

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

The Use of Uniform Clinical Scenarios to Produce Milestone Proficiency Scoring

Permalink

<https://escholarship.org/uc/item/3k33v4f6>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 16(4.1)

ISSN

1936-900X

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Publication Date

2015

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1. Are the discharge instructions typewritten (printed by computer)?
2. Are they legible? (If two or more people cannot read them, they are illegible.)
3. Are they written in a language and at a reading level the patient understands?
4. Do they include the physician's name?
5. Do they include an explanation of the injury or illness or discharge diagnosis?
6. Do they include a list of signs and symptoms to be aware of and what to do if they occur? (For example, call your primary care physician, call 911, or come back to the emergency department.)
7. Do you document patient understanding?
8. Do you document that the patient was given the opportunity to ask questions?
9. Do they specify a date, time, and provider for a follow-up visit or that a follow-up appointment was made before the patient left the emergency department?
10. Are they signed by the patient or the patient's authorized representative?

Figure 1. Self assessment of discharge instructions.

75 The Use of Uniform Clinical Scenarios to Produce Milestone Proficiency Scoring

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Introduction: The Accreditation Council for Graduate Medical Education (ACGME) requires reporting of Milestone proficiency levels, based on objective assessment. Programs have struggled with assessment methods. We report on a method of objective assessment

in which clinical scenarios are presented to a resident, and scored using the Milestone framework. This satisfies multiple educational needs of the resident and residency.

Educational Objectives: There were several objectives of this initiative. The first was to present uniform teaching points related to clinical care to all residents individually. The second was to assess management of each clinical scenario using the Milestone framework. This process was facilitated by the bank of Council of Emergency Medicine Residency Directors clinical scenarios.

Curricular Design: Each clinical faculty was assigned to two clinical cases. A total of 48 cases were chosen, with 12 designated to emergency medicine (EM) 1 level, and 18 each to EM2 and EM3 levels based on perceived complexity. Faculty were assigned to four specific conference days a year in which 4-6 faculty would present one of their cases to individual residents. A separate scoring sheet for each clinical scenario was developed using 12 of the 23 Milestone subcompetencies. (Table 1) Scoring was anchored to Needs Improvement, Meets Expectations, and Above Expectations, equated with Levels 2, 3, and 4 for each subcompetency, respectively.

Impact/Effectiveness: From July, 2014 through November 2014, EM1, EM2, and EM3 residents completed 60, 95, and 88 clinical scenarios, respectively. Scoring demonstrated progressive improvement by year level. (Table 2) Within each year level there was variation by resident. This project benefits residents and the residency. All residents are exposed to the same 48 clinical scenarios, making training more uniform. Each attending becomes relatively expert in their two cases. The residency benefits by increased scheduled conference attendance by attendings as well as an additional methodology for Milestone proficiency scoring.

Table 1. Clinical scenario scoring results by PGY level.

Subcompetency	PGY1	PGY2	PGY3
Emergency stabilization (PC1)	3.05	3.26	3.36
Performance of focused history and physical exam (PC2)	3.19	3.18	3.43
Diagnostic studies (PC3)	3.13	3.27	3.10
Diagnosis (PC4)	3.20	3.12	3.49
Pharmacotherapy (PC5)	2.93	3.21	3.23
Observation and reassessment (PC6)	3.21	3.17	3.45
Disposition (PC7)	3.05	3.39	3.36
Medical knowledge (MK)	3.00	3.11	3.30
Professional values (PROF1)	2.87	3.13	3.12
Accountability (PROF2)	3.14	3.20	3.43
Patient centered communication (ICS1)	3.06	3.22	3.36
Team management (ICS2)	3.01	3.14	3.19

PGY, postgraduate year; ICS, interpersonal and communication skills;

	Expectations	Expectations	Expectations
Emergency Stabilization (PC1)	Does not timely initiate appropriate antibiotics	IV Fluids initiated; Appropriate antibiotics given	IV Fluids and pain control given; Diagnosis zeroed in on quickly
Performance of Focused History and Physical Exam (PC2)	Does not evaluate patient thoroughly	Abdominal pain is solicited; focused history questions related to potential causes of abdominal pain	Evaluates for serious causes of abdominal pain; quickly appears to ascertain significance
Diagnostic Studies (PC3)	Blanket orders labs; Orders CT scan initially	Orders labs in thoughtful manner, including lipase Orders plain films first	Quickly considers perfr viscus. Orders plain films quickly;
Diagnosis (PC4)	Does not diagnose perforated viscus, or does so slowly	Diagnoses perforated viscus quickly	Diagnoses perforated viscus quickly; acts upon it
Pharmacotherapy (PC5)	Does not give pain meds, or inadequate pain meds given; antibiotics late	Gives adequate pain medication and antibiotics	Gives pain medication and appropriate antibiotics early in case
Observation and Reassessment (PC6)	Does not reassess	Reassesses effects of pain medication and antibiotics	Reassesses effects of medications; considers deterioration
Disposition (PC7)	Admits to hospital floor, no surgical or slow surgical consult	Admits to hospital bed with surgical consult	Consults surgery quickly, argues for OR
Medical Knowledge (MK)	Does not understand presentation or causes of perforated viscus	Understands presentation or causes of perforated viscus	Understands need for quick reaction to perforated viscus
Professional Values (PROF1)	Does not introduce self	Introduces self	Asks patient about care beliefs related to treatment
Accountability (PROF2)	Does not recognize limitations of knowledge and care	Recognizes lapses in knowledge and care	Recognizes lapses in knowledge and care; seeks answers
Patient Centered Communication (ICS1)	Does not communicate with patient	Elicits from patient their concerns	Communicates with patient addressing concerns
Team Management (ICS2)	Communicates pertinent information to colleagues	Ensures transitions of care are communicated	Resolves difficulties with consultants

Critical Actions	Yes/No
1. Diagnose perforated viscus	Yes <input type="checkbox"/> No <input type="checkbox"/>
2. Orders upright CXR and/or complete Abd. series	Yes <input type="checkbox"/> No <input type="checkbox"/>
3. Consults Surgery	Yes <input type="checkbox"/> No <input type="checkbox"/>
4. Begins antibiotics prior to OR	Yes <input type="checkbox"/> No <input type="checkbox"/>

Figure 1. Sample clinical scenario scoring sheet. IV, intravenous; CT, computed tomography; OR, operating room

76 The Use Of Voice-over Internet Protocol (VoIP) for Residency Interviews: The Wave of the Future?

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Introduction: Residency applications along with interview travel and hotel expense require increasing funds for the average residency applicant. Emergency medicine (EM), in particular, is currently among the more competitive specialties. EM candidates feel pressure to apply to a higher number of programs in order to match. In addition, the Electronic Residency Application Service (ERAS) has a crescendo fee schedule that penalizes the applicant with more than ten applications. This environment challenges the EM residency applicant to survive the interview season without incurring debt.

Educational Objectives: Our research survey examines the use of Voice-over Internet Protocol (VoIP) methods such as FaceTime or Skype for residency interviews.

Curricular Design: All interview candidates were anonymously surveyed at an urban EM program with 36 positions after the rank order lists were submitted. The survey revealed that on average the candidates applied to 59 programs and interviewed at 16 programs. It also showed that 38% of the respondents had financial constraints during interview season. Fifty-five percent of those who replied said they would consider VoIP for interviewing and 32% said that they would select a residency without a physical visit.

Impact: Our results indicate that VoIP interviews are an effective means of assisting programs with high meal

and hotel costs. More importantly, our survey indicates that student applicants strapped with the increasing financial burden of escalating application fees and travel expense would find VoIP an attractive adjunct to the in-person interview.

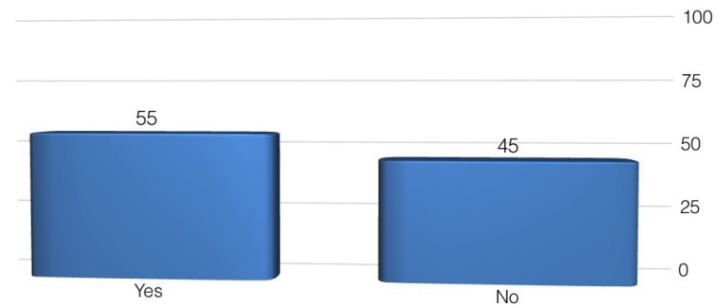


Figure 1. Percentage of candidates who reported they would consider VoIP as a form of interviewing.

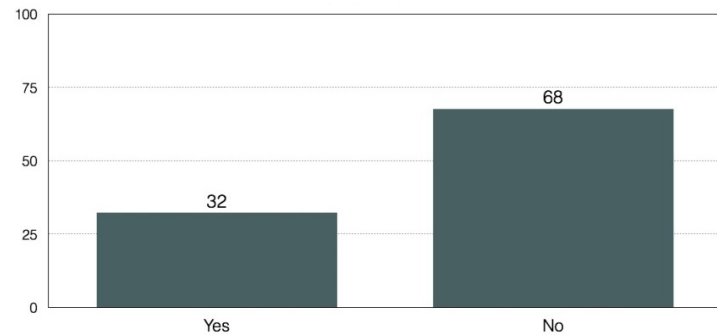


Figure 2. Percentage of candidates who reported they would select a residency program without a visit.

77 Ultrasound Mini Fellowship

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Introduction/Background: Training in the use of emergency ultrasound (EUS) is an Accreditation Council for Graduate Medical Education requirement for all emergency medicine (EM) residency programs. There are many EM residency programs with EM faculty who have limited to no training in the core EUS applications. A lack of proficiency by EM faculty is an obstacle to adequate EUS training for residents, and a barrier to the use of ultrasound in daily practice.

Educational Objectives: Increased capability and comfort-level of EUS performed by EM faculty; improved EUS training of EM residents by EM faculty; increased EUS credentialing of EM faculty; increased utilization of clinical EUS by EM faculty; increased EM faculty productivity; and, increased patient safety and patient satisfaction.

Curricular Design: The mini-fellowship is a 4-week comprehensive, skill-building curriculum (see Figure 1). It focuses on developing competency in core EUS applications