

INTRODUCTION

- The Ottawa Emergency Department Shift Observation Tool (O-EDShOT) is a workplace-based assessment (WBA) designed to assess a trainee's performance across an entire shift¹
- Developed in response to validity concerns with traditional end-of-shift WBAs, such as the daily encounter card (DEC)²⁻⁴
- O-EDShOT has previously demonstrated strong psychometric characteristics
- Unknown whether the O-EDShOT facilitates measurable improvements in the quality of documented assessments compared to DEC¹

OBJECTIVE

- To assess whether the O-EDShOT facilitates higher quality of documented assessments of trainees when compared to the traditional DEC

METHODS

- 3 randomly selected DEC^s and 3 O-EDShOT^s completed by 24 faculty were scored by two raters using the Completed Clinical Evaluation Report Rating (CCERR)
- CCERR is a previously published 9-item quantitative measure of the quality of a completed WBA⁵
- Automated-CCERR (A-CCERR) scores, which do not require raters, were also calculated⁶
- Paired sample t-tests were conducted to compare the quality of assessments between O-EDShOT^s and DEC^s

RESULTS

- CCERR scores were significantly higher for O-EDShOT^s (Mean ± SD: 25.6 ± 2.6) compared to DEC^s (21.5 ± 3.9) (p<0.001)
- A-CCERR scores were also significantly higher for O-EDShOT^s with (Mean ± SD: 18.5 ± 1.6) compared to DEC^s (15.5 ± 1.2) (p<0.001)
- CCERR items 1, 4 and 9 were rated significantly higher for O-EDShOT^s compared to DEC^s.

Table 1. Mean (SD) and item total correlations (ITC) for CCERR items across DEC and O-EDShOT assessment forms.

CCERR Item	DEC		O-EDShOT	
	Mean (SD)	ITC	Mean (SD)	ITC
1. Checklist/numeric ratings show sufficient variability to allow identification of relative strengths and weaknesses of the trainee.*	2.3 (0.7)	0.6	3.0 (0.3)	0.3
2. Comments are balanced providing both strengths and areas for improvement.	2.7 (0.5)	0.8	2.9 (0.4)	0.8
3. The trainee's response to feedback and/or remediation during the shift or rotation is described in the comments.	1.1 (0.2)	0.5	1.0 (0.2)	0.3
4. Comments justify the ratings provided.*	2.3 (0.4)	0.7	2.9 (0.4)	0.7
5. Clearly explained examples of strengths using specific descriptions (not generalizations) are provided in the comments.	2.5 (0.7)	0.7	2.9 (0.8)	0.5
6. Clearly explained examples of weaknesses using specific descriptions (not generalizations) are provided in the comments.	2.2 (0.7)	0.8	2.6 (0.6)	0.5
7. Concrete recommendations for the trainee to attain a higher level of performance are provided.	2.6 (0.6)	0.8	2.9 (0.6)	0.7
8. Comments are provided in a supportive manner.	2.9 (0.2)	0.6	3.1 (0.2)	0.5
9. Overall, this assessment provides enough detail for an independent reviewer to clearly understand the trainee's performance on the shift.*	2.6 (0.5)	0.8	3.2 (0.3)	0.7

*Denotes significantly higher (p<0.05) scores for CCERR items 1, 4 and 9 for the O-EDShOT as compared to the DEC.

DISCUSSION

- O-EDShOT yields higher quality documented assessments when compared to the traditional end-of-shift DEC
- Provides additional validity evidence for the O-EDShOT as an assessment tool for capturing trainee on-shift performance
- O-EDShOT can be used as a stimulus for driving actionable feedback and as a source for high-quality WBA data to inform decisions about emergency medicine trainee progress and promotion

FUTURE DIRECTIONS

- Study conducted at a single centre
- Different institutions have unique assessment cultures
- We intend to conduct a multicenter implementation study of the O-EDShOT to collect additional validity evidence across training programs with varying assessment systems and cultures

ACKNOWLEDGEMENTS

Our raters Dr. Sebastian Dewhirst, Dr. Jeffrey Landreville and Katherine Scowcroft at DIME

REFERENCES

1. Cheung WJ, Wood T, Gofton W, Dewhirst S, Dudek N. The Ottawa Emergency Department Shift Observation Tool (O-EDShOT): a new tool for assessing resident competence in the emergency department. AEM Educ Train. 2019;E-pub.
2. Cheung WJ, Dudek N, Wood TJ, Frank JR. Daily encounter cards—evaluating the quality of documented assessments. J Grad Med Educ. 2016;601-4.
3. Sherbino J, Kulasegaram K, Worster A, Norman GR. The reliability of encounter cards to assess the CanMEDS roles. Adv Heal Sci Educ. 2013;18:987-96.
4. Bandiera G, Lendrum D. Daily encounter cards facilitate competency-based feedback while leniency bias persists. Can J Emerg Med. 2008;10(1):44-50.
5. Dudek NL, Marks MB, Wood TJ, Lee AC. Assessing the quality of supervisors' completed clinical evaluation reports. Med Educ. 2008;42:816-22.
6. Bismil R, Dudek NL, Wood TJ. In-training evaluations: developing an automated screening tool to measure report quality. Med Educ. 2014;48:724-32.