HEY DOC, PAY ATTENTION TO ME:
TEACHING PATIENT-CENTERED EMR USE

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A PIECE OF MY MIND

The Cost of Technology

Young RK, JAMA 2012
BRACE YOURSELVES

EMR HAS ARRIVED
The ‘iPatient’

Culture Shock — Patient as Icon, Icon as Patient

Abraham Verghese, M.D.

On my first day as an attending physician in a new hospital, I found my house staff and students in the team room, a snug bunker filled with glowing monitors. Instead of sitting down to hear about the patients, I suggested we head out to see them. My team came willingly, though they probably felt that everything
Troubling Behaviors

Back to Patient

Poor eye contact

Long silences

Screen not visible to patient

Typing during sensitive discussion

Computer guided questioning

William Ventures, MD, MPA; Sarah Koelhofer, FNP; Ryan Martin, Nancy Vuckovic, PhD; Valerie Stewart, PhD

Interpersonal style affects their attention and body language on patients. Clinicians with a managerial style bridge informational and interpersonal styles by alternating their attention in defined intervals between patients and the computer. Conclusions: Family physicians have varying practice styles that affect the way they use examination room computers during visits with patients.

(Fam Med 2005;37(4):276-81.)
Best Practices

With a thoughtful approach, you can maintain your focus on the patient.

EHRs in the Exam Room: Tips on Patient-Centered Care

Electronic health records (EHRs) are clearly part of family medicine's future. However, the information available physicians commonly use troubling behaviors such as looking predominantly at the computer monitor during office visits, typing while patients are talking about intimate...
AMA 2012 Goals

“A new generation of medical students, trained to transition seamlessly into 21st century medicine”

Stack SJ. AMA Report of the Board of Trustees. 2012
Aims

• Implement MS2 Patient-Centered EMR Use Curriculum
  • MS2s– Lecture and OSCE during Clinical Skills Course

• Evaluate Impact on MS2 Knowledge, Attitude & Skills
  • Improve knowledge, attitudes, skills
  • Rate topic as important to current & future practice

• Compare OSCE performance of MS2s to MS3 controls
MS2 Lecture

• 1 hour lecture

• Teaching Video: ‘What Not to Do’
  • Worksheet: Barriers to patient-centered EMR use

• Literature Review

• Why is this topic important?
Lecture

- Best Practices
  - Key Skills and Behaviors
  - Pocket card: HUMAN LEVEL mnemonic
- Teaching Video 2: Ideal interaction
Best Practices

HUMAN

- Honor ‘Golden Minute’
- Use ‘Triangle of Trust’
- Maximize Patient Interaction
- Acquaint w/chart
- Nix screen

LEVEL

- Let the patient look on
- Eye contact
- Value the Computer
- Explain what you’re doing
- Log Off

OSCE

• Required for all MS2s (n=88)
  • w/in 1 week of lecture
  • Group OSCEs
  • 4 students, 1 preceptor
    • 1 student interacts w/SP; 3 student observers
    • 15 min encounter; 10 min feedback

• Required for all MS3s (n=88) – no lecture
  • End of MS3 year
  • Individual OSCE stations
OSCE

• Setting: Primary Care Clinic

• Objectives:
  
  • Log in/navigate EMR
    – Review chart (pertinent labs, studies, etc.)
  
  • Address patient’s CC (GERD)
  
  • Use EMR to *counsel* on obesity
Evaluation Strategies

• Overall MS2 Curriculum
  – Surveys: MS2 Pre-Lecture & Post-OSCE

• OSCE Performance
  – SP evaluation tool
  • Checklist to rate student performance
MS2: Survey Results

• Sample: MS2 class (n=88)*
  * Roughly 50% attend lectures

• Starting Cohort
  • Students who attended lecture
  • Pre-survey distributed to 45 students (39/45; 87%)

• Final Cohort
  • Students completed pre-lecture & post-OSCE surveys (33/39, 85%);
  • Paired analysis/ t test
Self Reported
Training, Knowledge & Skills
(n=33)

- **Training** (*p* < 0.001)
- **Knowledge** (*p* < 0.001)
- **Skills** (*p* < 0.001)
Importance to Clinical Practice (n=33)

- At Current level of training as Medical student \( p<0.001 \)
- As Future Provider \( p=0.04 \)
‘Education & Training should be required for all medical students’
OSCE Performance: SP Evaluation

- MS2s were rated higher than MS3s controls
  - Mean scores: 73.5/80 (SD 4.5) vs. 58.1/80 (SD 13.1)
  - p <0.001

Student’s Ability to use EMR to Enhance Patient-Provider Communication

<table>
<thead>
<tr>
<th>Student's Ability</th>
<th>MS2 n = 22</th>
<th>MS3 n = 88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td>Good</td>
<td>30%</td>
<td>18%</td>
</tr>
<tr>
<td>Average</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Fair</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Poor</td>
<td>17%</td>
<td>17%</td>
</tr>
</tbody>
</table>
Limitations

• Low participation rate, partly due to class attendance
  – Future work: Does OSCE performance differ based on class attendance?

• Not all MS2s ‘actively’ participated in OSCE
  – MS2 results on knowledge, attitudes and skills not different if “active” vs “passive”

• Not observing actual clinical practice
Conclusions

• Patient-centered EMR use curriculum is **innovative, timely** and addresses **gap** in medical education

• Students report topic is:
  – **Important** to clinical practice
  – Should be **required**

• MS2s who received our lecture performed better on an OSCE than more clinically experienced MS3s
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Questions?

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