Addressing EHR-related Burnout at CAMH

25 January 2021
AGENDA

1. About CAMH & The I-CARE Journey
2. Practical Recommendations for Reducing EHR-Related Burnout
3. Physician Engagement Strategy
About CAMH

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CAMH - Health redefined.

- Largest mental health and addictions hospital in Canada
- University of Toronto - affiliated teaching hospital
- World leader in brain science
- 3 main sites with 30+ locations
- 90 distinct services between an emergency department, inpatient, outpatient, day treatment and partial hospitalization models
I-CARE Journey

Key (Difficult) Requirements:

- Paperless clinical environment (<1% documentation created on paper)
- **Closed Loop Medication Administration and CPOE rates sustained above 95% and 90% respectively**
- Demonstrated use of clinical data to improve quality of care and patient safety over a 1 year period
- Demonstrated use of data to achieve financial savings
- Advanced clinical decision support
- All external documentation scanned within 24h
Practical Recommendations for Reducing EHR-Related Burnout

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Information Management Group & Office of the CMIO

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Background

Electronic health records contributing to physician burnout

Roger Collier

Optimization Sprints: Improving Clinician Satisfaction and Teamwork by Rapidly Reducing Electronic Health Record Burden

Amber Sieja 1, Katie Markley 2, Jonathan Pell 1, Christine Gonzalez 3, Brian Redig 3, Patrick Kneeland 3, Chen-Tan Lin 4
Objective: Review the current initiatives and strategies aimed at combatting EHR-related burnout and achieving the quadruple aim among multiple clinician groups, and what recommendations may be derived for the Canadian context.

Methods

Search Strategy
- Articles related to burnout and EHR usage
- Indexed in Embase, Medline, PsycInfo
- Published from 2014-2019

Screening
- 286 articles identified for title/abstract screening (Inter-rater kappa = 0.95)
- 63 articles identified for full-text screening

Data Extraction
- Demographics Information
- Statistics on burnout and EHR usage
- Interventions and outcomes
- Notable points of discussion

Results: Demographics of Included Articles

50 articles included for analysis

84% of articles published between 2017 – 2019
24% of articles were editorials or commentaries
98% of articles were published in the US (n = 47), Canada (n = 2)

Only 2 articles were conducted in psychiatric settings
62% of articles (n = 34) examined EHR usage and burnout in medical doctors

Results: Measuring EHR-Related Burden and Burnout

Methodologies Employed

- Surveys (n = 22)
- Interviews (n = 4)
- Usage Logs (n = 7)

Statistics on Burnout and EHR Usage

- 25% of respondents reported symptoms of burnout
- 70% of those reporting burnout attributed it to using health information technology, such as EHRs
- Those who had symptoms of burnout often disagreed with others about the efficiency of EHR systems

Results: Potential Interventions to Identify and Reduce Burnout

- Education and Training (n = 3)
- Additional Support (n = 5)
- Interface Improvement (n = 6)
- Communication Improvement (n = 1)

Discussion

- The global adoption of EHR systems highlights the need to examine burnout and EHR usage outside of the American context.
- Only 2 articles have focused on a mental health setting, with one examining psychiatric residents and faculty².
  - The unique documentation demands of psychiatry warrants further exploration of using EHR systems in this domain.
- Most of the literature has focused on physician usage of EHR systems, however, other healthcare professionals critical to mental health care delivery (e.g., nurses, social workers) should also be supported in EHR usage⁴.
- There is a paucity of evidence surrounding effective techniques to identify and reduce burnout; identifying which techniques are efficient and cost-effective is critical to developing a toolkit to support the increasingly advanced digital healthcare environment⁴.
Recommendations

Step 1: Measure baseline levels of burnout and identify challenges

Step 2: Select and implement appropriate interventions to mitigate burnout

Step 3: Measure impact and optimize the intervention

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CAMH Physician Engagement Strategy

Dr. Tania Tajirian
Chief Medical Information Officer
Chief Medicine in Psychiatry Division
Benchmark Survey: Target population & sample

474 CAMH physicians and learners
- 208 Full-time physicians*
- 199 Part-time physicians**
- 67 Learners (53 residents, 14 fellows)

208 survey participants
- 156 Active-Primary/Active-Provisional Primary Physicians* (75% Response Rate)
- 20 Active-Primary Secondary/Active-Secondary/Clinical Associate/Consultants/Courtesy** (10% Response Rate)
- 32 Learners (Residents/Fellows) (47.8% Response Rate)

Benchmark Survey: Contribution of EHR to physician burnout

In total, 69.7% of physicians and 68.8% of learners identified EHR as contributing to their symptoms of burnout.

Of the 24.5% of physicians and learners who were burned out, 74.5% identified EHR as contributing to their symptoms of burnout.

Physicians and learners: 74.4% physicians, 81.5% learners.

N = 51
N_{physicians} = 45
N_{Residents} = 6

Do you think EHR contributed to your symptoms of burnout?

- Physicians: 26.7%
- Learners: 16.7%

- 24.5% physicians, 74.5% learners identified EHR as contributing to their symptoms of burnout.

- Physicians: 73.3%
- Learners: 83.3%

Benchmark Survey: Significant contributors to physician burnout - Frustration and Satisfaction with EHR

Of those physicians and learners who were burned out

- 88.2% agreed that I-CARE added to their frustration (whereas only 56.8% in the non-burned out group agreed with this sentiment)
- 64.7% were dissatisfied with I-CARE (whereas only 41.0% in the non-burned out group agreed with this sentiment)

EHR adds to my daily frustration (p<0.001)

How would you rate your satisfaction with EHR? (p<0.001)

**Benchmark Survey:** Other significant differences between participants who were burned out vs. not burned out

**Perceptions on I-CARE’s usefulness**

**Of those physicians and learners who were burned out**

- **EHR helps keep my patients safe** (p<0.002)
  - Disagree (39.4%)
  - Neutral (44.5%)
  - Agree (16.1%)

- **Communications around I-CARE**
  - Disagree that I-CARE communications are efficient (25.5%)
    - Some of the Time + Almost Never (81.3%)
    - Always + Almost Always (74.5%)

- **Communications around I-CARE**
  - Disagree that I-CARE helps keep their patients safe (37.3%)
    - Some of the Time + Almost Never (43.1%)
    - Always + Almost Always (19.6%)
Benchmark Survey: Physicians’ Experiences with EHR

Themes amongst those participants with

Low EHR Satisfaction

- **Usability:**
  - “not intuitive”,
  - “not user friendly”,
  - “too many redundant tasks”,
  - “too many clicks”

- **Technical issues:**
  - “system crashes”,
  - “have to log out and back in often”

- **Additional training:**
  - “don’t know any shortcuts”,
  - “forwarding notes is a great function and surprisingly underused”

- **Information retrieval:**
  - “difficult to find documents”,
  - “info you need is buried”

- **System speed:**
  - “unresponsive”, “slow”,
  - “clunky”,
  - “takes away from time spent with patients”

- **Fixes:**
  - “prompts for diagnosis hinders workflow”,
  - “dialogue boxes that cannot be dismissed”

High EHR Satisfaction

- **Need for customization:**
  - “I use my own templates, not EHR templates”,
  - “personal short cuts”

- **Workarounds:**
  - “type long consult notes in word then copy into EHR”,
  - “enter appointments in my calendar”

- **New users:**
  - “still getting used to it”,
  - “probably use not all the functionalities”

- **Speech recognition:**
  - “use speech recognition tool exclusively instead of typing progress notes”

Multi-Pronged Physician Engagement Strategy

- Improve Physicians’ experience by rapid handling of EMR issues (SWAT)
- Enhance physicians engagement and leadership (Physician Think Tank)
- Leverage accessibility to system use data and metrics to measure outcomes (System Use Data Dashboards)
- Develop education and communication strategies (peer education, e-learning, physicians portal and CMIO newsletter)
Content:
- Initiatives updates
- Interviews
- EHR Tips & Tricks
- EHR changes in 3 categories (Pharmacy, labs, health records)

Develop education and communication strategies (peer education, e-learning, physicians portal and CMIO newsletter)

CMIO Monthly Newsletter (September 2019 onwards)

Open Rates
(Out of 500 recipients in September 2020)

Performance metrics: Delivery rates, Open rates, Links clicked.
A “Virtual lounge” (one stop shop)

Content:
- Stories
- Wellness initiatives
- EHR Tips & Tricks
- In case you missed

Develop education and communication strategies (peer education, e-learning, physicians portal and CMIO newsletter)

Physician Portal
(March 2020)
**Membership**

- CMIO (Chair)
- Physicians ‘Divisional Liaisons’
- Clinical Informatics Nurses
- Clinical Applications Team
- Health Information Management
- Pharmacy Informatics
- Laboratory and Diagnostics
- Professional Practice Office
- Enterprise Project Management Office

**Goals**

- Discuss new topics/changes
- Lead the improvement of EHR

**Benefits**

- Part of the Change Control Governance
- Representation from all divisions and stakeholders

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Enhance physicians engagement and leadership (Physician Think Tank)
Allowing physicians to view their own system use metrics:

- Time in EHR
  - Total active time
  - Time spent per patient including:
    • documentation
    • chart review
    • orders time
    • orders

- Time Spent in EHR After Hours

Leverage accessibility to system use data and metrics to measure outcomes (System Use Data Dashboards)
Goals

• Apply rapid changes and fix “the pebbles in your shoes”
• Fill the gaps in the physicians’ EHR knowledge

Benefits

• Multi disciplinary team
• Follows agile methodology

SWAT

Collect issues from divisions
Engage team
Categorize requests
Submit change requests
Develop education material
Close the loop (newsletter, divisional meetings)
We collected 133 EHR Change Requests.

- **Yellow Requests**: Request is applicable but needs time due to needed system upgrade or other requirement (On-Hold)
- **Green Requests**: Fixes will be delivered within 6 weeks of submission to change control governance
- **Blue Requests**: Needs more training
- **Red Requests**: Change is not in scope, or not aligned with policies and regulations

- **Implemented**
  - Yellow: 42% (N=56)
  - Blue: 33% (N=43)
  - Green: 15% (N=20)
  - Red: 10% (N=12)

- **In Progress**
  - 51% (In Progress)
  - 49% (Implemented)
SWAT: Divisional Dashboards

- Shareable interactive dashboard to monitor the status of all requests including:
  - Feedback for each request
  - Visualization by: Division, Status, Category
- Allows for real-time updates
SWAT: Lessons Learned from SWAT I

- Agile methodology
- Attending physician divisional meetings
- Engaging divisional leadership
- Multi disciplinary representation in the SWAT team
- Development of SWAT II (education focus)
- SWAT III (closing the loop) to maintain accountability

SWAT II:
- EHR education sessions resumed in September 2020
Multi-Pronged Physician Engagement Strategy: Lessons Learned

- Physicians are main stakeholders/decision makers in all initiatives of the strategy
- Multi-disciplinary team to be engaged in direct discussions with MDs
- Initiatives are connected and provide essential input to each other
Next Steps

• Continue to increase *satisfaction* through
  
  **Reducing inefficiencies** and **improving education**

• **Measure impact** & continuously improve (PEPs)

• **Return to what EHR was intended to do:**
  • Provide fast access to patient information
  • Support clinical decision making
  • Support the patient journey through transitions of care
  • Improve patient safety & quality of care
Questions?

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Thanks to:
Khaled Almilaji, Damian Jankowicz, Jessica Kemp,
Lydia Sequeira and David Yin