Point of Care Training: A Novel Approach to Providing Education While on a Night Float Rotation

Andrew Scatola MD, Julianna Marwell MD, Joseph Ingrassia MD, Sidra Azim MD, Shiromini Herath MD
University of Connecticut School of Medicine, Farmington, Connecticut

Problem: While on call blocks our residents spend one week on night float. This allows adherence to ACGME duty hours but poses the challenge of ensuring an adequate educational experience. A few studies have looked at this problem by evaluating if adding a nocturnist enhances education. Our institution implemented a novel system of teaching through utilizing point of care (POC) training to assess the literature in real time to answer clinical questions.

Innovation Continued: Physicians inevitably face situations where the need for high quality information at the POC is integral to direct patient care. In our program, interns receive formal training regarding appraisal of the literature and search techniques, but this training is variably reinforced during residency. Further, they do not receive formal training on the development of clinical questions in areas of uncertainty. POC training was chosen to be integrated into the night float rotation to address residents’ need to learn how to efficiently appraise medical literature while increasing the educational value of night float.

Innovation: While on night float, the residents are responsible for all overnight admissions. At the end of their shift, one to two cases are used to generate clinical questions directed toward patient care. With the help of the chief medical residents, clinical questions are reviewed and major society guidelines and primary articles are evaluated to help answer the clinical question. Forty-five minutes are evaluated to help answer the question. In our program, interns receive formal training regarding search techniques, but this training is variably reinforced during residency. Further, they do not receive formal training on the development of clinical questions in areas of uncertainty. POC training was chosen to be integrated into the night float rotation to address residents’ need to learn how to efficiently appraise medical literature while increasing the educational value of night float.

Results: Post-Survey
1. Do you feel comfortable identifying your knowledge gaps after practicing POC learning?
2. Do you feel comfortable formulating a clinical question in an area of uncertainty after practicing POC learning?
3. Do you feel comfortable identifying resources to answer a clinical question in an area of uncertainty after practicing POC learning?
4. Do you feel comfortable critically appraising evidence in literature regarding your clinical question after practicing POC learning?
5. Do you feel practicing POC learning was helpful in decreasing your knowledge gaps?
6. Do you feel you have the outcome of point of care learning on your clinical practice?
7. Confirmation of current clinical practice
8. Meaningful change in current clinical practice
9. Direction for further learning
10. Do you intend to continue point of care learning in your continuing education during and after residency?

Table 1. Pre- and Post-Intervention Data: N = 35

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation of current practice</td>
<td>54%</td>
<td>87%</td>
<td>33%</td>
</tr>
<tr>
<td>Meaningful change in current practice</td>
<td>31%</td>
<td>69%</td>
<td>38%</td>
</tr>
<tr>
<td>Direction for further learning</td>
<td>9%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>Do residents intend to include POC learning during and after residency</td>
<td>91%</td>
<td>94%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Discussion: We demonstrated that POC training adds a focused and novel educational aspect to the night float rotation. We have shown improvement in residents’ self-reported ability and comfort in generating clinical questions, as well as identifying and appraising the resources needed to answer those questions. Ongoing follow up to evaluate if residents continue to use POC training would be beneficial, as well as breaking down the perceived benefit by PGY year. Resident feedback and satisfaction with this change to the night float rotation has been overwhelmingly positive.

References:

Corresponding Author: Shiromini Herath, MD: sherah@uchc.edu

Innovation Continued: Physicians inevitably face situations where the need for high quality information at the POC is integral to direct patient care. In our program, interns receive formal training regarding appraisal of the literature and search techniques, but this training is variably reinforced during residency. Further, they do not receive formal training on the development of clinical questions in areas of uncertainty. POC training was chosen to be integrated into the night float rotation to address residents’ need to learn how to efficiently appraise medical literature while increasing the educational value of night float.

Innovation: While on night float, the residents are responsible for all overnight admissions. At the end of their shift, one to two cases are used to generate clinical questions directed toward patient care. With the help of the chief medical residents, clinical questions are reviewed and major society guidelines and primary articles are evaluated to help answer the clinical question. Forty-five minutes are evaluated to help answer the question. In our program, interns receive formal training regarding search techniques, but this training is variably reinforced during residency. Further, they do not receive formal training on the development of clinical questions in areas of uncertainty. POC training was chosen to be integrated into the night float rotation to address residents’ need to learn how to efficiently appraise medical literature while increasing the educational value of night float.

Results: Post-Survey
1. Do you feel comfortable identifying your knowledge gaps after practicing POC learning?
2. Do you feel comfortable formulating a clinical question in an area of uncertainty after practicing POC learning?
3. Do you feel comfortable identifying resources to answer a clinical question in an area of uncertainty after practicing POC learning?
4. Do you feel comfortable critically appraising evidence in literature regarding your clinical question after practicing POC learning?
5. Do you feel practicing POC learning was helpful in decreasing your knowledge gaps?
6. Do you feel you have the outcome of point of care learning on your clinical practice?
7. Confirmation of current clinical practice
8. Meaningful change in current clinical practice
9. Direction for further learning
10. Do you intend to continue point of care learning in your continuing education during and after residency?

Table 1. Pre- and Post-Intervention Data: N = 35

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation of current practice</td>
<td>54%</td>
<td>87%</td>
<td>33%</td>
</tr>
<tr>
<td>Meaningful change in current practice</td>
<td>31%</td>
<td>69%</td>
<td>38%</td>
</tr>
<tr>
<td>Direction for further learning</td>
<td>9%</td>
<td>13%</td>
<td>4%</td>
</tr>
<tr>
<td>Do residents intend to include POC learning during and after residency</td>
<td>91%</td>
<td>94%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Discussion: We demonstrated that POC training adds a focused and novel educational aspect to the night float rotation. We have shown improvement in residents’ self-reported ability and comfort in generating clinical questions, as well as identifying and appraising the resources needed to answer those questions. Ongoing follow up to evaluate if residents continue to use POC training would be beneficial, as well as breaking down the perceived benefit by PGY year. Resident feedback and satisfaction with this change to the night float rotation has been overwhelmingly positive.

References:

Corresponding Author: Shiromini Herath, MD: sherah@uchc.edu