative settings. Multiple staff surgeons assessed each resident. The evaluations were collected and assessed for internal consistency using Chronbach's alpha and for inter-rater reliability using Fleiss Kappa.

Results: The mean Chronbach's alpha was 0.662, which was of acceptable consistency. The mean Fleiss Kappa score was -0.218, which demonstrated low inter-rater reliability.

Conclusion: Despite the development of a validated assessment tool to evaluate the CanMEDS collaborator role, inter-rater reliability results suggest low levels of assessor agreement on evaluations of collaborator competencies. This could be suggestive of different interpretations of collaborative competencies and their evaluation, mis-opportunities for reliable observation of these competencies, or the need for varied approaches in the assessment of collaborative competencies during the postgraduate training period.