CALIFORNIA HEALTH CARE
SAFETY NET INSTITUTE

Epic USERGROUP
Avoiding Burnout & Addressing Provider Experience in Epic

Thursday, August 22, 2019
11:00am to 12pm

Recording Link

Agenda

Time	Topic	Lead(s)
5 min	**Welcome, Logistics & Introductions**	Kristina Mody
35 min	**UC Davis' Physician Efficiency Program (PEP)** Reactions & Q&A	Scott MacDonald, MD Vikram Kumar, MD Rajiv Pramanik, MD
15 min	**Peer Discussion**	All
2 min	**Wrap-up & Announcements** • Upcoming SNI events • Post Event Survey	Kristina

Logistics

Please mute yourself! (We'll have to mute lines if there is background noise)

Please feel free to chime in for questions, and especially for the discussion

At any time, feel free to chat your question & we will read out

Webinar will be recorded and saved on SNI Link/Data

Intros

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EHRs at CAPH Systems

2019: **Alameda**

2019: **Kern**

2019-2020: TBD
Arrowhead
San Mateo

UC DAVIS HEALTH

Finishing Faster and Happier

Individualized physician training to improve efficiency with the electronic health record

Scott MacDonald MD, FAPC

UC Davis Health

University of California, Davis, Health

Improving lives and transforming health care

- Academic health system
  - 1 hospital, 627 beds
    - 17 clinic locations
    - 1,473 physicians
    - ≈35,000 admissions/ year
    - ≈950,000 outpatient visits
  - 1 hosted hospital
    - 190 hosted physicians

EHR blamed for:

- “I’m retiring rather than changing how I practice”
- “EMR has turned me into a clerk”
- “I got carpal tunnel from this thing”
- “I’m never not working”
- “The patients are always asking for more attention”

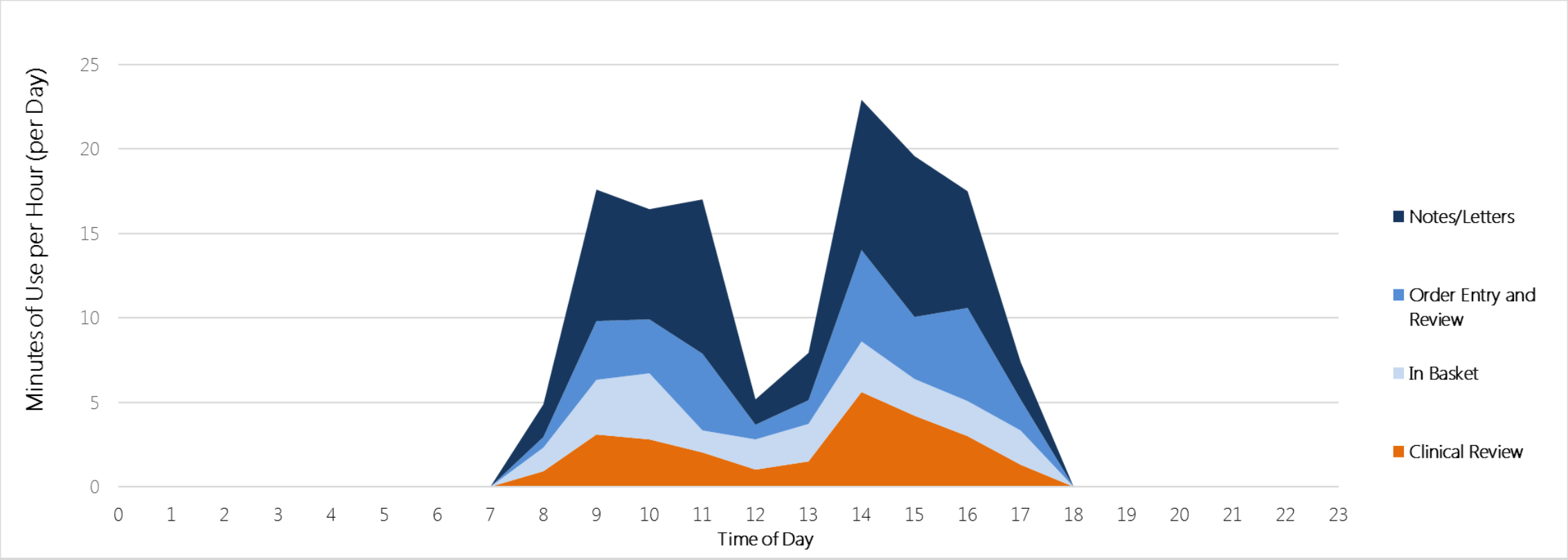
Perception vs Reality: Is EMR really the cause?

- Many external mandates over same time frame
  - Billing requirements (E&M, 'present on admission')
  - Prior authorizations for drugs, tests, and DME
  - Quality measures
  - Production pressures
- Changing patient expectations
  - Other industries have change expectations for
    - Access
    - Turn around time

Perception vs Reality: Is EMR really the cause?

- Responses implemented in EHRs
  - Because that's *how we work now*
- Data not compared to paper workflows
- EHRs have always shone a light on practice
- ***Perception trumps reality*- so we still have to address this**

EHR Utilization at UC Davis Health



Consequences of Inaction

- Current projections indicate a **shortage of 14,800 to 49,300** primary care **physicians by 2030**, with one in fifty physicians planning to leave clinical practice altogether.

- In a Mayo clinic study of 6,880 physicians,
  - 66.6% of respondents who were looking to leave clinical practice in the next two years were either dissatisfied or very dissatisfied with their EHR.
  - Of physicians looking to reduce their practice in the next two years, the percentage of EHR dissatisfaction was 51.6%.

What is known to help EMR satisfaction?

KLAS Arch Collaborative

- Survey of 72,000 physicians, 156 organizations
- Key metric: 'net EHR experience score'
  - (Very + somewhat satisfied) – (very + somewhat dissatisfied)
  - Higher numbers better
- Looked for corrllations of this with EHR vendor, many other variables
- Two highly correlated variables
  - Training
  - Personalization

Local Investment in Training Drives Electronic Health Record User Satisfaction. Longhurst CA, Davis T, et al. Appl Clin Inform. 2019 Mar;10(2):331-335. doi: 10.1055/s-0039-1688753. PMID: 31091545

KLAS Training findings

Hours of training versus average next EHR experience score

Hours of required new-provider training	Organizations	Average net EHR experience score
<4 h	11	6
4 h	21	17.2
5–6 h	13	20.6
7–8 h	20	16.7
10–16 h	12	27.5

KLAS Personalization Findings

Table 6 Correlation between personalization adoption and NEES for organizations

Percent of personalization adopted by providers	Average net EHR experience score for organizations
10–20	−21.5
20–30	−29-
30–40	−21.1
40–50	15.7
50–60	27.3
60–70	25.1

KLAS KLAS Personalization Robustness

Table 5 Correlation between personalization adoption and net EHR experience score for users

Personalization/optimization	Net EHR experience score for personalization adopters	Net EHR experience score for personalization nonadopters	NEES difference
Template personalization	29.3	−1.1	30.4
Order list personalization	31.2	10.3	20.8
Order set optimization	29.3	14.3	15.0
Navigation macro personalization	29.4	15.6	13.8
Filter personalization	35.3	11.9	23.4
Personalization of shortcuts	37.4	14.2	23.2
Layouts personalization	39.4	15.3	24.1
Personalization of report views	40.9	18.4	22.5
Personalization of sort orders for lists	40.2	17.7	22.5

What we did to improve physician burnout

Provider Experience Program:

Scope

- 2004 – Implemented EpicCare Ambulatory
- Fall 2017 – 4 clinic pilot modeled after UCSF
- Feb. 2018 – Launched PEP
- As of July 2019, trained:
  - 500 physician faculty and residents
  - 50 specialties
- 2020 – Engage all primary and specialty care ambulatory physicians

Meet the PEP Squad

- Scott MacDonald, M.D.
  EMR Medical Director
- Melissa Jost, M.S.
  Program Manager
- 4 EpicCare Ambulatory Trainers
- 2 EpicCare Ambulatory Builders

Training Elements

Part 1: Four hours *individually tailored*, one-on-one training for each physician

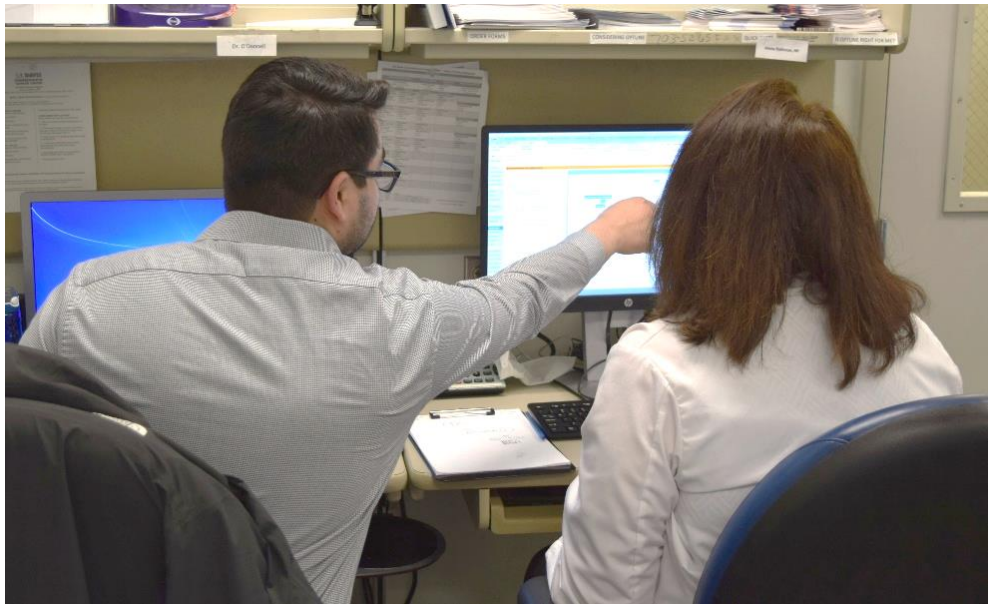
Part 2: Weekly "PEP Talks" to discuss areas where entire clinic struggles

Part 3: Supplementary support while in clinic

Training Elements: Part 1

One-on-one Training

One-on-one Training



- Held during clinic time to allow for practice charting
- 50% reduction of schedule
  - Plan 3 months in advance to block schedules

One-on-one Training

Prior to 1-1 sessions, team develops individual training plan for each physician by:

1. Evaluating Epic analytics
   - Signal, PAL's, and Slicer Dicer
2. Conducting in-system analysis
3. Reviewing pre-engagement survey
4. Shadowing

Individualized Physician Efficiency Plan (iPEP)

Individualized Physician Efficiency Plan for PEP Training, MD

PROGRAM
Finish Faster

	Training Objectives	Current Proficiency	Areas of Focus	Target Proficiency	Areas Trained
Priority 1	ORDERS	Beginner	Preference List	Proficient	Preference List, Create Sections and Subsections
Priority 2	SMARTTOOLS	Beginner	SmartPhrases, Copy and Modify	Proficient	SmartPhrases, Copy and Modify, Create New
Priority 3	INBASKET	Proficient	Quick Actions	Advanced	Quick Actions, created for Results, Rx Auth and Pt. Messages
Priority 4	CHARTREVIEW	Beginner	Quick Filters	Proficient	Quick Filters, created for Labs Tabs

Follow Up Items:	
Priority 1	For the next 2 weeks use the preference list for all orders, add orders to preference list as needed.
Priority 2	Continue to update the Labs Quick Filter as labs become available
Priority 3	

Operational/Workflow Recommendations:	
Priority 1	Review messaging templates with the staff
Priority 2	
Priority 3	

Enhancement Requests:	
Priority 1	Speed buttons for Reason for Visit/Chief Complaint
Priority 2	

Physician Testimonial

- Created for every physician
- Covers:
  - Training Objectives
  - Follow-up
  - Operational/Workflow Optimization Recommendations
  - System Enhancement Requests

Benefits of iPEP

- Focuses physicians and trainers during session
  - Curtails training being a complaint session
- Tool to track improvement and future follow-up
- Identify recurring challenges within and across clinics

Epic Personalization Achievement Levels (PAL's)

PAL's look at physician personalization for:

- Preference Lists
- SmartPhrases
- NoteWriter Macros
- Chart Review Filters
- Order Sets
- In Basket QuickActions
- Advanced SmartTools

Epic Personalization Achievement Levels (PAL's)

Measure	Value From Your Environment	Numerator Definition
Physicians have personalized Preference Lists	66.5% (654/983)	Providers with personalized Preference Lists

Provider	Passing?	Preference Lists (max of 20 display)
MACDONALD, SCOTT	Yes	LPF 281 LPF 568 LPF 278881

In-System Evaluation

Preference Lists

- Which preference lists have been built out?
- To what extent?
- Do they have custom order panels on a preference list?

SmartTools

- Are they utilizing NoteWriter SmartForm for ROS and PHY Exam?
  - Signal shows that it is enabled, but not frequency of use
  - What is available in SmartPhrase Manager
- Do they utilize SmartLists in their notes or wildcards – look through initial consult or follow-up notes to validate

Pre-Engagement Survey

- Allows physician input to guide in their training
- Even if an area of focus identified by a physician is not where they are most inefficient, we will still incorporate it

Shadowing

- PEP Squad shadows in each Clinic or Specialty
  - Shadowing is conducted over a half day
  - Random sample of physicians
- Allows us to understand clinic workflow
  - Who enters what information?
  - Specialties are different from Primary Care
- Makes physicians more comfortable with where we get our information

Training Elements: Part 2

PEP Talks

“PEP Talks”

- Weekly one-hour sessions while on site
- Cover topics where entire clinic is struggling
  - Food improves attendance!
  - Location, location, location!
- First PEP Talk is always widescreen
- Selected by clinic with PEP Squad recommendations
- Example Talks:
  - Managing InBasket
  - Efficient Ordering
  - Haiku and Canto

Training Elements: Part 3

Additional On-Site Support

PEP Squad Working Location

- Team works out of the clinic location during engagements
  - PEP Squad staff available for follow-up questions or sessions
  - Trainers help triage EMR-build issues that arise in clinic
  - When new build goes live, staff available to train on the spot

Epic System Optimization

Build Optimization Strategy

- While at clinic we implement specialty-specific enhancements known to improve physician efficiency
- Adoption of agile build methods reduces communication time between builders and clinicians, resulting in shorter build timelines
- Aim to implement items with minimal operational governance requirements

Starter Pack and Booster Pack Implementation

- **Starter Pack Go-Live** – First week of engagement
  - Customized build per specialty
  - Incorporate changes from previous PEP engagements
  - Team trains and personalizes the system based on the new functionality during one-on-one sessions

- **Booster Pack Go-Live** – Last week of engagement
  - New additions to Starter Pack
  - PEP Squad available to support in clinic

Subject Matter Experts Assigned

A Subject Matter Expert (SME) works closely with each specialty clinic and the PEP squad on build enhancements

- Subject Matter Expert's Role:
  - Identify EMR optimization opportunities
  - Obtain feedback from fellow physicians on enhancements
  - Review and sign-off on proposed changes
  - Be available for questions with quick turnaround time

Build Menu

- Give physicians a Build Menu to select enhancement items
- Streamline governance processes
- Evaluate special chef orders on a case-by-case basis

PHYSICIAN EFFICIENCY PROGRAM

Finish Faster

Epic Core Build Menu

Introduction

Physicians across the organization have been spending more time in the EMR than they would like, sometimes interfering with a desirable work life balance. The PEP program provides an opportunity to order some system enhancements from our core build menu. These items are designed to be built and activated during the course of the PEP Engagement to solve documentation concerns and help your clinic's physicians *Finish Faster* .

It is the intention of the PEP Squad to offer this real time system build along with personalized the at-the-elbow support to get physicians home sooner while maintaining excellence in quality patient care. Review some of the concerns that have been observed in our facilities and the solutions available from our build menu.

PEP Solutions

Use the Links below to see how the PEP Squad can help you *Finish Faster* . If you would like to focus on one of these areas during your PEP Engagement, please prepare by completing the **Pre-Engagement Clinic Action Items** listed at the bottom of each section.

Charting:	Note Tools
	Smart Tools
	Letter Templates
	Chief Complaint Speed Buttons
	Diagnosis Speed Buttons
	Navigator History Templates
	Medical
	Surgical
	Family
Ordering:	Orders Preference List
	Meds and Orders
Content Review:	Wide Screen Navigator
	Synopsis
	Snap Shot
Additional Requests:	Workstation Printer Mappings
	Special Requests

Build Menu Options

- Preference List Updates
- System Released Macros
- SmartTools
- Letters
- Synopsis Reports
- Printer and Workstation Mapping
- Screening Tools and Calculators
- Chief Complaint Speed Buttons
- Visit Diagnosis Speed Buttons
- Medical, Surgical, Social History Navigator Sections
- Specialty Specific Widescreen Navigator
- SnapShot Reports
- SmartSets

Metrics and Research Data

Narrative Outcomes

- "It was fantastic! I learned many functions in epic that I did not even know existed to make me more efficient with my patient management. I think devoting **a few hours to learning will help save many hours** in the future. Wish we had more of these sessions!"
- "I definitely recommend the PEP program. **I thought I was proficient, and I still learned** so much useful information."
- Having gone through the engagement **I feel "More confident** in my ability to set up my EMR to work better for my patient encounters and online communications."

Narrative Outcomes

- "My trainer was very patient, and I did not feel pressured to extend too far beyond my comfort level. I learned useful ways to interface with Epic, which is not always intuitive. I think this **training is invaluable**, and I would encourage incorporating into an annual or biannual session for providers who feel their EMR skills could stand improvement."
- The **most useful** part of the engagement was "having someone here [to] look over your shoulder [and] see how you work and **suggest points of improvement**."

Narrative Outcomes

- When speaking about my PEP experience, I would tell my colleagues "to EMBRACE this learning experience**. It will save hours**."
- "**I refused to change** my ways previously, but after learning so many methods on how to be more efficient **I am ready to let go of old habits**."

How do they rate their *efficiency gains*?

5-point Likert scale

- Increased efficiency from 2.72 to 3.37

Net score

- Increased from -20.37 points to 33.33 points

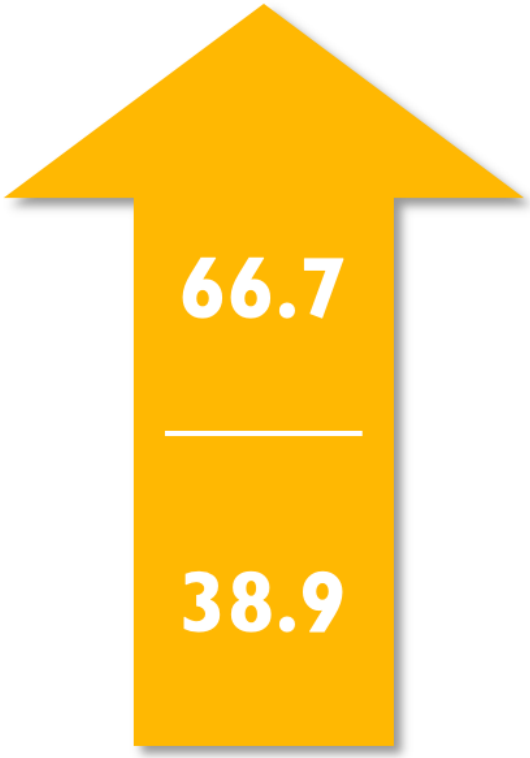
*All values are significant at the .05 or .01 level

How do they rate their *satisfaction*?

5-point Likert scale

- Increased satisfaction from 3.44 to 3.85

Net box score



- Increased from 38.89 to 66.67 points

*All values are significant at the .05 or .01 level

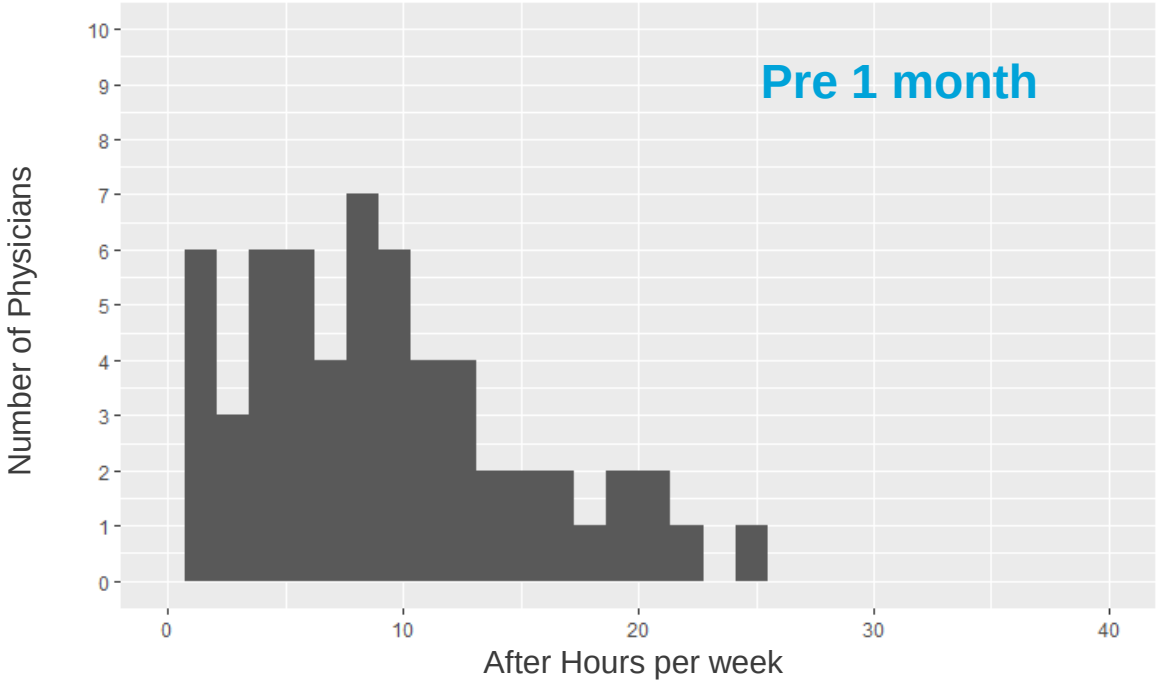
How do they *feel* about their after-hours time?

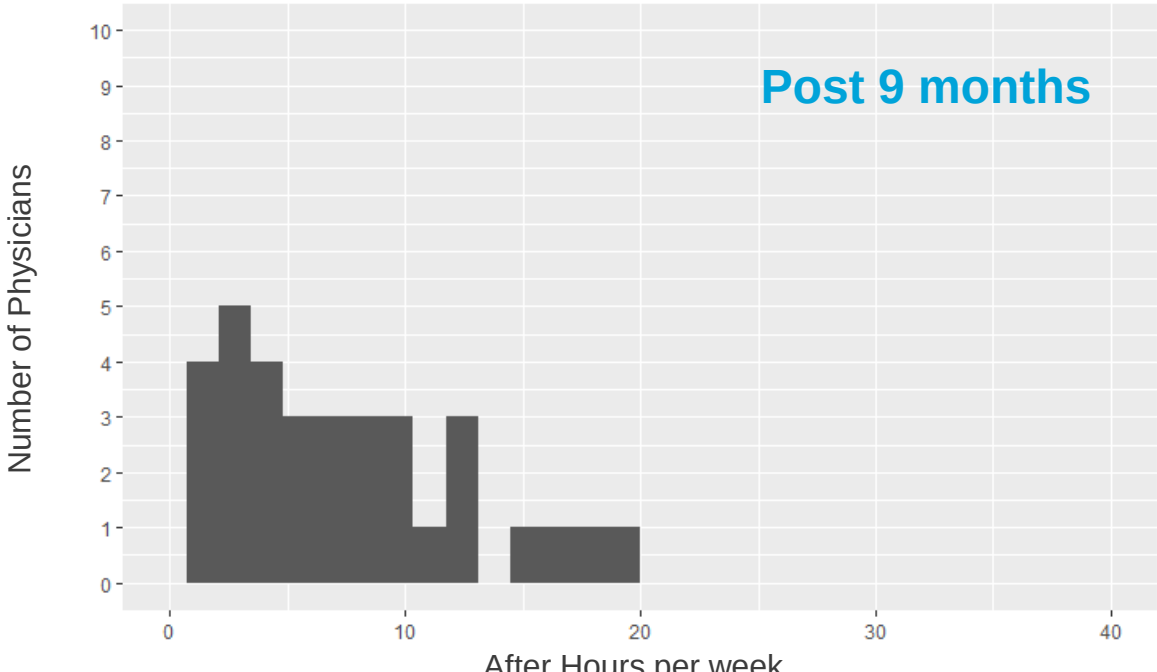
- Physicians **felt** they had a more acceptable level of after-hours work after training
- Increased from 2.43 to 3.06

*All values are significant at the .05 or .01 level

Change in pajama time

- Measured time at a 5min resolution, when taking action in EHR during non-scheduled time.
- All users: Improvement by 9 months, but not a consistent trend
  - Large Standard Deviation suggesting confounders such as varying workloads.
- Stratify by pre-intervention mean, breakpoint ~8hrs/week.
  - Those with the most room to improve, improved
  - Already ‘efficient’ physicians didn’t change



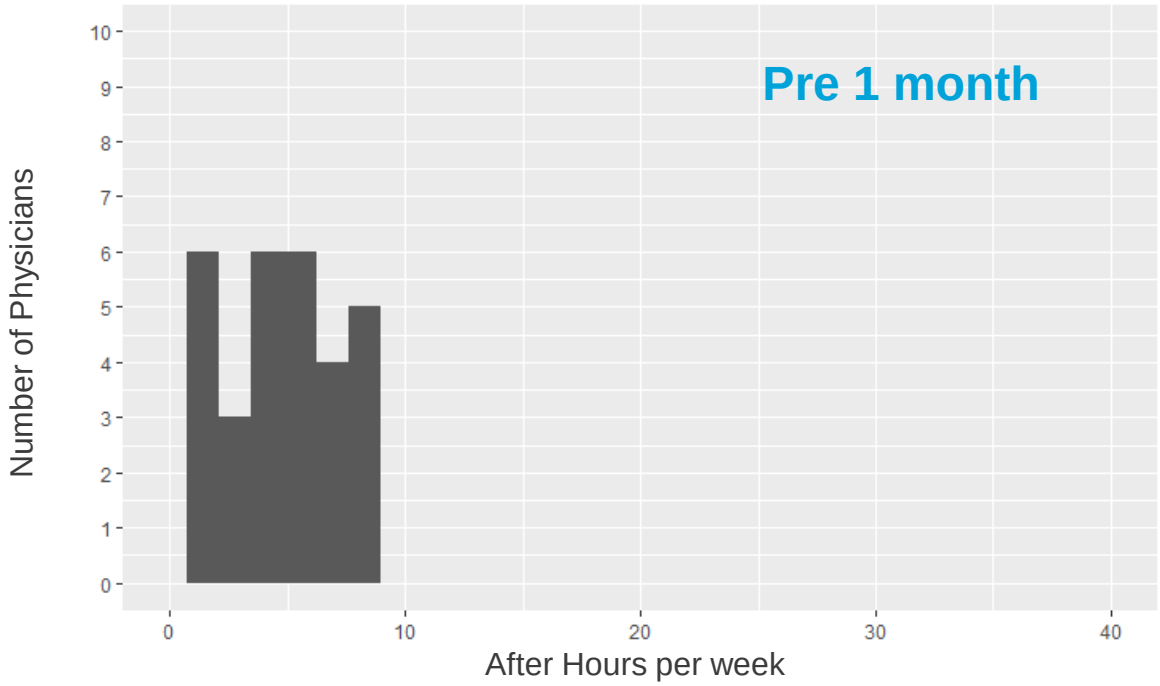


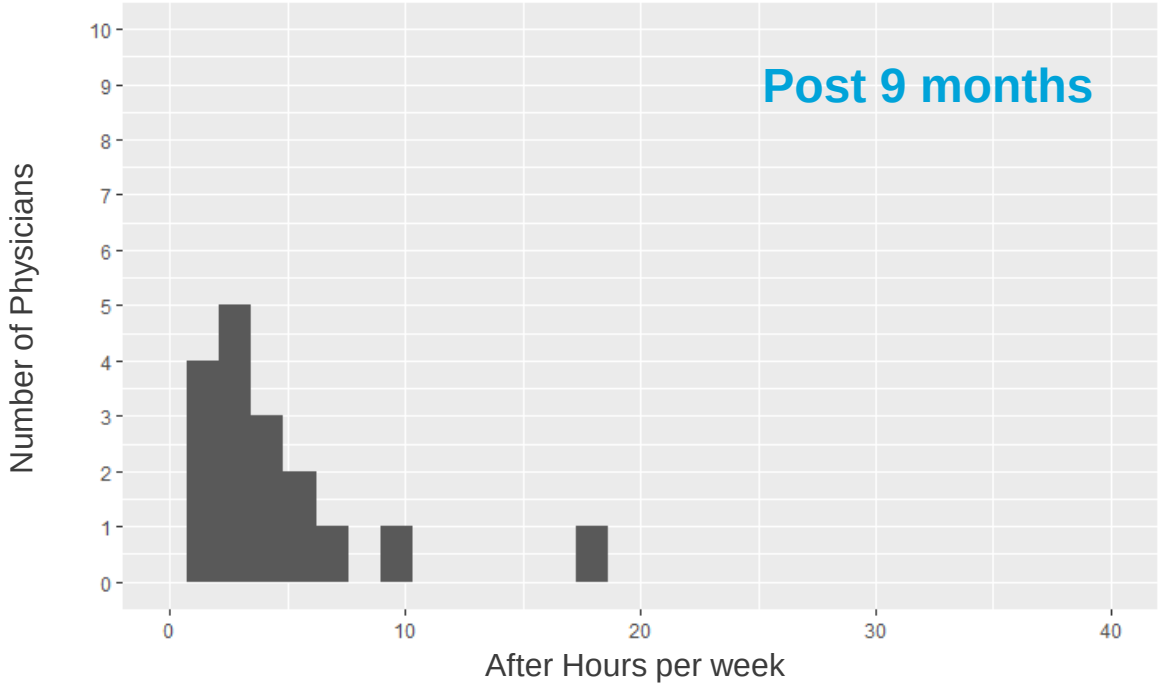
All physicians

- Statistically significant decrease in after hours at 9 months (p = 0.002)
- Returns to pre 1 month after hours baseline at 12 months (p = 0.071)

All Physicans	Mean ± SD	Median	Wilcoxon p value
Pre 1 month	9.2 ± 5.9	8.2	N/A
Post 3 months	8.6 ± 5.9	7.5	0.05
Post 6 months	10.0 ± 6.7	8.5	0.31
Post 9 months	7.2 ± 5.0	6.4	0.00*
Post 12 months	9.2 ± 6.2	8.8	0.07

‘Already efficient’ physicians

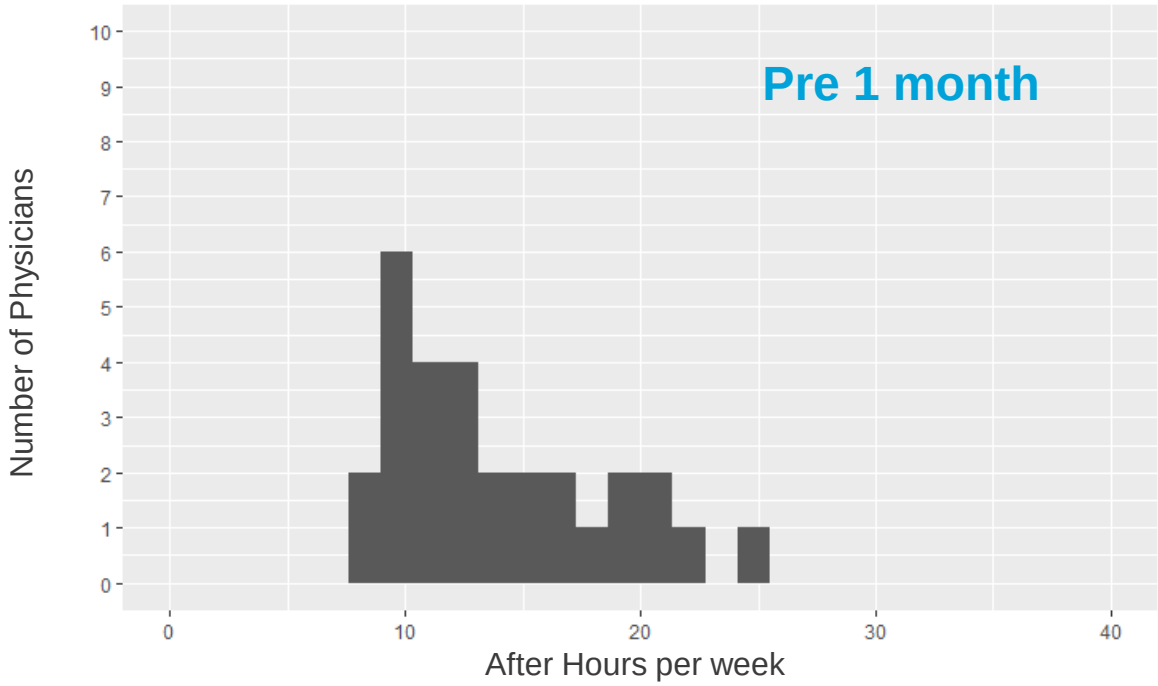


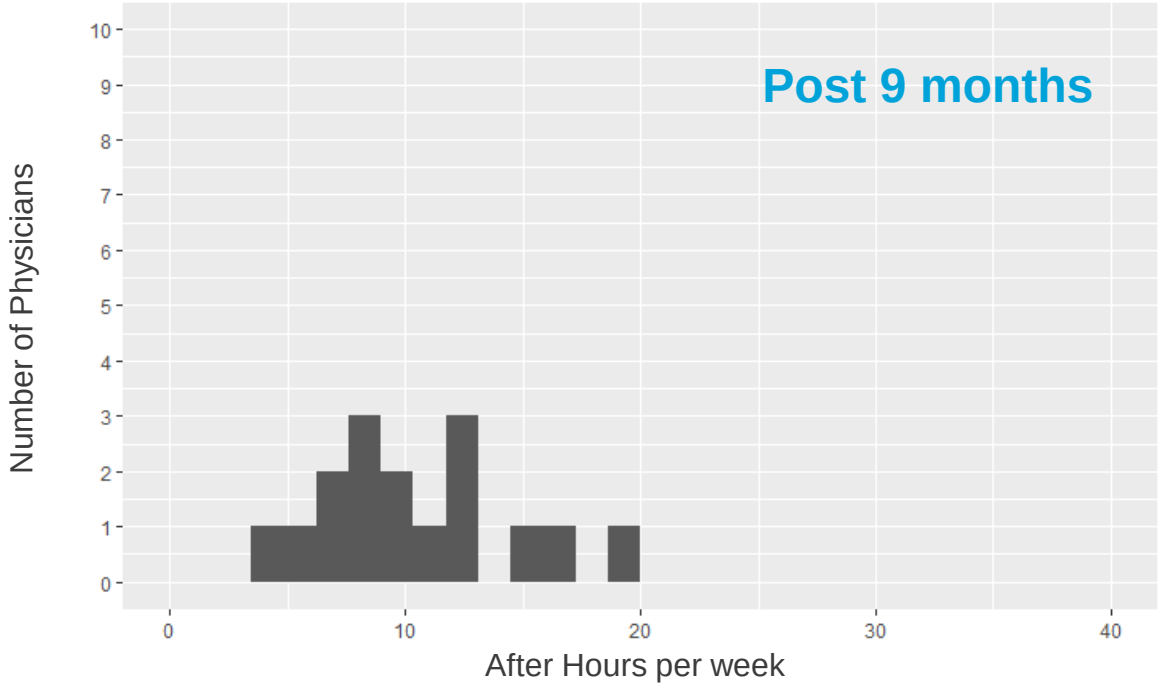


- No statistically significant trend

All Physicans	Mean ± SD	Median	Wilcoxon p value
Pre 1 month	4.7 ± 2.3	4.8	N/A
Post 3 months	4.8 ± 3.7	4.1	0.54
Post 6 months	5.8 ± 3.8	4.9	0.36
Post 9 months	4.3 ± 3.9	3.3	0.11
Post 12 months	5.9 ± 4.5	4.1	0.31

‘Previously inefficient’ physicians.





- Statistically significant decreases in after hours charting at 3 months and 9 months.
- Reductions are not sustained at 12 months.

All Physicans	Mean ± SD	Median	Wilcoxon p value
Pre 1 month	13.9 ± 4.7	12.1	N/A
Post 3 months	12.5 ± 5.1	11.3	0.03*
Post 6 months	14.0 ± 6.4	12.2	0.72
Post 9 months	10.4 ± 4.0	9.3	0.00*
Post 12 months	13.0 ± 5.9	11.6	0.15

Metrics that didn't change

- Level of Service Coding
- % Encounters Closed Same Day
- Epic's PEP Efficiency Score
- Average of Results Messages Average Days Until Marked Done
- Average of Rx Auth Messages Average Days Until Marked Done
- Average of Patient Call Messages Average Days Until Marked Done
- Average of Medical Advice Messages Average Days Until Marked Done

Pre-engagement x<1 day

We continue to look for trends as the program continues

What we've learned and where we're going…

PEP Squad Trainers

The PEP squad trainers are not:

- Clinically trained

They are:

- Experienced IT trainers with Epic Ambulatory certifications
- Passionate about making a positive impact
- Customer-service focused
- Willing to change tactics early and often
- Willing to learn physician workflows

What did we learn?

- Know your audience
- Clinical and operational leadership support is critical to success
- Epic Signal and PALs don't tell the whole story, and that's okay.
- Re-evaluate methods early and often
- Be cautious of burnout amongst staff

Provider Experience Program: What's Next

- Our team is doubling!
- 2020 Goals:
  - Develop **Inpatient** Physician Efficiency Program
  - Quarterly follow-up training for ambulatory physicians
  - CME credit for PEP training

Contact Us

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Reactor Panel & Q&A

- Considerations for
  - Systems yet to implement Epic
  - Systems just after Go-Live

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Peer Discussion

Key Discussion Questions

1. How does your system track and address provider burnout with EHRs? Are there specific metrics or outcomes tracked?
2. What training models are used?
3. Has anyone done work optimizing inpatient provider experience?
4. What questions do you have for your peers?
5. What advice do you have?

Useful Resources

- Epic
  - "It's possible" video series (available on Epic UserWeb)
  - Physician Efficiency Workgroup
  - Thrive training

- Epic for Mortals - Reference and syllabus for EpicCare Ambulatory
  - By Daniel Rosenberg MD

- KLAS Arch Collaborative

- CHCF CIN (California Improvement Network): Preventing Burnout Collection

WRAP UP

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Quality Leaders Awards (QLAs)

AWARD CATAGORIES:

- TOP HONOR
- AMBULATORY CARE REDESIGN
- DATA-DRIVEN ORGANIZATION
- PERFORMANCE EXCELLENCE

ABOUT THE AWARDS

For more than 20 years, CAPH/SNI has delivered the QLAs to recognize outstanding initiatives across California's public health care systems. The awards highlight forward-thinking and innovative approaches to improve care and advance population health.

Awards are presented at the CAPH/SNI Annual Conference on December 4-6 at the Paradise Point Resort in San Diego.

APPLY NOW!

safetynetinstitute.org/qla

DEADLINE TO APPLY: AUGUST 30, 2019

http://safetynetinstitute.org/qla

Save the Date
CAPH/SNI Annual Conference

Registration to open in September!

https://caph.org/aboutcaph/annualconference/

Upcoming Dates

Sept 9 (12-1): Patient-Centered Care Transitions Communication to Improve H-CAHPS Scores with RUHS [link]

M	T	W	Th	F
September				
2	3	4	5	6
9	10	11	12	13
14	15	16	17	18

Share Your Feedback

How did we do?

What did you learn?

Do you have suggestions for future topics or content?

PLEASE COMPLETE OUR POP-UP SURVEY