MICHIGAN MEDICINE HOSPITALS, CLINICS AND AFFILIATIONS LOCATIONS

City

Alma
Alpena
Ann Arbor
Brighton
Canton
Chelsea
Clare
Dexter
Flint
Gladwin
Grand Blanc
Grand Rapids
Howell
Jackson
Lansing

Livonia
Midland
Milford
Mt. Pleasant
Northville
Novi
Petoskey
Saline
Southfield
Toledo, Ohio
Traverse City
West Branch
Wyoming
Ypsilanti
Wyoming

Legend

Hospitals
MidMichigan Health
Metro Health
Clinics

Ann Arbor

University Hospital

Frankel
Cardiovascular
Center (CVC)

Mott Children's
Hospital and
Von Voigtlander
Women's Hospital

MISSION STATEMENT:

WE ADVANCE HEALTH TO SERVE MICHIGAN AND THE WORLD.

BEST HOSPITALS
U.S.News & WORLD REPORT
HONOR ROLL
2019-20

KEY FACTS

1,000	Licensed beds Medical and Surgical	**26,000**	Employees
3	Hospitals	**48,793**	Discharges
40	Outpatient facilities	**300K**	Patient days
5,000	Nurses	**104K**	ER/urgent care visits
1,199	Residents in training	**2.1M**	Outpatient clinic visits
105	Specialties	**54K**	Surgeries
708	Medical students	**4,400**	Babies Delivered

RESEARCH ACTIVITIES

235	New inventions
57	Patents Awarded
112	New option and license agreements with industry
7	New startup companies

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Objectives

Describe Proficiency Program

Describe targeted, provider-focused training and workflow re-design with measurable improvements in proficiency and provider satisfaction through Home for Dinner and BOOST programs.

Understand the Data

Identify best practices for efficiency programs and look for meaningful outcome measures in the complex data to better understand impact of these efforts.

Extrapolate to other Audiences

Consider how best to use this data going forward to adjust expectations and programming and support funding of a broader effort in inpatient, ED and for nursing staff.

Provider Burnout is in the Headlines

THE NEW YORKER

ANNALS OF MEDICINE   NOVEMBER 12, 2018 ISSUE

WHY DOCTORS HATE THEIR COMPUTERS

Digitization promises to make medical care easier and more efficient. But are screens coming between doctors and patients?

By Atul Gawande

Declaring Doctor Burnout a 'Health Crisis,' Hospital CEOs Urge Action

U.S.News

Research Shows Link Between EHR and Physician Burnout

The Hospitalist. 2016 April;2016(4)

Click image to read article

The Washington Post
Democracy Dies in Darkness

Health & Science

Physician burnout taking center stage

The Atlantic

HUMAN CAPITAL

The Burnout Crisis in American Medicine

Are electronic medical records and demanding regulations contributing to a historic doctor shortage?

RENA XU MAY 11, 2018

Forbes

16,379 views | Sep 6, 2016, 07:13am

For Every Hour With Patients, Doctors Spend Two Record-Keeping

Harvard Business Review

TECHNOLOGY

To Combat Physician Burnout and Improve Care, Fix the Electronic Health Record

by Robert Wachter and Jeff Goldsmith

MARCH 30, 2018

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And at Michigan Medicine

2 in 5

Michigan Medicine Physicians report experiencing burnout.

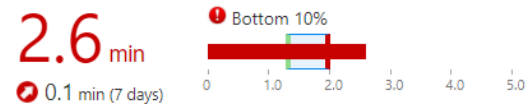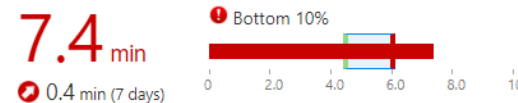|	
Experience Burnout	42%
MiChart Related Stress	>33%
Excessive After Hours Time in MiChart	52%
Proficient based on self-perception	82%
Proficient based on Epic Usage Data	46%

Source: Michigan Medicine Faculty Physician Health Initiative (FPHI) Survey 2018; includes faculty in clinical departments only.
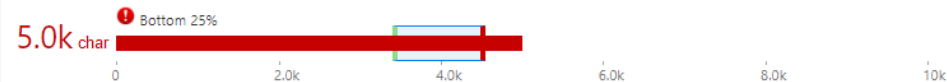
Time in In Basket per Appointment

2.6 min   ❗ Bottom 10%

🔴 0.1 min (7 days)

0   1.0   2.0   3.0   4.0   5.0

Time in Notes per Appointment

7.4 min   ❗ Bottom 10%

🔴 0.4 min (7 days)

0   2.0   4.0   6.0   8.0   10

Documentation Length

5.0k char   ❗ Bottom 25%

0   2.0k   4.0k   6.0k   8.0k   10k

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Physician Burnout is a Systemic Issue

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

49% OF PHYSICIANS
report often or always experiencing feelings for burnout

- 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

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Training can help!

Healthcare IT News — GLOBAL EDITION

EHR training is biggest predictor of user satisfaction, experts say

By **Mike Miliard** | May 17, 2019 | 03:56 PM

A better clinician experience makes for higher-quality patient care, according to a new report from KLAS' Arch Collaborative, which makes the case for bigger investment in end-user education.

Healthcare IT News — GLOBAL EDITION

Can EHRs' contributions to physician burnout be cured? Mixing up training can help

It's pivotal for organizations to institute an ongoing program that promotes a state of continuous improvement, keeping pace with new functionality, one HIMSS19 speaker says.

By **Bill Siwicki** | January 29, 2019 | 10:50 AM

Health systems invested in electronic health records to drive patient care improvements, increase efficiencies, reduce lengths of payment cycles and allow for prospective and retrospective reporting without manual intervention.

Some, not all, of those anticipated benefits have been realized. In many cases, expected clinical efficiencies are not being experienced, and often satisfaction is

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Training Initiatives

Actual Photo
Epic Training Team

Home for Dinner: 2 day course, 15 CMEs for a class of 18 providers, led by 3+ Trainers and + provider champions, working in live environment (Current users sign up on their own)

MiChart Boost: Performance improvement & usability initiative. Department specific education program including Home for Dinner concepts, workflow analysis and build requests.

Program 1

Home for Dinner

MiChart Ambulatory Provider Efficiency Course
15 CMEs

Home for Dinner: Ambulatory Provider Efficiency Course

HOME for DINNER

Topics include: Clinical Review, Workspace Customization, In Basket Customization and Efficiency, Notes & Smart Tools, and using/customizing the Plan and Wrap Up Tabs to improve efficiency

2 Days focused time
(15 CME credits)
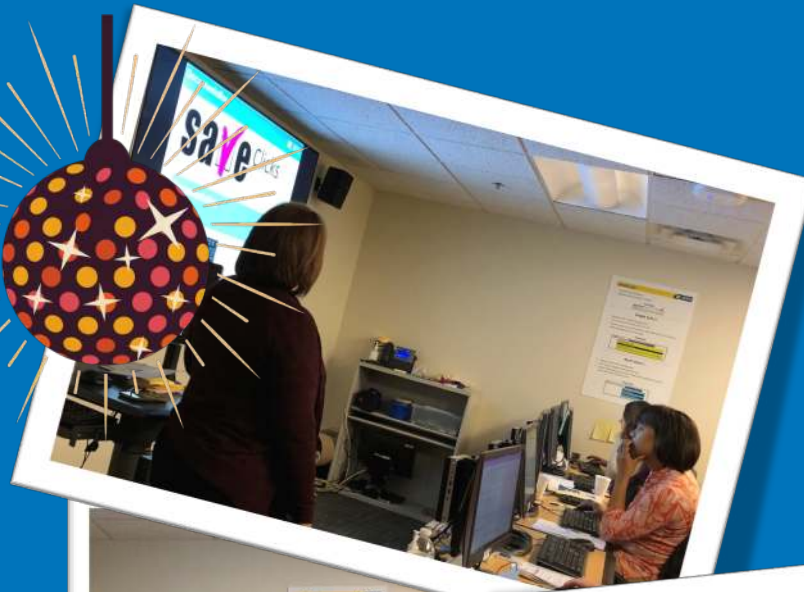
Hands on – personalize and customize in the live production system

Individualized support from trainers and experienced physician(s)

Engaging atmosphere with lunch, snacks and prizes

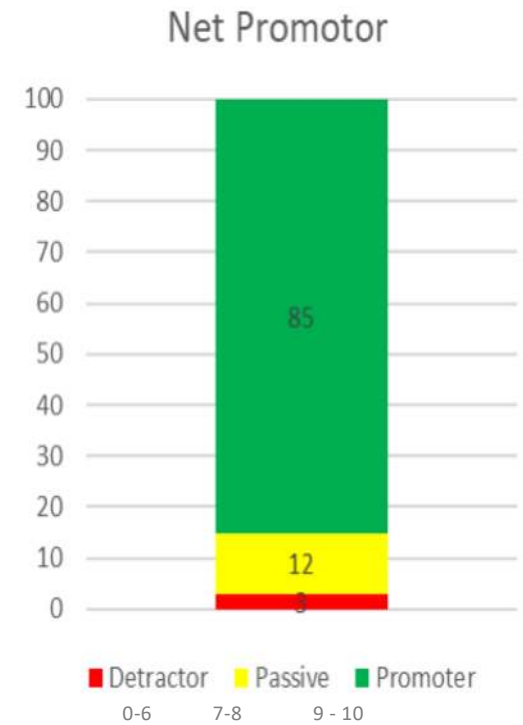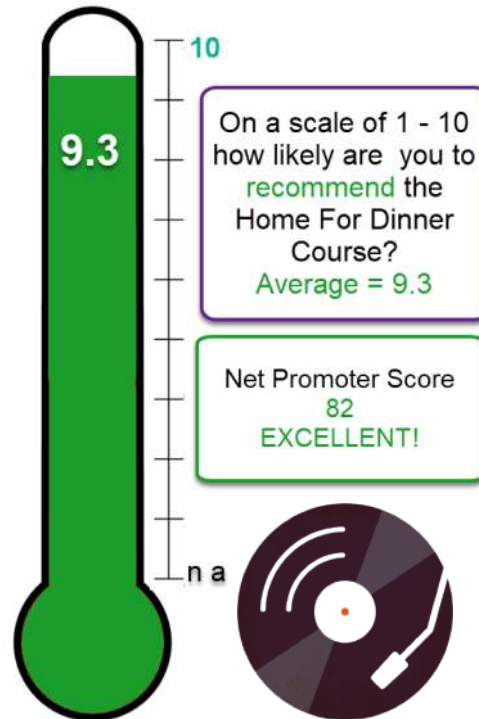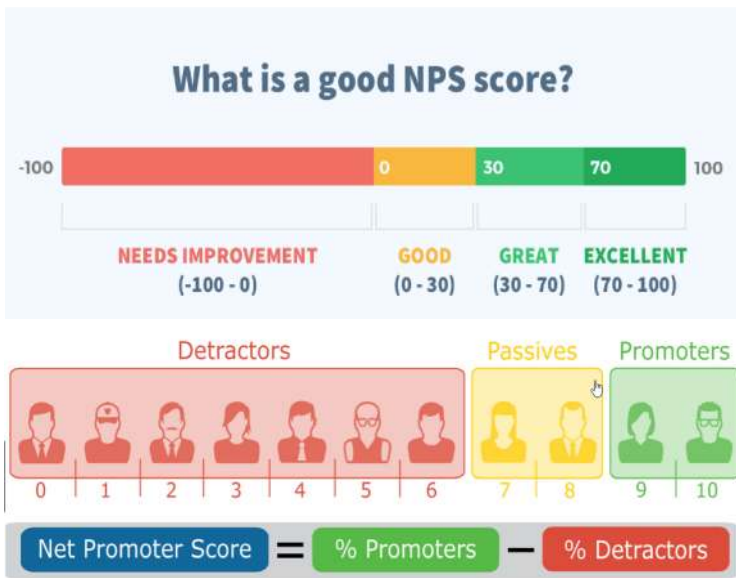Offered Monthly
(Classes full thru Dec)

Pre-and post-survey collected
Signal data reviewed with participants
Learning home dashboard shared with all

Class in Action
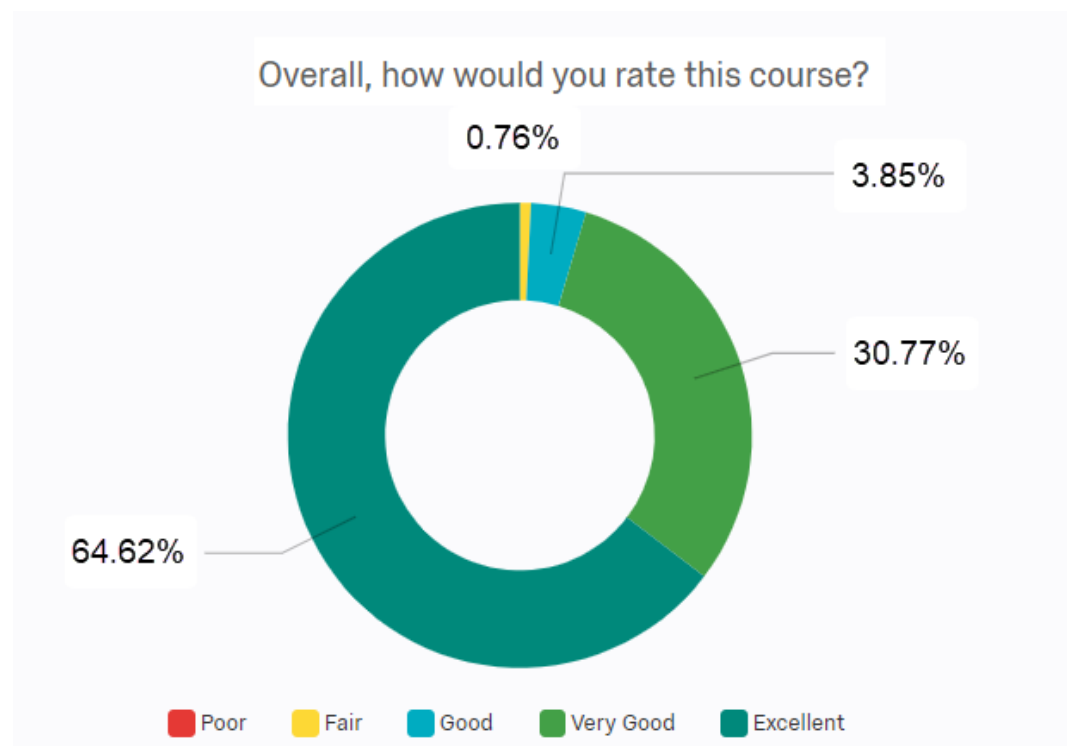

Working hard!

Smiles and fun all around!

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Home for Dinner Course NPS

Home for Dinner Course Satisfaction

95% of attendees rate the course as Excellent or Very Good

Overall, how would you rate this course?

0.76%

3.85%

30.77%

64.62%

Poor   Fair   Good   Very Good   Excellent

What Providers are Saying

2 day MiChart "Home for Dinner" training is great. Huge help to increase efficiency and cut down time to document. Would recommend highly.
- John Allen, MD, MBA

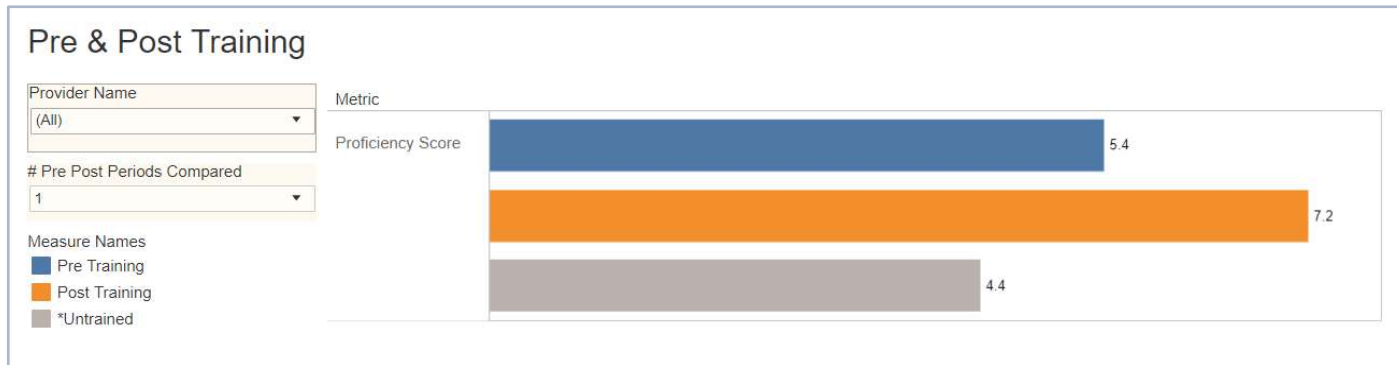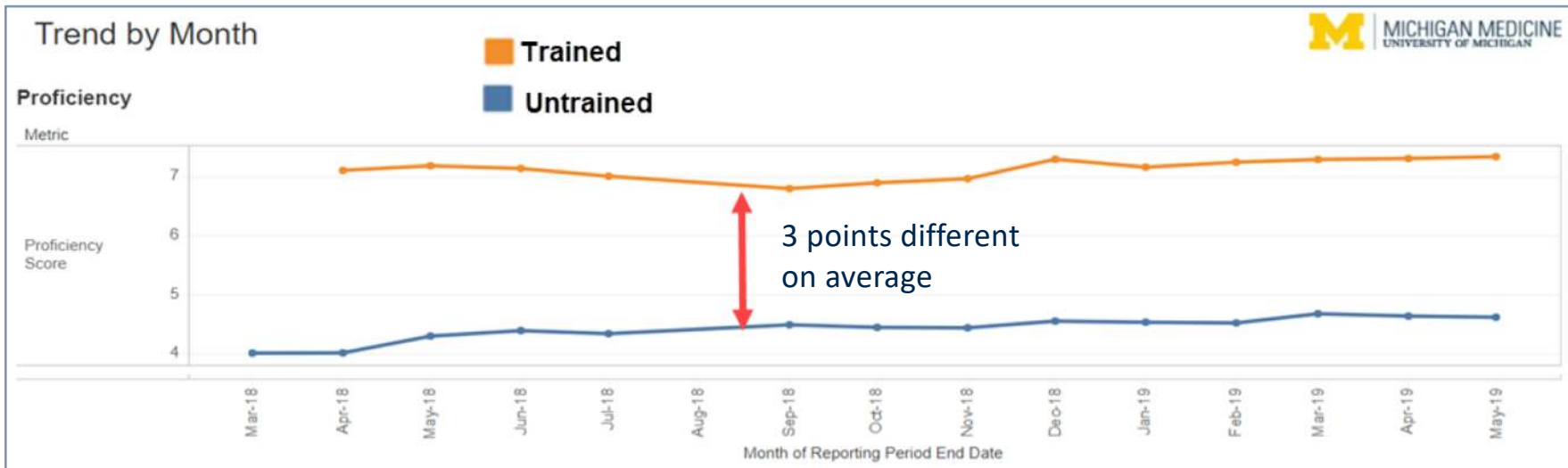This should be mandatory for new hires, 3-6 months after they start.

My In Basket efficiency has improved the most, and I have been able to eliminate a few clicks per patient which gives me a feeling akin to joy... And to have the time during the course to systematically go through this within each Michart function was a luxury of great value and should not be a luxury but a necessity for all provider users of Michart.

Personalizing MiChart by using custom features will save me time.
- Kirk Brower, MD

This course was the perfect way to build up your MiChart efficiency AND get CME credits for the time you spend doing it. Building tools in MiChart upfront is going to save me a lot of time every day from here on out.

I found a lot of short cuts that I did not know existed. I LOVED that we were actively modifying our own MiChart rather than learning about something in a class, then trying to remember it and find time to apply it to our own work later. I also really appreciated the hands on help.

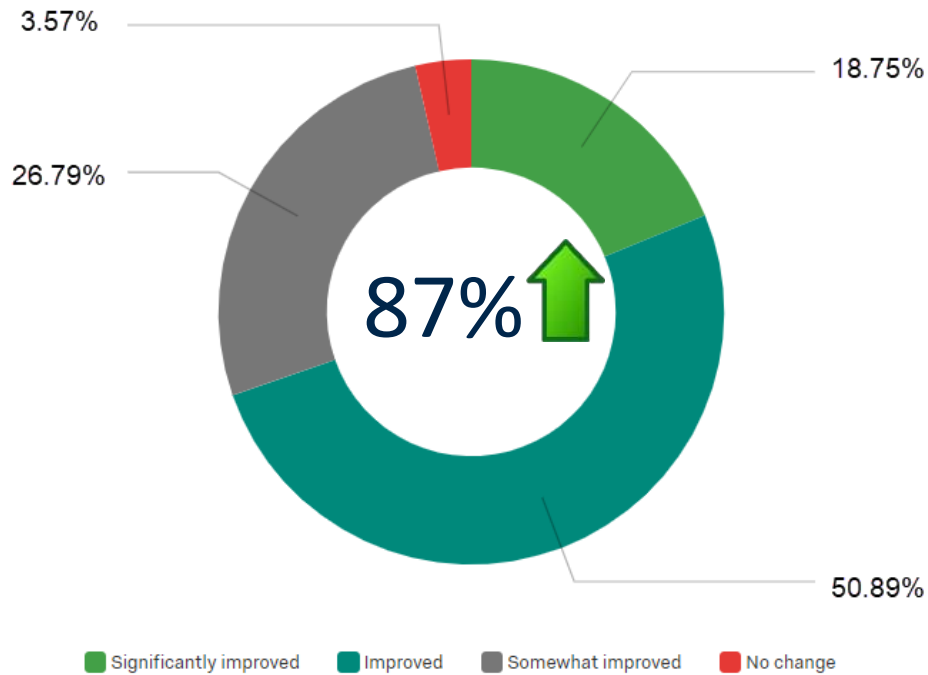# Proficiency Scores Improve Significantly
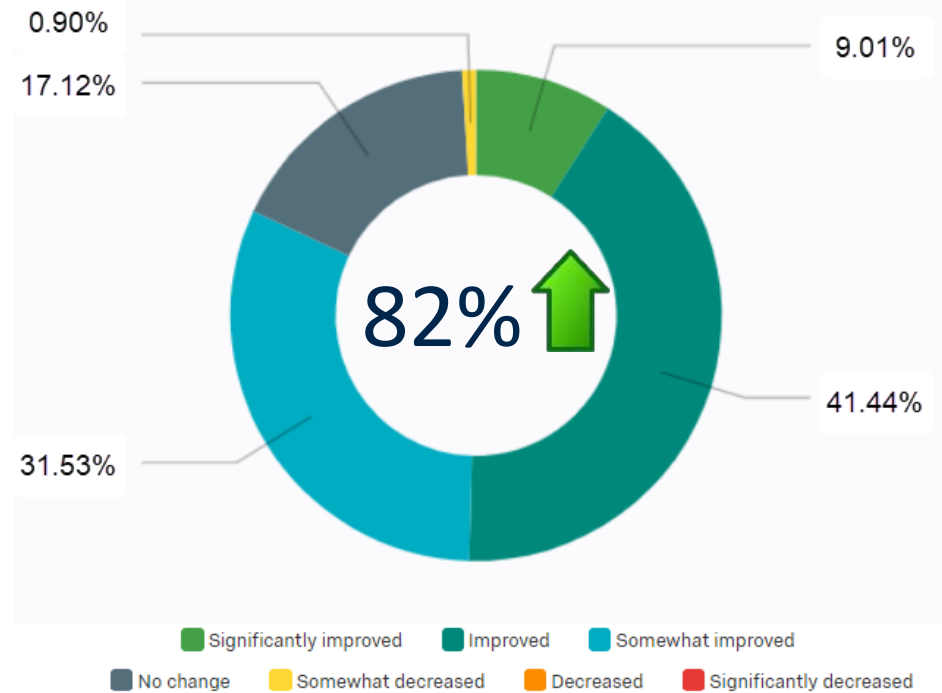
Perceived Improvement in Efficiency and Quality of time

Efficiency/Proficiency

To what degree do you feel participating in Home for Dinner has improved your overall efficiency/proficiency?

3.57%

18.75%

26.79%

87% ⬆

50.89%

- ■ Significantly improved
- ■ Improved
- ■ Somewhat improved
- ■ No change

Quality of Time Spent

To what extent do you feel that the quality of your time spent in MiChart has changed since Home for Dinner?

0.90%

17.12%

9.01%

82% ⬆

41.44%

31.53%

- ■ Significantly improved
- ■ Improved
- ■ Somewhat improved
- ■ No change
- ■ Somewhat decreased
- ■ Decreased
- ■ Significantly decreased

Follow-up Survey (Aug 2019)

Which of the following are true after the Home for Dinner Course?

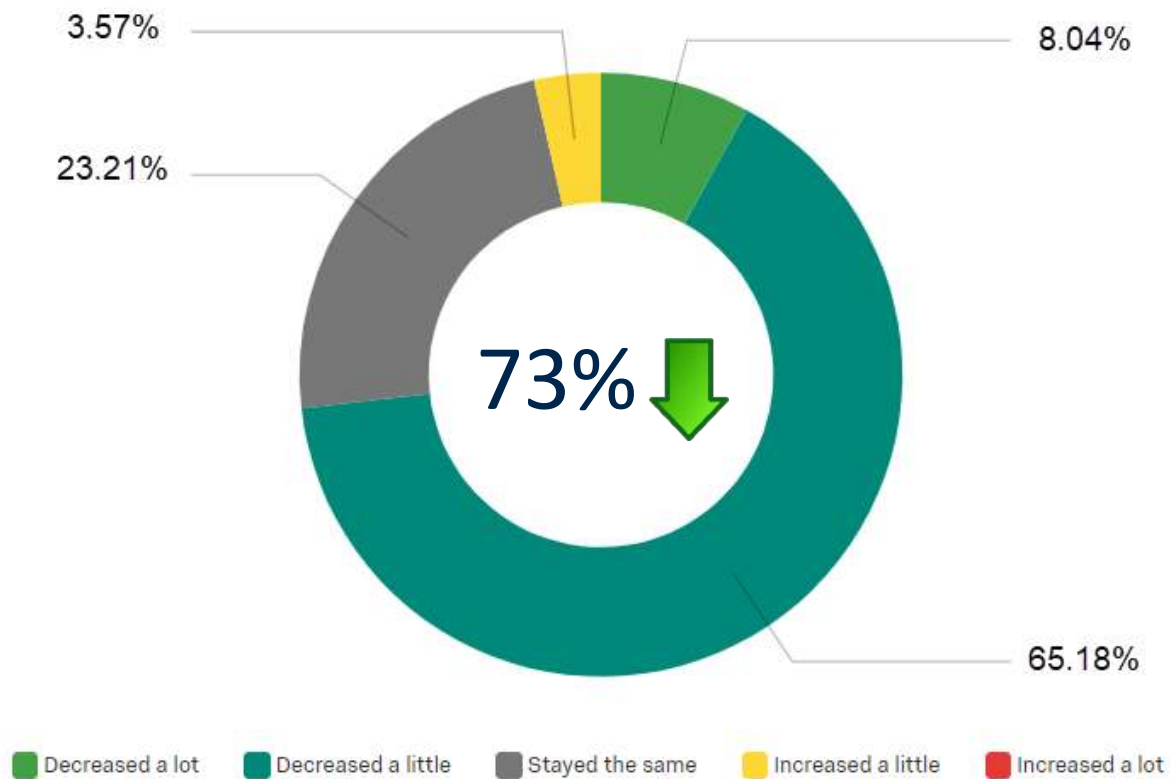| Statement	Percent True
I can find information more quickly	63.89%
I can document information more quickly	59.26%
I feel more empowered to change my environment (in computer or in clinic workflow)	44.44%
I am less frustrated	41.67%
My In Basket is cleaner	36.11%
I understand In Basket messaging better	34.26%
I feel more in control of my day	23.15%
Other	10.19%
I feel less burned out	6.48%

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Where is the time savings?

Perceived Time Spent in MiChart

To what extent has your time spent in MiChart changed since the Home for Dinner course?

3.57%

8.04%

23.21%

73% ⬇

65.18%

Decreased a lot ■ Decreased a little ■ Stayed the same ■ Increased a little ■ Increased a lot
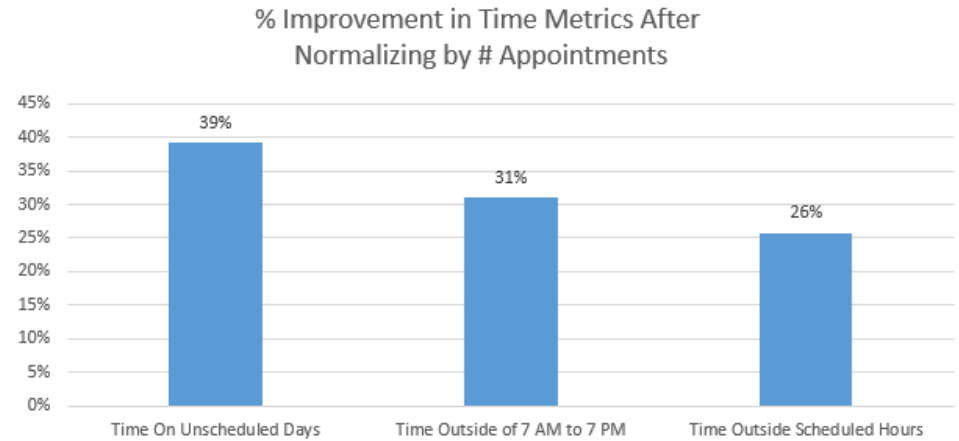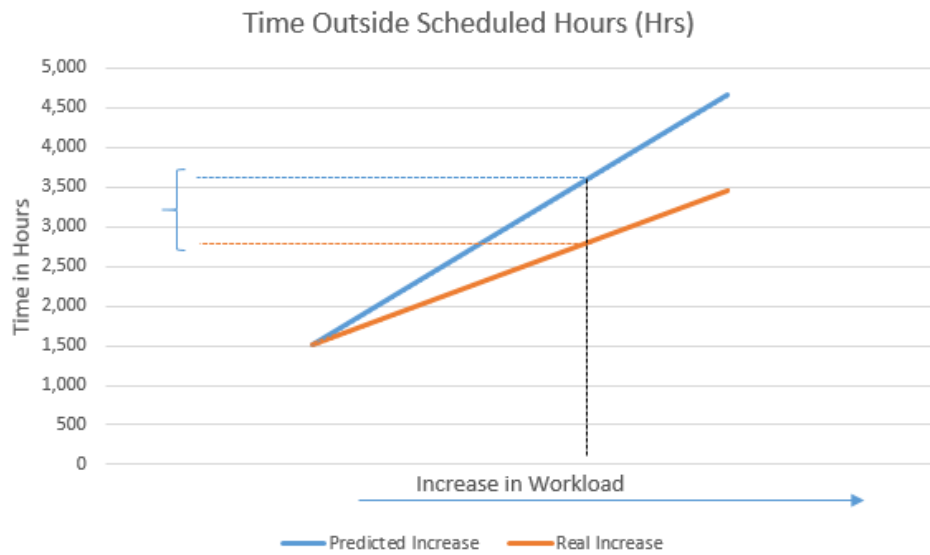
Potential Confounders Causing More Time

- Seasonal variation

- Newer providers that ramp up appointment volume

- Overall increase in appointments/patient access efforts

- Other obligations during workday forcing catch up after hours

- More pre-charting

- Shift away from delegation (do it themselves)

- Shift away from dictation toward smart tools or copy forward

- Increased In Basket volume

- Using In Basket more instead of e-mail or other

The Rest of the Story

112% more appointments post-training

Time Outside Scheduled Hours (Hrs)

Predicted Increase — Real Increase

% Improvement in Time Metrics After Normalizing by # Appointments

Program 2

MiChart Boost

Performance Improvement & Usability
for Ambulatory Providers

MiChart Boost

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 with MiChart; 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

Program Basics

Assess	Plan	Implement	Evaluate
Assess individual & departmental performance 1. Self assessment surveys 2. Epic Data (PEP) 3. Observation & Interviews 4. Workflow review	Develop improvement plans (department & individual) 1. Training 2. Customized learning events 3. At the elbow (ATE) education	Implement Plan 1. Design and develop specialized materials and job aides 2. Perform training and learning events (including ATE)	Evaluate program for success 1. Provider perceptions 2. Improved PEP results 3. Reduced hours outside 7a - 7p/ unscheduled days 4. Others TBD

Staffing/Resources

* 20% funding provided
** Department Staff

Physician Trainers*	Training Coordinator	Provider Champion*	Super User**
1. Perform assessments, observations, etc. 2. Develop improvement plans 3. Create/modify curriculum 4. Provide training/ATE 5. Assist in evaluation	1. Coordinate and schedule internal and customer meetings, trainings, ATE support 2. Assist in project management of key tasks and deliverables 3. Assist in data collection and analysis	1. Participate in developing improvement plans 2. Collaborate with trainers in determining curriculum needs 3. Provide training and support onsite	1. Collaborate with Provider Champion and Trainers as available to provide education and support for department

Expanding Beyond Ambulatory Providers

What about the rest of the iceberg?

- In addition to providers, many others would benefit from additional training.
  - Provider trainees—med students, residents, fellows
  - RNs, LPNs
  - PT/OT, Nutrition, Pharmacy, Social work, Psychology, Genetics, etc.
  - MAs
  - Home care staff
  - Front office staff
  - Administrators (report use)
  - Research
  - …and Patients!

Can We Afford **Not** to Invest in Efficiency?

- Provider/staff burnout, inefficiencies, non-standard workflows, and patient safety risks **abound** in EHRs

- Improved knowledge and standard use can mitigate these risks

- Cost for HFD ~$600/provider, Boost ~$1000/provider

- Value estimates for expansion:
  - Assumption: 0.83 hrs/person/month = 10 hrs/person/year

Role	#	Hours	FTE
Physicians	2500	25,000	13
Nurses	5500	55,000	29
Advanced Practice	500	5000	3
Allied Health	2000	20,000	10
Total		105,000	55

? How many FTE from these cohorts can be re-purposed to colleague training?

THANK YOU

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