



Using Step-Wise Electronic Medical Record Training Approach to Reduce Resident Burnout and Improve Resident Physician EPIC EMR efficiency.

Allegra Tenkman MD, 8/28/2023

Project Background



Project Background

- Repeatedly, physicians would report working with a physician EPIC trainer was more helpful than working with a non-physician EPIC trainer.
- My experience taught me physicians were most satisfied when I started with the basics and on returning visits, built on prior knowledge, teaching more complex efficiencies over time
- **Became an EPIC physician builder in 2018.**
 - Bridge the gap between end user and IT project team
 - Help prioritize what projects are most useful to physicians.
- Have worked to build 16 organizational Express Lanes for Well Child checks



Current literature supports a strong

> J Am Med Inform Assoc. 2014 Feb;21(e1):e100-6. doi: 10.1136/amiainf-2013-001875. Epub 2013 Sep 4.

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

Stewart Babbott¹, Linda Baier Manwell, Roger Brown, Enid Montague, Eric Williams, Mark Schwartz, Erik Hess, Mark Linzer

Affiliations + expand
PMID: 2400 > J Med Internet Res. 2020 Jul 15;22(7):e19274. doi: 10.2196/19274.

The Influence of Electronic Health Record Use on Physician Burnout: Cross-Sectional Survey

Tania Tajirian^{1,2}, Vicky Stergiopoulos^{1,2}, Gillian Marcos Sanches³, Jessica Kemp⁴, Karishini Ram

Affiliations + expand
PMID: 32673234 PMID: PMC7392132 DOI: 10.1093/jamia/ocab018
[Free PMC article](#)

Primary Care Physician Gender

Rittenberg E, Liebman JB, Rexrode J
J Gen Intern Med. 2022 Oct;37(13):2499-2505
PMID: 34993875
Female PCPs receive 24% more stress-related messages (51.5 messages/month) (p values explained by the percentage of female patients in a PCP's panel. ...The ...

Front Digit Health. 2022 Jan 13;3:772356. doi: 10.3389/fdgth.2021.772356. eCollection 2021.

Saving Time for Patient Care by Optimizing Physician Note Templates: A Pilot Study

Rana Alissa¹, Jennifer A Hipp¹, Kendall Webb²
Affiliations + expand
Colandra Li,¹ Camil
PMID: 35098206 PMID: PMC8792616 DOI: 10.3389/fdgth.2021.772356

Case Reports > JAMIA Open. 2021 Apr 19;4(2):ooab018. doi: 10.1093/jamiaopen/ooab018. eCollection 2021 Apr.

EHR "SWAT" teams: a physician engagement initiative to improve Electronic Health Record (EHR) experiences and mitigate possible causes of EHR-related burnout

Lydia Sequeira^{1,2}, Khaled Almilaji¹, Gillian Strudwick^{1,2}, Damian Jankowicz¹, Tania Tajirian^{1,2}
Affiliations + expand
PMID: 33898934 PMID: PMC8054031 DOI: 10.1093/jamiaopen/ooab018

How to Repair Incomplete Electronic Medical Records and Address Causes of Provider Burnout.

van R, Mohamed A, Russo CL
doi: 10.1200/OP.20.00294. Epub 2020 Aug 6.

Electronic Medical Record (EMR) was cited as the second most common cause to address according to a priority matrix. ...The ...

Annals of Internal Medicine®

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Ideas and Opinions | 3 July 2018

Physician Burnout in the Electronic Health Record Era: Are We Ignoring the Real Causes?

N. Lance Downing, MD, David W. Bates, MD, MSc, and Christopher A. Longhurst, MD, MSc
Author, Article, and Disclosure Information
<https://doi.org/10.7326/M18-0139>

Associations of physician burnout with organizational electronic health record support and after-hours charting

H C Eschenroeder¹, Lauren C Manzione², Julia Adler-Milstein³, Connor Bice², Robert Cash², Cole Duda², Craig Joseph⁴, John S Lee⁵, Amy Maneker⁶, Karl A Poterack⁷, Sarah B Rahman⁸, Jacob Jeppson², Christopher Longhurst⁹

Affiliations + expand
PMID: 33880534 PMID: PMC8068427 DOI: 10.1093/jamia/ocab053

Vishnu Mohan, MD, MBI,¹ Cort Garrison, MD,¹ and Jeffrey A Gold, MD²

¹ Department of Medical Informatics and Clinical Epidemiology, Oregon Health & Science University, Portland, OR, United States

PMCID: PMC8491113
PMID: 34325400

Record Training to Reduce Physician

Project Background

- Meaningful use of Electronic Medical Records became a requirement for clinicians in 2014.
- Many studies have shown clinicians feel EMR implementation has led to increased workload and increased burnout.
- Most organizations only focus on the initial training of EMR to clinicians, which only contains basic functionalities and focuses on a one-sized-fits-all approach.
- A more tailored and step-wise EMR training approach has been proposed to be “more adequate” while emphasizing lifelong learning and clinician wellbeing.

[JMIR Med Inform](#). 2021 Sep; 9(9): e29374.

Published online 2021 Sep 20. doi: [10.2196/29374](#)

PMCID: PMC8491113

PMID: [34325400](#)

Using a New Model of Electronic Health Record Training to Reduce Physician Burnout: A Plan for Action

Monitoring Editor: Christian Lovis

Reviewed by Christopher Longhurst

[Vishnu Mohan](#), MD, MBI,⁰¹ [Cort Garrison](#), MD,¹ and [Jeffrey A Gold](#), MD²

¹ Department of Medical Informatics and Clinical Epidemiology, Oregon Health & Science University, Portland, OR, United States

Project Background

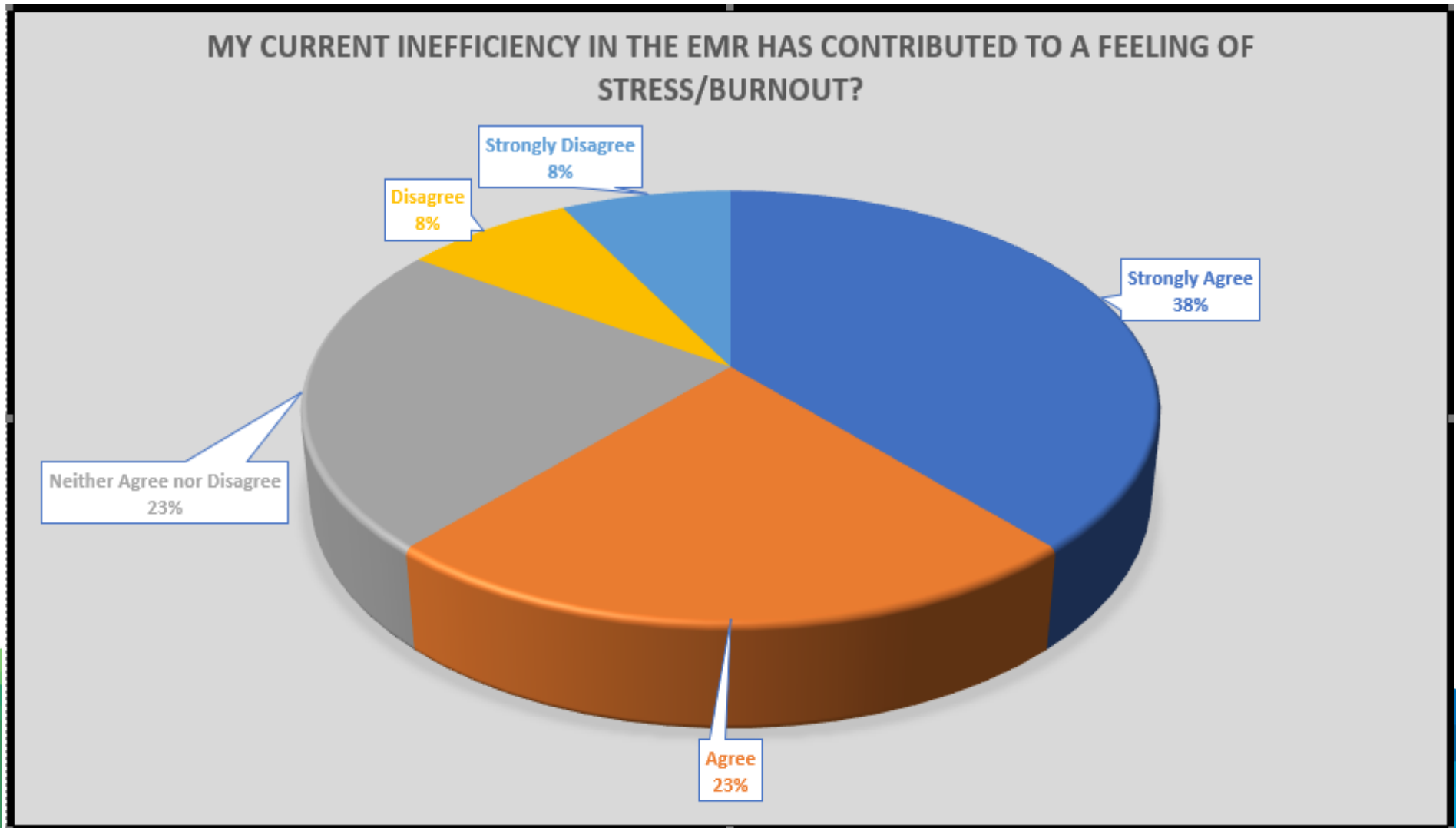
- Many resident physicians of Mercy Anderson's Family and Community Medicine Residency Program have received initial EPIC training and have expressed EMR related burnout.

Objective

- Create and deliver a tailored Family Medicine Residency EPIC training program, featuring increasingly complex EPIC functionalities, to improve resident documentation efficiency, inbox management efficiency and resident physician wellbeing from March 2023 to August 2023.
- Continue this program annually, with continued PDSA cycles to continuously improve the program.

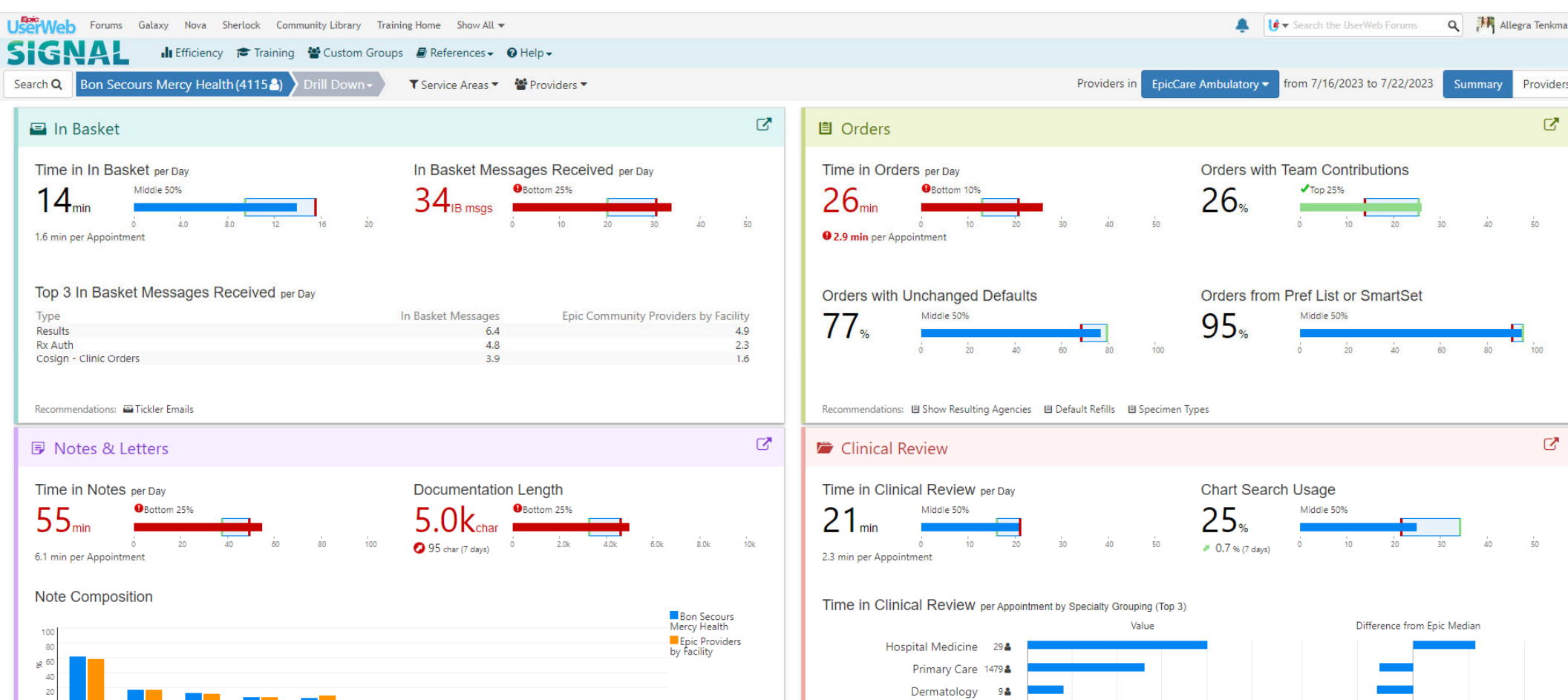
Project Design/Methods

- Baseline qualitative data of our 13 resident physicians was collected via survey in March 2023.



Project Design/Methods

- Baseline quantitative data regarding EMR efficiency was also collected on each resident using EPIC Signal reports.



Project Design/Methods

- Baseline quantitative data regarding EMR efficiency was also collected on each resident using EPIC Signal reports.
- Data was collected in each of the following five categories:
 - Seconds per completed in basket message
 - Times in orders per appointment
 - Time in notes per appointment
 - Length of documentation per appointment
 - Time in clinical review per appointment

Project Design/Methods

- Intervention one: A 137-page PowerPoint presentation was created with clear screen shots of each workflow component including:
 - Storyboard
 - Chart Review/Precharting
 - Order entry/Preference List Composer
 - Result management
 - Mychart and telephone encounter
 - Quick Actions
 - Refill management
 - Progress Note Documentation
- Intervention two:
 - Classroom style session in which residents created/built their own shortcuts/QuickActions with the help from a physician teacher
- Intervention three:
 - Residents presented their assigned preference lists and SmartPhrases to each other and make them part of a Residency Tool Kit that they can all use.

Project Design/Methods



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6/25/2023 - 7/29/2023

Compare With [Family Medicine - Provider Specialty in Facility \(Bon Secours Mercy Health\) \(155\)](#)

Proficiency **6** | PEP Score **5** | Training Focus Area: In Basket | Provider Type: Resident | Specialty: Family Medicine | Department: MHCX AND FM RES PRACT | Using Epic at this Org For: 2.1 years | Community ID: 132142917

[Overview](#) | [In Basket](#) | [Orders](#) | [Notes & Letters](#) | [Clinical Review](#) | [Workload](#) | **[Training](#)**

Actions	Training Date	Program	Areas	Training Title	Comments
Edit	7/12/2023	1:1 Training	<ul style="list-style-type: none"> Orders Notes & Letters 	EPIC Efficiency training #3	shared .visitacute, .visitchronic, .fcmrportho and group preference lists
Edit	4/5/2023	1:1 Training	<ul style="list-style-type: none"> In Basket Notes & Letters 	EPIC training # 2	--spent time creating quick actions in the many different areas in epic. Also creating speed buttons in the many different areas in epic.
Edit	3/29/2023	1:1 Training	<ul style="list-style-type: none"> In Basket Orders Notes & Letters Clinical Review 	Epic Efficiency training	



Project Design/Methods



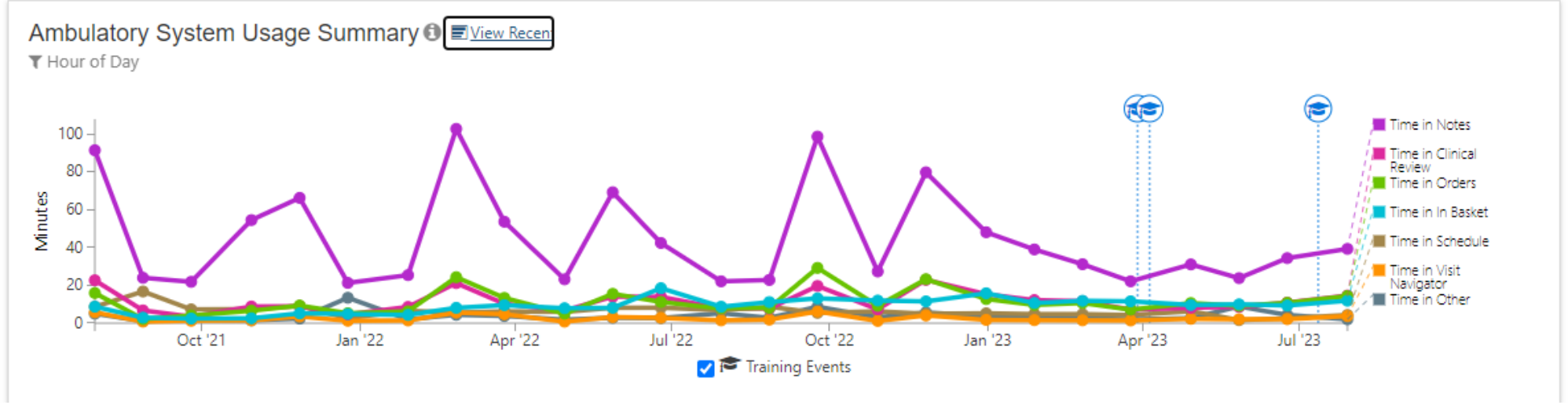
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6/25/2023 - 7/29/2023

Compare With **Family Medicine - Provider Specialty in Facility (Bon Secours Mercy Health) (155)**

Proficiency **6** PEP Score **5** Training Focus Area In Basket Provider Type Resident Specialty Family Medicine Department MHCX AND FM RES PRACT Using Epic at this Org For 2.1 years Community ID 132142917

Overview In Basket Orders Notes & Letters Clinical Review Workload Training



Results/Outcomes

- QI project start was delayed until March 2023 to allow attendance and incorporation of material from the “Provider Efficiency Tools 2023 Winter updates”
 - This included **5 one-hour live virtual seminars** given in January 2023

The screenshot shows a webinar registration page. On the left, there is a date selector for '2023 JAN 18'. The main heading is 'Provider Efficiency Tools – Winter 2023 Update'. Below the heading, the date and time are listed as 'Wednesday, January 18, 2023 12:00 PM - 1:00 PM', with a note that it is displayed in the user's local time zone. The topics covered include 'Efficiency Tools (Signal, PEP, NEAT), EpicCare Ambulatory, Physician Builder, Physician Lounge, Physician Power User'. A note indicates that the webinar is part of a series and provides the contact information for Tom Kuech. The main body of text describes the webinar's focus on reviewing the latest updates for Signal and Tune-Ups, and mentions that the session will be recorded. At the bottom, there is a 'Register' button with a star icon. The footer contains the copyright notice for Epic Systems Corporation and links to the Terms of Use, Contact Epic, and Privacy Policy.

2023
JAN
18

Provider Efficiency Tools – Winter 2023 Update

Wednesday, January 18, 2023 12:00 PM - 1:00 PM Displayed in your computer's local time zone
Efficiency Tools (Signal, PEP, NEAT), EpicCare Ambulatory, Physician Builder, Physician Lounge, Physician Power User
🔗 This webinar is part of a series Contact: Tom Kuech

Looking to understand how your providers are using Epic? Join as Epic's Physician Well Being team reviews the latest updates along with a preview of what is coming for Signal and Tune-Ups.

We will record if you cannot make it. We hope to see you there virtually!

Once registered please use the "Add to Calendar" buttons from the registration page or the email from Zoom to block off the time on your calendar.

★ Register

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Results/Outcomes

- Because of this delay final results are not yet available.

**NOT
AVAILABLE**

Results/Outcomes

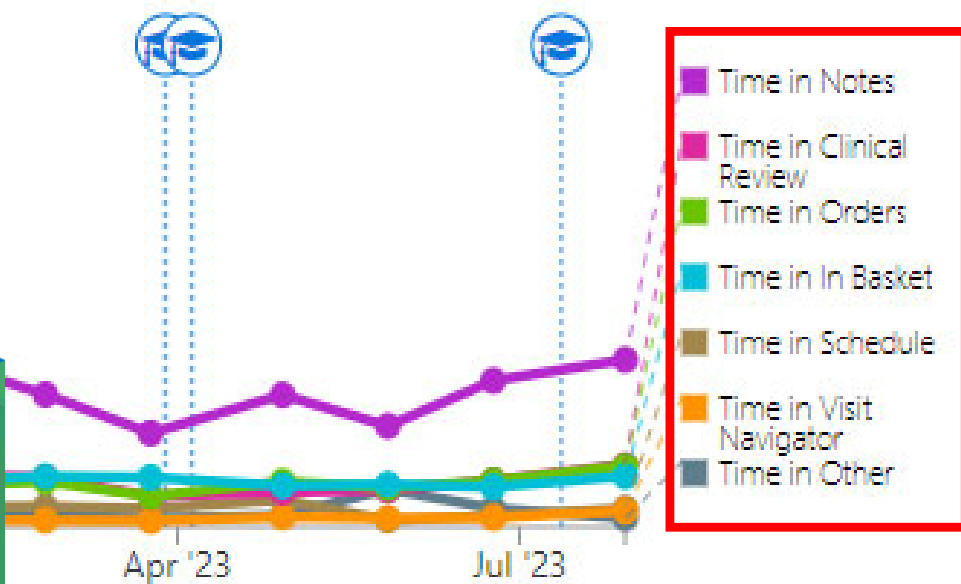
- 12 of 13 residents attended each training session
- Initial feedback was very positive with each new lesson met with great enthusiasm and amazement of what the EMR could do
- The last training session was completed in July 2023

Results/Outcomes

- New qualitative surveys will be delivered to residents to see if this EMR training changed their perception of EMR-related burnout

Results/Outcomes

- Currently working with Signal expert at EPIC to build similar run chart below, showing training sessions, but changing the Y-axis to match the 5 quantitative measurements from the categories below in red
- **For residents need to measure Per Appointment, as they spend a different amount of time in clinic depending on PGY year and rotation**



- Seconds per completed in basket message
- Times in orders per appointment
- Time in notes per appointment
- Length of documentation per appointment
- Time in clinical review per appointment

Discussion/Next Steps

- Plan to continue to study and adjust approach based on PDSA cycle results and feedback from the residents
- Can also add additional personalized sessions for residents that are struggling and not showing improvement
- Will continue with each academic year, including new residents over time, as an “N of 12” isn’t statistically significant
- Hope to prevent EMR burnout after graduation by this intervention



Questions????

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