Burnout: How EHR Usability Improves Efficiency & Satisfaction

Greta Branford, MD
Associate CMIO

Karen Kennedy
Associate Principal

Session #266, February 14, 2019
Conflict of Interest

Greta Branford, MD and Karen Kennedy have no real or apparent conflicts of interest to report.
Agenda

Elevating the Provider Experience  
Case Study: Faculty Burnout  
Key Considerations & Action Steps
Learning Objectives

- Analyze the stressors of provider burnout that can be addressed through a sustained usability training program

- Discuss the key components of a provider-centric usability training program

- Describe the partnership between Elite Provider Trainers and Provider Champions that promotes a provider-fluent training environment

- Follow the 5-step approach to implement a sustained usability training program in one’s own organization
Elevating the Provider Experience

Case Study: Faculty Burnout

Key Considerations & Action Steps
Physician Burnout is a Systemic Issue

Physician burnout can have widespread impact on patient quality, staff performance and organizational performance.

- Increased risk of medical errors
- Decreased provider empathy for patients
- Lower patient satisfaction
- Increased turnover
- Reduced performance
- Reduced innovation
- Lack of collaboration and ineffective team communication
- Reduced clinical effort
- Reduced productivity
- Increased attrition

49% of physicians report often or always experiencing feelings for burnout.
The EHR Has Been a Contributing Factor

Research Shows Link Between EHR and Physician Burnout

For Each Hour of Clinical Time, Docs Spend 2 on Desk Work

— Time-and-motion study of 57 doctors in ambulatory settings
Burnout is a System Problem, Not Individual Weakness

“Medical has long been hampered by the ancient myth of invincibility — the notion that physicians must never show weakness, always embodying grace under pressure. This is not only wrong but also adds to the emotional toll on our physicians.”

Marschall S. Runge, M.D., Ph.D.,
CEO Michigan Medicine
The Path to Faculty Dissatisfaction

In trying to meet multiple expectations, faculty cite a number of stressors that impact their ability and desire to treat patients. These stressors can contribute to burnout.

- Provide excellent care when you see patients
- Support patients via the portal between visits
- Produce enough RVUs to support your department and your personal compensation
- Create a collaborative team environment
- Ensure the number of patients aligns with panel expectations
- Document in a timely fashion
- Create an enriching education experience
- Do this all within the allocated time based on your FTE
Traditional Health System Approaches Have Been Short-Sighted

Traditional approaches to decrease burnout have included:

- Training in physician resiliency
- Increased access to behavioral health services
- Incremental resources (e.g., scribes, admin support)
- Decreased provider expectations (e.g., decrease coverage needs)

...Yet isolated quick ‘fixes’ and one-off solutions risk alleviating only some of the symptoms and limiting the opportunity for sustainable, far-reaching improvement.
Addressing Burnout Requires Transformational and Operational Change

Elevating the Provider Experience

- Process Redesign
- Care Team Model
- EHR and Technology Optimization
- Leadership
- Culture
- Organizational Engagement
Elevating the Provider Experience

Case Study: Faculty Burnout

Key Considerations & Action Steps
The Organization At-A-Glance: By the Numbers

- **3** Hospitals
- **48,793** Inpatient Discharges
- **104,219** ED Visits
- **1,000** Licensed Beds
- **40** Outpatient Locations
- **150** Clinics
- **2,700** Faculty
- **~1,199** Residents
- **~5,000** Nurses
- **$3.3 Billion** Total Operating Budget
- **#3** NIH Funding
- **$3.3 Billion** Hospital Funding
- **31,000** Licensed Beds
- **2,700** Faculty
The Burning Platform: 42% of Faculty Report Burnout

Email 43%

Clerical Activity 40%
Time Worked Outside Of Regular Hours 39%
Workload Time Pressure 38%
Trying To Meet All My Work Expectations 33%
Insufficient Time For Meaningful Activities 31%
Work Interruptions 31%
In Basket Messages 29%
Lack Of Decisional Transparency 28%
Too Many Work Hours 25%

Many of the faculty stressors are either directly or indirectly connected to the faculty experience with MiChart. Our hypothesis is that improving faculty usability of MiChart will decrease the impact of selected stressors.

When asked specifically about time spent in the EHR at home, 52% of clinical faculty report “high” or “excessive” use connected to MiChart Usability and Mastery.
Despite Significant Investments, Faculty Still Struggled with the EHR

The organization has not been able to maximize its investment in MiChart given the faculty’s inability to proficiently and efficiently use the EHR.

Faculty perceive that they are proficient in MiChart:
I think I’m good at using MiChart. I’m at least as good as those around me, but I don’t know what I don’t know.

Despite perceived proficiency, faculty site spending significant personal time on the EHR:
My documentation and In-Basket work is a huge burden that I normally complete at night or on weekends.

Faculty do not know how to or believe they have time to seek support:
I get bombarded by emails or tipsheets that explain what to do in MiChart; I don’t understand them and don’t have time to put in helpdesk tickets.
Our Vision for a Holistic Program Centered on Continuous Improvement

**Vision:** To promote a state of continuous improvement keeping pace with new MiChart functionality and end-user needs.

1. **A comprehensive, ongoing educational program** specifically designed to increase faculty’s usability in the ambulatory setting; addressing faculty’s needs on their time, customized to the way that they most want to learn.

2. **Dedicated resources** who understand the clinical environment, deliver workflow-based interventions and partner with identified provider champions.

3. **Organizational commitment** and support for faculty participation in MiChart training programs.
Our Approach: Improve Proficiency and Efficiency for All Providers

- **Provider Champions and Elite Provider Trainers (EPTs)**
  - EPTs are non-physician clinicians and experienced trainers;
  - EPTs are fluent and confident with physician workflows (across care settings);
  - EPTs are aligned with and supported by Provider Champions;
  - These teams are able to quickly assess, diagnose and address root causes;
  - Their allocated time is commensurate with their role.

- **Broad Portfolio of Educational Programs**
  - Ranging from initial onboarding to continuous improvement;
  - Personal coaching and small group learning;
  - Follow-up evaluation and interventions to solidify learnings;
  - Organizational expectations for minimum, yearly participation.

- **Specialty Workflow-Based Curriculums**
  - Concentrate on the most frequent workflows (across care settings);
  - Customized and/or focused curriculums.
Principle One: Broad Portfolio of Educational Programs

**Faculty On-Boarding**
To educate new faculty on the MiChart Usability Program and provide specific EHR training

**Three Month Boost**
To reinforce EHR training received during on-boarding and to provide guidance on available MiChart Usability Program offerings

**Home for Dinner**
To increase faculty’s MiChart Usability usage and skill level after successfully completing this two day course

**1:1 Physician Coaching**
To provide a permanent relationship between expert MiChart users (physician champions) and a cohort of colleagues

**Training Bursts**
To become a regular agenda item on faculty department meetings, so expert MiChart users can train wide audiences of faculty at the same time

**Clinic Sprints**
To utilize a “power team” of workflow and EHR experts to improve the operational performance of practices in need

**E-Learning**
To capitalize on an existing, under-utilized mode of learning to provide faculty training on EHR system upgrades, which occur on a regular basis several months per year
**Principle Two: Committed Resources to Support Program Delivery**

<table>
<thead>
<tr>
<th>Provider Champions</th>
<th>Faculty On-Boarding</th>
<th>Three Month Boost</th>
<th>Home for Dinner</th>
<th>1:1 Physician Coaching</th>
<th>Training Bursts</th>
<th>Clinic Sprints</th>
<th>E-Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elite Provider Trainers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Instructional Designers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Credentialed Super-Users</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>HITS App Analysts</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
### New Resources: Provider Champions and Elite Provider Trainers

<table>
<thead>
<tr>
<th>Provider Champions</th>
<th>Elite Provider Trainers</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Better than average use of MiChart (as measured by efficiency and proficiency)</td>
<td>• Majority, if not all, are non-physicians</td>
</tr>
<tr>
<td>• Willing to speak in front of peers</td>
<td>- HITS Trainers</td>
</tr>
<tr>
<td>• Organized and proactive</td>
<td>- Credentialed Super-Users</td>
</tr>
<tr>
<td>• Can support dept / division training by dedicating up to 20% effort for 6 months</td>
<td>- Nursing and Nursing Informatics</td>
</tr>
<tr>
<td>• Can support dept / division training on an ongoing basis by facilitating training bursts (e.g., training</td>
<td>- Other (MAs, LPNs, Scribes)</td>
</tr>
<tr>
<td>sessions during dept meetings)</td>
<td></td>
</tr>
<tr>
<td>• Mentor Elite Provider Trainers</td>
<td>• Clinical background preferred but not required; extensive clinical environment</td>
</tr>
<tr>
<td></td>
<td>experience needed</td>
</tr>
<tr>
<td></td>
<td>• Experienced in supporting providers in the EHR</td>
</tr>
<tr>
<td></td>
<td>- Fluent in workflows, ability to assess and diagnose root causes, confident, high</td>
</tr>
<tr>
<td></td>
<td>EQ, relates to physician concerns</td>
</tr>
</tbody>
</table>

- One will be assigned to each dept/division
- One will work with as many as 4 depts at a time
Principle Three: Specialty Workflow-Based Curriculums

Our goal is to support faculty in each department or division and fundamentally change the way they use MiChart and improve usability.

<table>
<thead>
<tr>
<th>Faculty Assessment</th>
<th>Improvement Plans and Standard Tools</th>
<th>Initial and Continued Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assess performance of providers in cohort:</td>
<td>• Develop and communicate individualized plans for improvement</td>
<td>• Adapt Home for Dinner program as needed to support faculty in cohort</td>
</tr>
<tr>
<td>- Self-Assessment</td>
<td>• Coordinate resources to support the individualized improvement plan</td>
<td>• Conduct 1:1 Physician Coaching Sessions to meet targeted needs</td>
</tr>
<tr>
<td>- PEP/Signal Data</td>
<td>• Build new functionality and new standard templates that can be shared with dept/division</td>
<td>• Work with Certified Super-Users to reinforce the education</td>
</tr>
<tr>
<td>- Direct Observation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Burnout is a System Problem, Not Individual Weakness

“Medicine has long been hampered by the ancient myth of invincibility — the notion that physicians must never show weakness, always embodying grace under pressure. This is not only wrong but also adds to the emotional toll on our physicians.”

Marschall S. Runge, M.D., Ph.D., CEO Michigan Medicine
The Results: Measuring Overall Program Success

Several metrics will be used to assess provider performance pre- and post-MiChart usability training.

**KEY METRICS**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Efficiency Score</strong></td>
<td>Score derived by the EHR that compares the efficiency of performance in comparison to all other faculty at the organization <em>(curved)</em></td>
</tr>
<tr>
<td><strong>Proficiency Score</strong></td>
<td>Score built by the EHR that indicates how well the provider uses the system and its functionality <em>(not curved)</em></td>
</tr>
<tr>
<td><strong>Time Outside of Scheduled Hours</strong></td>
<td>Represents the total hours spent in the EHR outside of scheduled clinic hours</td>
</tr>
<tr>
<td><strong>MiChart Minutes/Appt</strong></td>
<td>Calculated on the total hours spent in MiChart and total number of appts (based on PEP metrics around total hours spent in MiChart and total number of completed appointments in a month)</td>
</tr>
<tr>
<td><strong>Pre-and post-self-assessment</strong></td>
<td>Faculty perception of their own performance</td>
</tr>
</tbody>
</table>

**Goal:** Proficiency Score > 7

**Goal:** Reduce time spent in MiChart by 30%
Faculty Members are Spreading the Word

Excellent! Super useful, relevant. Just good… good… good.

I should have had this years ago.

I feel that any provider within the health system would benefit from this course.

So helpful, I feel so much more ready to use MiChart in daily activities. Should be mandatory!!

Loved actually working in the production environment. Having time to work on using the tools with help was also great.

**The Results: Measuring Home for Dinner Pilot Success**

- **Rate Program as Very Good or Excellent**: 94%
- **Net Promoter Score**: 88%
- **Feel It Increased Their EHR Efficiency**: 75%
### Improvement in Efficiency and Proficiency Scores for Home for Dinner Participants:

#### March Course (Pre (Jan) and Post (June) scores)

<table>
<thead>
<tr>
<th>PARTICIPANT DEPT</th>
<th>JANUARY</th>
<th>MARCH</th>
<th>JUNE</th>
<th>JANUARY</th>
<th>MARCH</th>
<th>JUNE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal Medicine- BHC</td>
<td>6.2</td>
<td>5.0</td>
<td>✓ 7.0</td>
<td>✓ 9.9</td>
<td>✓ 9.0</td>
<td>✓ 9.0</td>
</tr>
<tr>
<td>2. Internal Medicine- CHC</td>
<td>2.9</td>
<td>4.0</td>
<td>✓ 6.0</td>
<td>✓ 5.9</td>
<td>✓ 7.0</td>
<td>✓ 7.0</td>
</tr>
<tr>
<td>3. Internal Medicine- Endo</td>
<td>6.6</td>
<td>5.0</td>
<td>✓ 7.0</td>
<td>✓ 3.6</td>
<td>✓ 6.0</td>
<td>✓ 7.0</td>
</tr>
<tr>
<td>4. Internal Medicine - Endo</td>
<td>5.0</td>
<td>4.0</td>
<td>✓ 5.0</td>
<td>✓ 5.0</td>
<td>✓ 9.0</td>
<td>✓ 7.0</td>
</tr>
<tr>
<td>5. Internal Medicine - Gastro</td>
<td>6.0</td>
<td>5.0</td>
<td>✓ 7.0</td>
<td>✓ 4.4</td>
<td>✓ 7.0</td>
<td>✓ 5.0</td>
</tr>
<tr>
<td>6. Neurology</td>
<td>6.5</td>
<td>6.0</td>
<td>✓ 7.0</td>
<td>✓ 5.5</td>
<td>✓ 8.0</td>
<td>✓ 6.0</td>
</tr>
<tr>
<td>7. Obstetrics and Gynecology*</td>
<td>5.8</td>
<td>6.0</td>
<td>✓ 7.0</td>
<td>✓ 4.7</td>
<td>✓ 9.0</td>
<td>✓ 7.0</td>
</tr>
<tr>
<td>8. Obstetrics and Gynecology</td>
<td>4.8</td>
<td>4.0</td>
<td>✓ 5.0</td>
<td>✓ 7.1</td>
<td>✓ 9.0</td>
<td>✓ 9.0</td>
</tr>
<tr>
<td>9. Obstetrics and Gynecology</td>
<td>3.6</td>
<td>4.0</td>
<td>✓ 6.0</td>
<td>✓ 8.9</td>
<td>✓ 9.0</td>
<td>✓ 9.0</td>
</tr>
<tr>
<td>10. Otolaryngology</td>
<td>2.8</td>
<td>4.0</td>
<td>✓ 4.0</td>
<td>✓ 8.3</td>
<td>✓ 9.0</td>
<td>✓ 9.0</td>
</tr>
<tr>
<td>11. PM&amp;R</td>
<td>6.2</td>
<td>5.0</td>
<td>✓ 8.0</td>
<td>✓ 1.7</td>
<td>✓ 8.0</td>
<td>✓ 6.0</td>
</tr>
<tr>
<td>12. Psychiatry</td>
<td>5.9</td>
<td>5.0</td>
<td>✓ 6.0</td>
<td>✓ 4.9</td>
<td>✓ 9.0</td>
<td>✓ 7.0</td>
</tr>
</tbody>
</table>

#### Notes:
- Efficiency is how much time providers spend using MiChart.
- Proficiency is how many of the tools they enable.
- The H4D pilot required faculty to participate in 2 full days of training.
- Training was conducted in March.
- Table only includes faculty and NPs that had PEP scores for selected months.
- *Represents a NP who participated in the class.

Source: PEP Data 2018.
Elevating the Provider Experience

Case Study: Faculty Burnout

Key Considerations & Action Steps
Key Considerations: Non-Negotiables

Require **for all providers**

Ensure trainers are **familiar with provider workflows**

**Protect time** for learners and for trainers

**Use the ‘Live’ environment** to use, build, and reinforce what is learned

Evaluate learners knowledge/goals, **customize curriculum accordingly**

Use this opportunity to **brainstorm and build ‘smartstuff’**

Include **workflow considerations** wherever possible

**Limit the self-service model**
Where to Start?
Monday Morning Action Steps

- **Survey/test whether your current portfolio meets physician needs;** spotlight the amount of resources currently engaged

- **Build the business case** anchored in your organization’s burning platform and using “what if” scenarios with targeted, quantifiable outcomes

- **Identify and engage key physicians** as change leaders and amplify the physician voice

- **Use a programmatic approach to address burnout** at both an operational and transformational level

- **If you build it, they will come;** have courage in your convictions

- **Communicate** (and “advertise”) improvements
Building a Business Case

1. Establish a baseline of understanding of physician burnout in your organization
   Internal surveys or extrapolation of national survey results

2. Drill-down into EHR usability as a driving cause of burnout by specialty area
   Scores and verbatim comments from key physicians

3. Analyze vendor-supplied, specialty-specific EHR usability data in four major categories:
   Documentation, In-Basket, Clinical Review, Ordering
   Time spent in EHR (in and out of scheduled clinical hours, volume of patient secure messages, etc.)

4. Illustrate solution-focused (vs. functionality-focused) approach of an EHR Usability Program
   Streamlined in-basket management workflows, customized quick actions and documentation tools, team-based results management, etc.

5. Build scenarios to estimate potential benefits and ROI
   Reducing EHR as a cause of burnout by x-x% (range) can reduce burnout related costs by a factor of x% (turnover, reduced clinical hours)

6. Commit to quantifiable metrics to measure short and long-term value of the Program
Questions

Greta Branford, MD
Associate CMIO
gretab@med.umich.edu
734.255.7787

Karen Kennedy
Associate Principal
Clinical Informatics & Technology
kkennedy@chartis.com
314.550.7302