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To date, the main method of assessment of surgical ability has been written and oral examinations followed by In-Training Evaluation Reports that may or may not deal with technical competency. At a higher level, the examination after completion of residency training in Oral and Maxillofacial Surgery (OMFS) has also been the written and oral components of the National Dental Specialty Examination (Royal College of Dentists of Canada Fellowship), requires the completion of a certified residency program in North America. However, a technical skills' examination that evaluates a surgeon's ability to properly execute surgical procedures has not been implemented in any academic or licensure setting. The Oral and Maxillofacial Objective Structured Assessment of Surgical Skills (OMOSATS) is the first of its kind to evaluate a surgeon's ability to execute oral and maxillofacial surgical procedures.

The goal of this project is not to develop a testing standard but rather create a method of assessing skills and to see if we can differentiate levels of skill in order to provide feedback to Surgical Educators and residents alike. The examination is a procedure-based, multistation technical skills examination that reflects the range of milestones and Entrustable Professional Activities necessary for OMFS surgical practice. The outcomes of this project would enable academic programs to assess the development of skills and how they are taught; it may help residents establish a self-assessment tool for competency and areas requiring improvement; and, for residency programs to assess candidates for potential entrance into OMFS during candidate selection process for residency.

We are collaborating with the Mount Sinai Surgical Skills Centre in running the second trial run for the OSAT (Objective Structured Assessment of Technical Skills) examination for OMFS. This is an exciting initiative to help assessing our trainees. After great success in the pilot examination run in August 2018, we have achieved reliability for the OMOSATS through strong statistical analyses and qualitative feedback which indicated a high degree of both examiner and candidate satisfaction with implementation, assessment, and learning, including the fidelity and quality of the models. We plan to run a second, larger-scale examination in order to achieve validity for the OMOSATS. In June 2019 the preliminary results of the pilot exam were presented to the Canadian Association of OMFS and in September 2019 they will be presented to the American Association of OMFS at their annual conference.

According to examiner and participant feedback we are changing some of the surgical simulations and altering the exam to better evaluate the technical skills of our OMFS trainees. OMFS residents from all over North America have been invited to participate in the second OSATS examination. Just as last year's pilot examination, the updated stations will be a combination of high-fidelity models, bench top animal tissue models and low fidelity bench-top models. The stations will be as follows in the upcoming examination: (1) Microvascular Anastomosis, (2) Skin Grafting, (3) Suturing, (4) Tracheostomy, (5) TMJ Arthroscopy, (6) Lag Screw, Bone Cutting, Plating and Wiring, (7) Dental Implantation and Removal of an Impacted Tooth, (8) Sinus Lift.

The stations and exam are similar to an OSCE format. The pilot study included 14 OMFS trainees performing 8 separate, blinded and timed tasks that were evaluated by 8 OMFS task-specific experts using validated checklists and global rating scales (GRS). The second large scale exam will be run in 4 different administrations with 32 total OMFS trainee candidates.