Teaching Patient-Centered Use of the Electronic Medical Record to Millennial Learners

Wei Wei Lee MD MPH,1 Maria Alkureishi MD2, Kristen E. Wroblewski MS3, Jeanne Farman MD MHPE4, Vineet Arora MD MA1
1Department of Medicine, 2Department of Pediatrics, 3The University of Chicago

Background

• EMR use in exam rooms can prevent physicians from focusing on patients and impede patient-doctor communication.1,2
• Despite rapid EMR adoption in medical learning environments, few curricula address how to teach patient-centered EMR use to ‘tech-savvy’ Millennial learners

Aims

• Implement a ‘Patient-Centered EMR Use’ curriculum for Pritzker School of Medicine second-year students (MS2s) in 2013
• Compare Observed Structured Clinical Examination (OSCE) performance of MS2s to third-year student (MS3) controls
• Compare MS2 and MS3 post-OSCE survey results on self-assessed knowledge, attitude and skills

Lessons Learned

• Any lessons learned for a next iteration?
• What would you recommend to others trying to solve this problem?
• Where there any unanticipated issues/benefits?

The Intervention

MS2s received a lecture and participated in ‘Group OSCES’
- MS2s were divided into groups of 4:1 MS2 interacted with SP, 3 observed
• MS3s received no training and participated in ‘individual OSCE’
• The standardized patient (SP) used a 16-item ‘SP evaluation tool’ to rate 1 of 4 MS2s in each group and all MS3s
• Post-OSCE surveys were distributed to all students

Results

• All MS2s (n=89) and MS3s (n=96) participated in the OSCES
• SP evaluation of student performance [16-item tool; score range 15-80]:
  - MS2s (n=20) were rated higher than MS3s (n=88) [73.5 (SD=4.5) vs. 58.1 (SD=13.1), P < .001]
  - 95% (19/20) of MS2s were rated as good or excellent in their ability to ‘use the EMR to enhance communication’ vs. 53% (47/88) of MS3s
• Post-OSCE survey results:
  - 80% MS2 (90%, 80/89) and 88% MS3 (92%, 88/96) surveys were analyzed
  - MS2s rated their knowledge, training, and confidence higher than MS3s (P < .05 for all)
  - Most MS2s (85%, 68/80) and MS3s (70%, 62/88) thought training should be required for all students.

Next Steps

• Develop direct observation piece for curriculum; encourage outpatient MS3 preceptors to observe students interact with patients while using the EMR and provide feedback
• Compare the OSCE performance of the “trained cohort” when they are MS3s to historical 2013 MS3 controls.
• Expand curriculum for residents, attendings, other staff

References:

Larry Alkureishi, MD
The University of Chicago

Table 1: Post-OSCE comparison of Group OSCE performance with SP evaluation of student performance. (P < .001)

<table>
<thead>
<tr>
<th>SP Evaluation Rating</th>
<th>Mean (SD)</th>
<th>P Value</th>
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<tbody>
<tr>
<td>MS2 (n=20)</td>
<td>73.5 (4.5)</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>MS3 (n=88)</td>
<td>58.1 (13.1)</td>
<td>&lt; .001</td>
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*All comparisons were significant (P < .001)