### Background

Feedback is particularly important in the context of healthcare teams as it provides learners with insight on how to improve their clinical performance.(4) Patient care is often delivered by a changing team. Therefore, providing individual feedback to members of a complex healthcare team is a challenge.(1)

The individual teamwork observation and feedback tool (iTOFT) offers an avenue for individual feedback within a team setting.(5) To our knowledge, iTOFT is the only feedback tool that targets individualized performance within a team.

We believe the iTOFT can be used to evaluate individual performance within a team setting and can provide consistent results with future implications in real-time evaluation.

### Description/Methods

A tablet-based electronic deployment of the iTOFT was developed in a simulated setting. Observers rated the behaviors of specific team members across ten team-skills competencies. Ratings evaluated whether the skill was performed correctly (when appropriate), performed incorrectly (when it was appropriate for the skill to be displayed), not displayed when it should have been, or no opportunity to elicit the behavior was provided.

Six raters were recruited; 3 nurses and 3 physicians.

- Raters attended a rater training session where they learned how to use the electronic tool and underwent practice coding sessions using previously recorded code videos.
- Rating sessions were scheduled for each rater where they observed and rated six distinct individuals who participated in a simulated code context.

The final data was then extracted from the iCODA software and analyzed for interrater reliability within and across competencies.

### Evaluation/Results

- Percentage agreement between rater pairs ranged from .389 to .944.
- Six competencies had agreements above 65% and three had agreements above 80%.

This suggests that coding of six or more of the competencies is sufficiently consistent across raters to support the use of the tool for providing feedback to learners. Qualitative data demonstrated the usability of the tool. All raters indicated the iTOFT as deployed on the tablet was easy to use, was clear/descriptive and well labelled, and was a prompt for descriptive feedback to individual learners.

Suggested improvements from learners included quantifying the number of times an observation occurs to allow for real-time accounting to the reviewer, and being able to review the ratings before final submission. Other comments on the tool included some confusion between the terms inappropriate and missing.

### Conclusions

Healthcare team performance is associated with patient outcomes.(2) In an academic setting, health professions students must learn to perform effectively as a member of a team.(3)

- Software refinements to the tablet deployment of the iTOFT tool can be useful in providing individual feedback to healthcare teams in a live setting.
- Comprehensive rater training is vital; it should include clarification on terms (inappropriate vs missing) to ensure accurate ratings.

Additional issues that need discussion regarding the use and refinement of the tool: suitability of the simulation for eliciting the targeted competencies, improvements in definition/training on those competencies in which inter-rater agreement was below 67%, the coding of multiple opportunities for competencies within a given scenario, and expedient generation of output from a tool that can be shared with students immediately following observations.