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29 Have Incoming PGY-1 Residents Achieved Level 1 Milestones?

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**Background:** As of July 1, 2013 residents training in Accreditation Council for Graduate Medical Education (ACGME) accredited Emergency Medicine (EM) residencies must be evaluated on a continuum across 23 milestones (MS). The MS have subcompetencies (SC) that capture a resident’s progression along a continuum from novice (medical student - Level 1) to expert (seasoned EM attending “Level 5). It is assumed that incoming postgraduate year one (PGY-1) residents have achieved Level 1 SC of the MS. This has not been prospectively validated. Our purpose was to evaluate incoming PGY-1 residents to assess what percentage have achieved level 1 for the eight SC assessing patient care (PC 1-8).

**Objectives:** Primary objective: What percentage of incoming PGY-1 residents have achieved level 1 for care-based SC? Secondary objective: How accurate are incoming PGY-1 residents at self-assessing their SC level of MS?

**Methods:** Incoming PGY-1 residents at 5 EM residencies were scored by faculty and themselves to determine if they had achieved level 1 on SC PC 1-8, at the end of their 1st month of internship (Figure 1). Faculty assessments (FA) were done by 3 separate faculty members on 3 separate occasions. The majority response was taken as the final determination. Only PGY-1 residents who graduated medical school in the last year were included.

Performance anchors were taken directly from the ACGME MS. Faculty and PGY-1 residents responded if they had achieved the SC or not. Means were compared using Fischer’s exact test.

**Results:** There were 35 PGY-1 residents at 5 residency programs. 3 subjects were excluded. Mean age 27.8; 57.1% male. The percentage of PGY-1 residents that achieved level-1 on FA ranged from 44.1%-100%, and on self-assessment (SA) from 17.5% to 100% (Table 1). SA was lower than FA for several SC. The majority of PGY-1 residents achieved level 1 on all SC except PC5a (classification of pharmaceutical agents).

**Conclusions:** The majority of PGY-1 residents achieved level 1 on 7 of 8 PC SC. SAs were lower than FAs for several SC.

### Table 1.

<table>
<thead>
<tr>
<th>Subcompetency</th>
<th>Level 1 milestone</th>
<th>Faculty</th>
<th>Self</th>
<th>Difference</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC1 Emergency stabilization</td>
<td>Recognizes abnormal V/S</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>1</td>
</tr>
<tr>
<td>PC2 Performance of focused</td>
<td>History and physical</td>
<td>91.4%</td>
<td>85%</td>
<td>6.4%</td>
<td>0.49</td>
</tr>
<tr>
<td>PC3 Diagnostic studies</td>
<td>Diagnostic studies</td>
<td>57.1%</td>
<td>42.5%</td>
<td>14.6%</td>
<td>0.25</td>
</tr>
<tr>
<td>PC4 Diagnosis</td>
<td>Potential diagnoses</td>
<td>62.9%</td>
<td>80%</td>
<td>17.1%</td>
<td>0.13</td>
</tr>
<tr>
<td>PC5a Pharmacotherapy</td>
<td>Classifications of pharmacologic agents</td>
<td>44.1%</td>
<td>17.5%</td>
<td>26.6%</td>
<td>0.02</td>
</tr>
<tr>
<td>PC5b Pharmacotherapy</td>
<td>Drug allergies</td>
<td>91.4%</td>
<td>72.5%</td>
<td>18.9%</td>
<td>0.04</td>
</tr>
<tr>
<td>PC6 Observation and reassessment</td>
<td>Re-evaluation</td>
<td>94.3%</td>
<td>75%</td>
<td>19.3%</td>
<td>0.03</td>
</tr>
<tr>
<td>PC7 Disposition</td>
<td>Describes resources</td>
<td>77.1%</td>
<td>48.7%</td>
<td>28.4%</td>
<td>0.02</td>
</tr>
<tr>
<td>PC8 Multi-tasking</td>
<td>Manages single patient</td>
<td>94.3%</td>
<td>80%</td>
<td>14.3%</td>
<td>0.09</td>
</tr>
</tbody>
</table>

Figure 1. The nine questions that address the eight patient care sub-competencies that were evaluated.