



<http://dx.doi.org/10.1016/j.jemermed.2016.12.002>

Education

STANDARDIZED DIRECT OBSERVATION ASSESSMENT TOOL: USING A TRAINING VIDEO

Kathleen E. Kane, MD, Kevin R. Weaver, DO, Gavin C. Barr Jr., MD, Gary Bonfante, DO, Nicole L. Bendock, DO, Brian M. Berry, DO, Stephanie L. Goren-Garcia, DO, Marc B. Lewbart, DO, Allison L. Raines, DO, Gregory Smeriglio Jr., DO, and Bryan G. Kane, MD

Department of Emergency Medicine, Lehigh Valley Hospital and Health Network/USF MCOM, Allentown, Pennsylvania
 Reprint Address: Kathleen E. Kane, MD, Lehigh Valley Hospital and Health Network, 5th Floor, Emergency Medicine Residency Suite, 2545 Schoenersville Road, Bethlehem, PA 18107

Abstract—Background: We developed a DVD training tool to educate physicians evaluating emergency residents on accurate Standardized Direct Observation Assessment Tool (SDOT) application. **Objective:** Our goal was to assess whether this training video improved attendings' and senior residents' SDOT use. **Methods:** Participants voluntarily completed SDOT evaluations based on a scripted "test" video. A DVD with "positive" and "negative" scenarios of proper SDOT use was viewed. It included education on appropriate recording of 26 behaviors. The test scenario was viewed again and follow-up SDOTs submitted. **Performances** by attendings and residents on the pre- and post-test SDOTs were compared. **Results:** Twenty-six attendings and 26 senior residents participated. Prior SDOT experience was noted for 8 attendings and 11 residents. For 20 anchors, participants recorded observed behaviors with statistically significant difference on one each of the pretest (no. 20; $p = 0.034$) and post-test (no. 14; $p = 0.041$) SDOTs. On global competency assessments, pretest medical knowledge

($p = 0.016$) differed significantly between groups. The training intervention changed one anchor (no. 5; $p = 0.035$) and one global assessment (systems-based practice; $p = 0.031$) more negatively for residents. Recording SDOTs with exact agreement occurred 48.73% for attendings pretest and 54.41% post-test; resident scores were 45.86% and 49.55%, respectively. DVD exposure slightly raised attending scores ($p = 0.289$) and significantly lowered resident scores ($p = 0.046$). **Conclusions:** Exposure to an independently developed SDOT training video tended to raise attending scores, though without significance, while at the same time lowered senior resident scores statistically significantly. Emergency attendings' and senior residents' SDOT scoring rarely differed with significance; about half of anchor behaviors were recorded with exact agreement. This suggests senior residents, with appropriate education, may participate in SDOT assessment. © 2016 Elsevier Inc. All rights reserved.

Keywords—SDOT; training video

The study was reviewed and approved as exempt by our network's Institutional Review Board before any study procedures taking place.

An abstract of this report was presented in poster format at the Council of Emergency Medicine Residency Directors Academic Assembly in 2012 in Atlanta, GA. The project was represented in an oral format at the 2012 Pennsylvania College of Emergency Physicians Scientific Assembly in Gettysburg, PA, where it received a Spivey Research Award.

INTRODUCTION

The Accreditation Council for Graduate Medical Education (ACGME) requires performance evaluation of all residents. Previously, the evaluation process was designated to address six areas referred to as the "Core

Competencies,” which were central to the prior ACGME evaluation system (1). These competencies consist of the following: patient care (PC), medical knowledge (MK), practice-based learning and improvement (PBL), interpersonal and communication skills (ICS), professionalism (PROF), and systems-based practice (SBP) (1). The Standardized Direct Observation Tool (SDOT) was developed with these competencies in mind (2). The initial validation was with video scenarios, and the use of senior residents as evaluators was not studied in this cohort.

Recently, the American Board of Emergency Medicine and the ACGME have moved to the evaluation of emergency residents using the Next Accreditation System (NAS) “milestones.” Table 1 describes these milestones. The Council on Residency Directors for Emergency Medicine (CORD) recommends direct observation as an evaluation tool for emergency residents for the following milestones: 1, 2, 3, 4, 5, 6, 7, 8, 10 (via checklist), 12, 13, 16, 17, 18, 19, 20, 21, 22, and 23 (3). Direct observation of some type is recommended in 19 of the 23 milestones. The previous SDOT is specifically recommended for measurement in all but milestone 13, 18, and 23.

The SDOT requires an emergency physician observe all aspects of a resident–patient encounter from initial contact to history and physical examination, re-evaluation, and final disposition. The tool has standard definitions related to performance for each of the 26 evaluated areas, the six core competencies, a global assessment, and the ability to provide free-form feedback (4). These performance assessment definitions, or “anchors,” as we denote in this article, are translatable to measurable NAS behaviors.

A previous study demonstrated that the SDOT instrument can be used with a high degree of inter-rater reliability by attendings in a summative fashion for five of the six competencies, with minimal training (5). The use of senior residents as SDOT evaluators has not, to date, been studied. We sought to develop a training tool that educated both attendings and senior residents on the application of the SDOT instrument, while viewing a resident during a performance encounter modeling positive behaviors (exceeds expectations), negative behaviors (below expectations), and mixed behaviors (combination of exceeds, meets, and below expectations). Accuracy would be defined as recording, on a study SDOT, behavior with exact agreement from a video encounter. The behaviors would be scripted with the tool’s definitions (4). This study’s specific goal was to determine whether this brief training video could improve attendings’, as well as postgraduate year (PGY) 3 and PGY4 residents’ SDOT use, as measured by exact agreement.

Table 1. Emergency Medicine Milestones and Grading Rubric

No.	Category	Milestone
1	PC1	Emergency Stabilization
2	PC2	Performance of a Focused History and Physical Examination
3	PC3	Diagnostic Studies
4	PC4	Diagnosis
5	PC5	Pharmacotherapy
6	PC6	Observation and Reassessment
7	PC7	Disposition
8	PC8	Multi-tasking
9	PC9	General Approach to Procedures
10	PC10	Airway Management
11	PC11	Anesthesia and Acute Pain Management
12	PC12	Goal-directed Focused Ultrasound
13	PC13	Wound Management
14	PC14	Vascular Access
15	MK	Medical Knowledge
16	SBP1	Patient Safety
17	SBP2	Systems-based Management
18	SBP3	Technology
19	PBL1	Practice-based Performance Improvement
20	PROF1	Professional Values
21	PROF2	Accountability
22	ICS1	Patient Centered Communication
23	ICS2	Team Management

Grading rubric (applies independently to each milestone)

- Level 1: The resident demonstrates milestones expected of an incoming resident.
- Level 2: The resident is advancing and demonstrates additional milestones, but is not yet performing at a mid-residency level.
- Level 3: The resident continues to advance and demonstrate additional milestones; the resident demonstrates the majority of milestones targeted for residency in this sub-competency.
- Level 4: The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.
- Level 5: The resident has advanced beyond performance targets set for residency and is demonstrating “aspirational” goals, which might describe the performance of someone who has been in practice for several years. It is expected only a few exceptional residents will reach this level.

ICS = interpersonal and communication skills; MK = medical knowledge; PBL = practice-based learning and improvement; P = patient care; PROF = professionalism; SBP = systems-based practice.

MATERIALS AND METHODS

This was a pre-/post-education intervention study using the standards for performance evaluations as defined by the ACGME and CORD for performing SDOTs (4). The study was reviewed and approved as exempt by our network’s Institutional Review Board before any study procedures taking place. The study was conducted at an independent academic medical center, not affiliated with a local medical school, hosting a dually approved PGY1 through PGY4 emergency medicine (EM) residency hosting 14 residents per year. Employed at the

Download English Version:

<https://daneshyari.com/en/article/5653926>

Download Persian Version:

<https://daneshyari.com/article/5653926>

[Daneshyari.com](https://daneshyari.com)