It’s Virtually a Reality

SIMULATION AS AN ACCEPTABLE SURROGATE FOR CREDENTIALING

W. Scott Gilmore, MD, EMT-P, FACEP
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An individual may perform only those procedures for which they are educated, certified, licensed, AND credentialed.
VALIDATED
Simulation-based Assessment of Paramedics and Performance in Real Clinical Contexts

Walter Tavares, ACP, BSc, Vicki R. LeBlanc, PhD, Justin Mausz, ACP, Victor Sun, ACP, BSc, Kevin W Eva, PhD

Prehospital Emergency Care 2014;18:116-122
<table>
<thead>
<tr>
<th>Dimension</th>
<th>SBA</th>
<th>WBA</th>
<th>p value</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>STD</td>
<td>Mean</td>
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<tr>
<td>Situation awareness</td>
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<td>Decision making</td>
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<td>Mean scores</td>
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SBA, simulation-based assessment; WBA, workplace-based assessment; STD, standard deviation.
“This GRS has demonstrated evidence of content and discriminant validity, as well as high interrater reliability (0.75-0.94) and intrarater reliability (0.94) when used to assess paramedic trainees.”
GLOBAL RATING SCALE FOR THE ASSESSMENT OF PARAMEDIC CLINICAL COMPETENCE

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Tony Mallette, ACP, Kevin W. Eva, PhD

Prehospital Emergency Care 2013;17:57-67
“First, we used only one unscripted case (a medical cardiac patient). This tells us that performance can be reliably differentiated, but it limits its external validity and prevents us from determining the extent to which individuals’ general ability is captured by single application of the scale. In terms of external validity, whether similar results would be found when assessing candidates attending to a trauma victim, for example, requires further study.”
1. Washed hands
2. Checked that all necessary equipment is available and ready to use
3. Put on examination gloves.
4. Applied tourniquet
5. Cleansed “skin” with 3 dry wipes to simulate alcohol pads.
6. Held needle securely by wings or by plastic vacutainer connector.
7. Inserted needle bevel up at approximately 30-degree angle to skin
8. Pressed the evacuated glass tube onto the piercing needle using connector and collected sample (if no blood returned to tube, examinee removed and reinserted needle in a new site).
9. Removed tourniquet.
10. Tube was removed from vacutainer connector before needle was removed from task trainer.
11. Placed 2 x 2 gauze over puncture site and withdrew needle, then applied pressure.
12. Upon being asked by instructor, “How long would you tell the patient to apply pressure?” Answered, “2 min.”
14. Inverted tubes 6-8 times.
15. Dispose of all soiled supplies into proper containers ("bloodied" supplies into biohazard).
16. Labeled samples with full name, ID number, location, date, time, initials, and test name.
17. Maintained sterility appropriately throughout the procedure.

To Set Standards for Basic Procedural Skills:

Step 1. Identify criteria for “essential” items
Step 2. Judges apply criteria to each checklist item to determine if it is essential or non-essential.
Step 3. Judges determine separate passing scores for essential and non-essential items.

Conjunctive Criteria to Pass:
- Learners must accomplish correctly X% of essential items plus Y% of non-essential items.
- Non-essential items do not compensate for essential items.

*We chose to use patient/clinician safety, patient comfort, and procedure outcome as criteria for essential items. Other criteria may be substituted.
The most dangerous phrase in the language is “we’ve always done it this way.”

Rear Admiral Grace Hopper (1906-1992)
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