Taming the EHR
Reducing Administrative Burden

HIMSS
3.5.18
Christine A. Sinsky, MD, FACP
Vice President, Professional Satisfaction
American Medical Association
Agenda

• Introduction
• Studies (12)
  – Burnout
  – Time costs, cognitive load w/current ways EHRs used
• Solutions
• Recommendations
  – Design, Implementation, Reg, Use
• Discussion
At the center of patient care are healing relationships.
Take-away: Balance

Relational

Tick boxes, bullet points, discrete data
On a recent visit to a new doctor I believe we made eye contact twice—upon her arriving and leaving.

And yet, I am much more able to receive advice

From people I feel are thinking of me as a person rather than just the next patient.

I am no longer a physician but the data manager, data entry clerk and steno girl. I am frustrated, unhappy and I am unable to do my best in caring for my patients. I became a doctor to take care of patients. I have become the typist.
Doctors’ distress over EHRs is not about imperfect software or error-laden code...it is much deeper. It is visceral. It arises from ...an undermining of the soul of medicine, the doctor-patient relationship.

MDs and other clinicians burning out. Men/women out of reserve bc of cumulative impact Wrong work Disconnect from purpose
Over $\frac{1}{2}$ of MDs Burned Out
Physician Burnout Rising

45→54%

*Twice gen’l pop: controlled for hrs worked educational level, age, gender, relationship status
EHR: Driver of Dissatisfaction

• Too much time per task, clerical
• ↓ Face-to-face time
• ↓ Quality of visit note
• (uses for administrative oversight and compliance monitoring)

EHR Functions → MD Burnout and intent to leave practice

Electronic medical records and physician stress in primary care: results from the MEMO Study

Fn’s: e-mail, order entry, alerts, reminders, e-communication with colleagues

http://jamia.bmj.com/content/early/2013/09/04/amiajnl-2013-001875.short?rss=1
57 MDs, 4 specialties, 4 states, 7 EHRs

- 50% day EHR/desk
- 1 hr F2F: 2 hr EHR
- 1-2 hr EHR at night
  “pajama time”
Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time-Motion Observations

Brian G. Arndt, MD

ABSTRACT

142 family physicians
3 year: 2013-2016
118 M EHR events
Validated by direct observation

50% of day on EHR
6 hr/d, incl 1.4 hr/d personal time
4 hr: CPOE, billing, coding, documentation, refills
(most of this can be done by team)

and system security accounted for nearly one-half of the total EHR time (157
Relationship Between Clerical Burden and Characteristics of the Electronic Environment With Physician Burnout and Professional Satisfaction

Tait D. Shanafelt, MD; Lotte N. Dyrbye, MD, MHPE; Christine Sinsky, MD; Omar Hasan, MBBS, MPH; Daniel Satele, MS; Jeff Sloan, PhD; and Colin P. West, MD, PhD

Abstract

- MD satisfaction w/ EHR, CPOE low
- Clerical burden ↑ EHR/CPOE users
- CPOE associated with ↑ burnout*
  (OR. 1.29; 95% P< .001)
  * after adjusting for age, gender, specialty, practice setting, hours worked per week
Zheng K, Haftel HM, Hirschl RB. Quantifying the impact of health IT implementations on clinical workflow: a new methodological perspective. JAMIA 2010 17: 454-461
Note Bloat

2009 vs 2016:
2x longer

US vs other:
4x longer

Personal communication: Sam Butler, EPIC, 7.5.17
Pts rate care higher w/o computer

- Compassion $P = .0003$
- Communication skills $P = .0001$
- Professionalism $P = .013$

http://abstracts.asco.org/233/AbstView.cfm?AbstDetailId=49001213.html
Relationships Matter

446 hours observation 3 AMC ICUs

“low-use” (10% d) of HIT vs “high use” (50% d):

Clinicians in low-use EHRs less siloed: better situational awareness, communication and patient satisfaction

Relationships Matter

155 clinicians at 6 primary care clinics

Density of EHR communication $\rightarrow$ ↓ clinical outcomes.

F2F communication $\rightarrow$
  $\uparrow$ LDL and BP control
  Hospitalizations ↓ 38%
  Urgent care visits ↓ 66%
  ER visits ↓ 73%
  Cost ↓ $594/yr

Mundt, Ann Fam Med 2015
Solutions
Save 3-5 hours/day

• Practice Re-engineering
  – Pre-visit lab ½ hr
  – Prescription mgt ½ hr
  – Expanded rooming/discharge 1 hr
  – Optimize physical space 1 hr
  – Team documentation 1-2 hr

3+ hr/d

stepsforward.org
Team documentation at Cleveland Clinic
Kevin Hopkins M.D.
Team Documentation
Cleveland Clinic

• New Model
  – 2 MA: 1 MD
  – 2 pt/d cover cost
  – 21 → 28 visits/d
  – 30% ↑ revenue
  – Spread to others (35)
  – We’re having FUN

• Research
  – Q doc as good or better J Fam Pract 2016
UCLA: saves 3 hr/d  Pt satisfaction w/MD time ↑
JAMA IM 2014
University of Utah: Redstone

Q: ↑ immun, CA, DM
E: ↑ productivity
↓ staff cost /wRVU
↓ cycle time 90" -> 45"
S: ↑ pt, MD. MA satisf.
University of Colorado FM

Burnout 53% -> 13% 1 yr
Capacity +3.5 pt/d
“We have turned the EHR from an adversary into an ally.”
Dr. James Jerzak, Bellin Health, Green Bay
professional work and legal record
Printer in every room
Saves 20 min/day
Large monitor
Saves 20 min/day
RFID Sign On
“Tap and Go”

• Dean Clinic
  – 103 signs to 2 sign ins per day
  – Saved 17 min/d

Happiness Minutes
60 hours/yr
Flow Stations
Saves 30 min/day
Fairview: Filtering Inbox

Reduce “backpack” 90min/d to few min

JAMA IM 3/2016
PCP: 77 inbox messages/d
Fairview: Filtering Inbox
Reduce “backpack” 90min/d to few min
Line of Sight
Design for Teamwork

- Real time, multi-contributor notes
  - Ala Google Docs
- Not every element of care loop MD or EHR
  - “Not documented, not done” toxic
Vendors and Regulators

Rethink Documentation

MDs/nurses hrs q wk providing doc that does not add value
Primary purpose: clinical communication
The patient presents with palpitations. The onset was just prior to arrival. The course/duration of symptoms is resolved. Character of symptoms skipping beats. The degree at present is none. The exacerbating factors is none. Risk factors consist of none. Prior episodes: none. Therapy today: none. Associated symptoms: near syncope
The patient’s story matters

Patient is more than sum of series of drop down boxes

When record hx this generic way we risk seeing pts as generic
Vendors

Eliminate 1 billion clicks/day

32 clicks for flu shot
Regulators

Align with Team-based Care
Institutions

**Mini Z 2.0 (aka: Joyful Workplace Survey)**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question</th>
<th>Answer options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfied</strong></td>
<td><strong>1. with current job</strong> Overall, I am satisfied with my current job</td>
<td>5 = Agree strongly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = Neither agree nor disagree</td>
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<tr>
<td></td>
<td></td>
<td>2 = Disagree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Strongly disagree</td>
</tr>
<tr>
<td><strong>2. No symptoms of burnout</strong></td>
<td>Using your own definition of “burnout”, please choose one of the numbers below:</td>
<td>5 = I enjoy my work. I have no symptoms of burnout.</td>
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<tr>
<td></td>
<td></td>
<td>4 = I am beginning to burn out and have one or more symptoms of burnout</td>
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<td></td>
<td>3 = I feel completely burned out. I am at the point where I may need to seek help.</td>
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<tr>
<td><strong>3. Aligned with clinical leaders</strong></td>
<td>My professional values are well aligned with those of my clinical leaders:</td>
<td>5 = Agree strongly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = Neither agree nor disagree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Disagree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Strongly disagree</td>
</tr>
<tr>
<td><strong>4. Care team works efficiently together</strong></td>
<td>The degree to which my care team works efficiently together is:</td>
<td>5 = Optimal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Good</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = Satisfactory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Marginal</td>
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<tr>
<td></td>
<td></td>
<td>1 = Poor</td>
</tr>
<tr>
<td><strong>5. Not stressed because of job</strong></td>
<td>I feel a great deal of stress because of my job</td>
<td>5 = Strongly disagree</td>
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<td></td>
<td></td>
<td>4 = Disagree</td>
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<td></td>
<td></td>
<td>3 = Neither agree nor disagree</td>
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<tr>
<td></td>
<td></td>
<td>2 = Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 = Agree strongly</td>
</tr>
<tr>
<td><strong>6. Little time spent on EMR at home</strong></td>
<td>The amount of time I spend on the electronic medical record (EMR) at home is:</td>
<td>5 = Minimal/none</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 = Modest</td>
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<tr>
<td></td>
<td></td>
<td>3 = Satisfactory</td>
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<tr>
<td></td>
<td></td>
<td>2 = Moderately high</td>
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<tr>
<td></td>
<td></td>
<td>1 = Excessive</td>
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<td><strong>7. Good documentation time</strong></td>
<td>Sufficiency of time for documentation is:</td>
<td>5 = Optimal</td>
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<td></td>
<td>4 = Good</td>
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<td></td>
<td>2 = Marginal</td>
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<td></td>
<td></td>
<td>1 = Poor</td>
</tr>
<tr>
<td><strong>8. Calmer work atmosphere</strong></td>
<td>Which number best describes the atmosphere in your primary work area?</td>
<td>5 = Calm</td>
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<td></td>
<td></td>
<td>4 = Busy, but reasonable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 = Busy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Hectic, chaotic</td>
</tr>
<tr>
<td><strong>9. Workload Control</strong></td>
<td>My control over my workload is:</td>
<td>5 = Optimal</td>
</tr>
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<td></td>
<td></td>
<td>4 = Good</td>
</tr>
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<td></td>
<td>3 = Satisfactory</td>
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<td></td>
<td></td>
<td>2 = Marginal</td>
</tr>
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<td></td>
<td></td>
<td>1 = Poor</td>
</tr>
<tr>
<td><strong>10. No Frustration with EMR</strong></td>
<td>The EMR adds to the frustration of my day:</td>
<td>5 = Agree strongly</td>
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<td>4 = Agree</td>
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- 1000 physician benchmark
- 1500 physicians in 4 pilots
## Mini Z 2.0

<table>
<thead>
<tr>
<th>Measure and Definition</th>
<th>Calculation</th>
<th>Success Criteria</th>
</tr>
</thead>
</table>
| **Joyful Workplace** (Mini-Z Scores) | Sum of questions 1-10  
Range = 10-45** | a joyful workplace  
≥ 80%* |
| **Supportive work environment** (Subscale 1) | Sum of questions 1-4  
Range = 4-20 | a highly supportive practice  
≥ 16 |
| **Work pace and no EMR stress** (Subscale 2) | Sum of questions 5-8  
Range = 4-20 | an office with good pace and manageable EMR stress  
≥ 16 |

*Mini-Z target is 40 out of 50 (80%). However, for the national benchmark study, the target is 36 out of 45 (80%) because Q10 was not asked. Therefore, percentages are used to compare the two.
Avoid Compliance Creep

Ex: MU CPOE
CPOE no longer in ACI (MU)

Are Computerized Provider Order Entry (CPOE) and Clinical Decision Support (CDS) required objectives under the Medicare and Medicaid EHR Incentive Programs?

In the 2017 OPPS final rule, we finalized the elimination of the CPOE and CDS objectives and associated measures for eligible hospitals and Critical Access Hospitals (CAHs) attesting under the Medicare EHR Incentive Program for CY 2017 and subsequent years. The elimination of the CPOE and CDS objectives and associated measures also applies to dual-eligible hospitals that are attesting to CMS for both the Medicare and Medicaid EHR Incentive Programs.

In the 2017 MIPS final rule, we did not include CPOE and CDS objectives and associated measures as part of the advancing care information performance category, thus, they are not required for reporting by MIPS eligible clinicians.

The CPOE and CDS objectives and measures are still required for the Medicaid EHR Incentive Program to successfully attest to meaningful use.

Jan 2017
Measure Developers

Less is More

Keep it simple, add it up

3 hr/d staff/MD time per MD on PMs

CMS: ↓ Administrative Burden

Welcome to the February Patients over Paperwork newsletter. Patients over Paperwork is our effort to lower administrative burden and put patients first. In this edition, we’ll:

- Look closely at the new Meaningful Measures initiative.
- Update you on documentation review improvement.
- Tell you how we’re going out in the field to hear from providers.

Quality Measures

What is the Meaningful Measures initiative?

Six new metrics

• Work After Work
• Click Counts
• Teamwork
• Being Present
• Fair Pay
• Regulatory Balance
3 PCPs, 3 patterns of WAW

1.5 hr WAW: 1 hr scheduled pts

- EHR WAW
- Patient scheduled time

Time of Day

Day
3 PCPs, 3 patterns of WAW

1 hr WAW: 1 hr scheduled pts

Time of Day

Day

EHR WAW;  Patient scheduled time
3 PCPs, 3 patterns of WAW

**0.25 hr WAW: 1 hr scheduled pts**

- Shorter notes?
- More templates?
- Less eye contact, more multitasking?
- Advanced team-based care?
- Less risk averse compliance environment?
- Burnout?
- Retention?
Action Step

Research

Tests  Treatment

>$100 Billion/yr

<$0.3 Billion/yr

Delivery model
to wisely deploy
Redesign your practice. Reignite your purpose.
AMA’s Practice Improvement Strategies.

Module Categories

- Patient Care: 11 Modules
- Workflow and Process: 12 Modules
- Leading Change: 4 Modules
- Professional Well-Being: 3 Modules
- Technology and Finance: 5 Modules

Looking for modules? Try our Practice Assessment tool.

Start Assessment
When I'm Here
At the center of patient care are *healing* relationships.
Take-away: Balance

Relational

Infrastructures: technology, regulation, staffing
What patients want is that deep relationship with a healer; this is the foundation upon which we need to build healthcare.

Paul Grundy, MD
IBM, PCPCC
personal communication
1.30.09