Graduate medical education has recently undergone a transformation in evaluation of physician trainee performance with a priority being placed on ensuring that trainees are competent and entrustable with key clinical tasks. Constant evaluation of progress in relationship to established milestones and entrustable professional activities (EPAs) now occurs. More recently, EPAs for graduating medical students have been proposed. A key unifying theme of EPAs is continuous workplace-based assessment with a focus on self-awareness and self-identification of one’s strengths and deficiencies. However, compared to traditional feedback from faculty, such self-reflection has been underutilized and its efficacy debated. We designed a pilot to evaluate the utility of a self-assessment tool in the 3rd year medical school cardiology clerkship.

**Introduction**

- To guide students to think about and self-identify their clinical skill weaknesses as part of development of a lifelong self-assessment career skill
- To provide unique insight into what students feel they are learning (or not) from their pre-clerkship and clerkship cardiology curricula
- To develop novel educational tools to improve reported weaknesses in cardiovascular competencies

**Objectives**

- Develop novel educational experiences during the cardiology clerkship to address the two weakest domains
  - Online interactive modules
  - Hands-on stress lab experience
  - Self-reflective exercises for cost effective care

**Methods**

We modified a previously validated instrument through the help of a medical student focus group to create a survey for rating student self-reported competence with 20 fundamental activities of inpatient medicine and cardiovascular care. It also polled for personal gaps in cardiology knowledge/skills. The survey was administered to all 3rd year medical students rotating through cardiology before and then again after their rotation.

**Conclusions**

- Self-assessment data from students allow unique insight into perceived curricula deficiencies
- Students reported an improvement in most competencies through the cardiology clerkship
- Two important skills remained weak both before and after the clerkship:
  - Interpreting a stress test report
  - Applying the concept of cost effectiveness in relation to patient care

Students overall also felt least competent at these two skills after completing the clerkship.

**Results**

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Pre-Clerkship</th>
<th>Post-Clerkship</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Describe location, timing, and intensity of an auscultated heart murmur</strong></td>
<td>Pre: 30.2%, Post: 31.6%</td>
<td>Pre: 27%, Post: 83%</td>
</tr>
<tr>
<td><strong>Interpret an echocardiogram report on your patients</strong></td>
<td>Pre: 39.1%, Post: 50.3%</td>
<td>Pre: 23, Post: 24</td>
</tr>
<tr>
<td><strong>Interpret a stress test report on your patients</strong></td>
<td>Pre: 31.7%, Post: 50.1%</td>
<td>Pre: 23, Post: 32</td>
</tr>
<tr>
<td><strong>Apply the concept of cost effectiveness in relation to care of your patients</strong></td>
<td>Pre: 30.7%, Post: 52.1%</td>
<td>Pre: 23, Post: 32</td>
</tr>
</tbody>
</table>

Most self-assessed competency ratings showed a substantial improvement after clerkship completion (two examples above).

**References**

- The Core Entrustable Professional Activities for Entering Residency Drafting Panel. AAMC Core Entrustable Professional Activities for Entering Residency (2014).