Pediatric Nurse Buddy Program Cohort 3
The impact of EMR on Healthcare Provider Wellness

Learning Objectives
At the end of this presentation the participant will be able to:
• Evaluate literature used as guidance for how EMRs are perceived and how they effect productivity
• Analyze survey and interview data from healthcare members regarding questions focused on the usage of EMRs
• Apply gathered information in a significant way to future EMR practices
• Understand how the literature review and our gathered data explains the impact of EMRs
• Remember why EMRs are used and focus on how to utilize them in a productive way
• Increase understanding that wellness is a culture change and must start with the current and next generation of physicians.

Aim Statement/Research Question
Does the increased computerization of medicine, more specifically the use of EMR, impact healthcare provider wellness?

Background/Introduction
Electronic Medical Records (EMRs) are an everyday part of life for the majority of healthcare workers but is it best practice? We set out to see how EMRs affect workflow, patient interaction and the well-being of healthcare workers.

To start, a literature review was completed utilizing studies that focused on physician perception of EMRs, the direct effect of EMRs on productivity as well as adverse outcomes.

Varying members of the healthcare team were then surveyed and interviewed in an attempt to determine the impact EMRs have.

Project Timeline

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Contract</td>
<td>June 23, 2016</td>
</tr>
<tr>
<td>Tuckman’s Model Worksheet</td>
<td>August 11, 2016</td>
</tr>
<tr>
<td>Identify Project Theme</td>
<td>September 12, 2016</td>
</tr>
<tr>
<td>Literature Review</td>
<td>October 4, 2016</td>
</tr>
<tr>
<td>Survey</td>
<td>February 17, 2017</td>
</tr>
<tr>
<td>Interviews</td>
<td>February 27, 2017</td>
</tr>
<tr>
<td>Presentation</td>
<td>June 9, 2017</td>
</tr>
</tbody>
</table>

Disclosure
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Buddy Program Design

Literature Review – EMR Pros & Cons

Difficulties
- Technical difficulties
- Institution specific EMRs
- Need for workarounds for EMR limitations
- Increased documentation time
- Charting time competing with time spent with the patient

Benefits
- Decreased time charting for nurses
- Availability of patient info for multiple providers
- Increased adherence to guidelines and protocol based care
- Decrease in medical errors
- Reduction in redundant testing

Literature Review – Caregiver Burnout – 15 Reasons Why

- Too many bureaucratic tasks
- Spending too many hours at work
- Income not high enough
- Too many patients
- Too many difficult patients
- Too many patient appointments in a day
- Inability to provide patients with the quality of care
- Lack of professional fulfillment
- Difficult colleagues or staff
- Unfairness
- Instability of employment
- Burnout
- Compassion fatigue

Physician Burnout and Clerical Burden

Shanafelt et al.
Audience Participation

- Grab your Phone
- Log into: www.menti.com
- Enter Code: 32 06 07

Audience Participation

What word comes to mind when you think of EMR?

www.menti.com
Code: 32 06 07

Electronic Health Record Use a Bitter Pill for Many Physicians
by Stephen L. Marks, DDS, FAKSE, and Michael Fischman, PhD, MBB

Abstract
Electronic health record (EMR) adoption among office-based physicians in the United States has
progressed steadily in the past decade, driven by reform efforts at the federal level. However, the
adoption of EMR technology has been slow due to a number of factors, including the lack of
significance in terms of the potential benefits. The current study examines the perceptions of
physicians regarding the implementation of EMR technology and its impact on their practices.

Introduction
Over the past two decades, electronic health record (EMR) adoption among office-based physicians
in the United States has progressed steadily. However, the adoption of EMR technology has been
slow due to a number of factors, including the lack of significance in terms of the potential benefits.

Surveys

Demographic Section:

1. What is your position?
   a. General
   b. Subspecialty
   c. Pediatric
   d. Other
2. How many years have you been in practice?
   a. 1-2 years
   b. 3-5 years
   c. 6-10 years
   d. >10 years
3. What is your specialty?
   a. Pediatrics
   b. Internal Medicine
   c. Family Medicine
   d. Other
4. Length of time in position?
   a. 1-2 years
   b. 3-5 years
   c. >5 years
5. Amount of time spent in front of the computer?
   a. 4+ hours
   b. 3-4 hours
   c. 2-3 hours
   d. 1-2 hours

EMR Section:

1. On a scale of 1-10, with 10 being the most positive, how would you rate your
   satisfaction of working with your current EMR?
2. How do you think EMR benefits the following aspects? Please rate
   each item on a scale of 1-10, with 10 being the most positive.
   a. Patient care
   b. Medical administration
   c. Financial management
   d. Annual care
3. If you could select one item to focus on for improving EMR and
   patient care association with EMR, which of the following would
   you choose?
   a. Funding patient information
   b. Electronic links
   c. Health care provider for procedures, referrals, imaging, etc.
   d. Other (please specify)
4. Based on the issues you listed above, please state one possible solution:
5. How do you feel EMR affects your interactions with other health
   professionals at work? Please explain.
Methods of obtaining results:

- Cross sectional surveillance of healthcare workers vs. control (non-healthcare) with survey
- Collected data organized into excel spreadsheet
- Basic frequencies on demographics and other categorical variables
- Control vs. Healthcare
- EMR workflow with in the context of 3 major objectives: Perceived benefit, focal issue, and professional interactions

Who was surveyed?
- Administration Nurse
- Junior Nurse
- Senior Nurse
- PL2
- PL3
- Fellow
- Junior Attending
- Senior Attending
- Healthcare non-medicine

Survey Results

- Computer Time
  - 1-2 hr: 27%
  - 3-5 hr: 18%
  - 5-7 hr: 55%
  - > 8 hr: 8%

- Satisfaction
  - Very Satisfied: 36%
  - Satisfied: 9%
  - Neutral: 55%
  - Dissatisfied: 2%
  - Very Dissatisfied: 2%

Who is perceived to benefit from EMR?

Improving EMR workflow: Issue & Solution

- Focal Issue
  - Patient Info: 73%
  - Orders: 7%
  - Scheduling: 8%
  - Time for task: 6%

- Solutions:
  - Multi-system user
  - Clicking boxes (auto-populate vs. less boxes)
  - Change EMR
  - Time allocated per patient

Perceived effects of EMR on interdisciplinary interactions
Interview Questions

1. Do you think the loss of required face-to-face communication with patients has led to a detachment from patient care leading to decreased wellness? If so, why?
2. Would face-to-face communication work synergistically with EMR to increase workflow and decrease errors (orders entered and follow up face to face to ensure understanding)? Or does it just add more work?
3. What personal changes could you make to your technique and work processes to improve EMR workflow?
4. Does the benefit EMR offers patients outweigh the inefficiency it offers healthcare professionals?

Do you think the loss of required face-to-face communication with patients has led to a detachment from patient care leading to decreased wellness? If so, why?

"Definitely has the potential to decrease the wellness of a doctor. I’m sure it can be pretty stressful. Because the amount of work and the lack of relationship with your patient."

"I feel it is still the provider’s responsibility to engage the patient. To make themselves known and to find a balance between using the EMR, but to also talk to the patients."

"I would assume a person becomes a doctor to help people. It must suck to not see the people you’re helping."

Would face-to-face communication work synergistically with EMR to increase workflow and decrease errors (orders entered and followed up face-to-face to ensure understanding)?

"Yes"
Would face-to-face communication work synergistically with EMR to increase workflow and decrease errors (orders entered and follow up face to face to ensure understanding)? Or does it just add more work?

- Yes: 57%
- No: 43%

“I think it would add a different kind of work, but it’ll really save time because you won’t be spending time on trying to fix errors.”

“There are times where face-to-face communication is really nice to complement everything else.”

“You have to go out of your way to communicate with nurses...The EMR has so many pre-worded things that it doesn’t communicate the subtleties of what you mean, so a lot of times you have to tell the nurse what you mean. So that kind of face-to-face prevents errors.”

“Tremendously more work.”

What personal changes could you make to your technique and work processes to improve EMR workflow?

- Create a more efficient notification system for the nurses in the clinic
- Having more help for the doctor, like a right hand to help them do all of their daily tasks - like all the stuff you all have to do on the computer
- Making macros and templates for your notes the way you want to use them... But when you make those templates, data can’t be extracted. We prepared these templates the way we write notes, so the notes make much more sense, but the data is not extractable.

Does the benefit EMR offers patients outweigh the inefficiency it offers healthcare professionals?

- Yes: 78%
- No: 22%

Audience Participation

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Audience Participation

How does EMR help providers?

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Does the benefit EMR offers patients outweigh the inefficiency it offers healthcare professionals?

"I don’t see the potential benefits to patients. If a patient could go to any hospital and any hospital could access a patient’s records that would be a benefit to the patient."

"People can be more involved in their own care when they have access to lab results, prescriptions, and doctor offices all from the convenience of their own home. I think it encourages people to take charge and be more in control."

"It’s a change which is inconvenient but it’s a necessity. It’s a quick tool – a quick reference point. At the end, the EMR winds up benefiting both the patient and the healthcare professional."

Results/Impact

After data analysis, our statistically significant results are as depicted here

Conclusions

• Even though increased computerization of practice has increased in contributing to provider burnout, our results show that most providers still feel the benefits outweigh the negatives.
• How do you change the culture of medicine to provide better wellness for the physician when physicians perceive patient’s wellness to be more important than their own?
• It leads us to wonder, would we care as much about physician wellness if it didn’t impact patient care?

References


Physician Burnout II: And Keeps Getting Worse – Medscape - Jan 28, 2015.


Questions/Comments/Personal Experiences