Burnout: Impact of EPIC Sprint

Background

- Burnout:
  - "A syndrome of emotional exhaustion, loss of meaning in work, feelings of ineffectiveness, and a tendency to view people as objects rather than as human beings" [1]
  - Maslach Burnout Inventory (MBI):[1]
    - Emotional Exhaustion
    - Depersonalization
    - Low sense of personal accomplishment
- Physician burnout:
  - Currently estimated at 54% of physicians nationally [2]
  - Impact on provider, colleagues, families, organization….
  - DOM: ~200 physicians, 54% burnout rate, 7%/year turnover = **4.9 physicians/year lost to burnout** [3]
  - Replacement cost/physician $500,000 = **$2.5M/year** [3]
  - Patients…

Faculty Practice physician engagement:

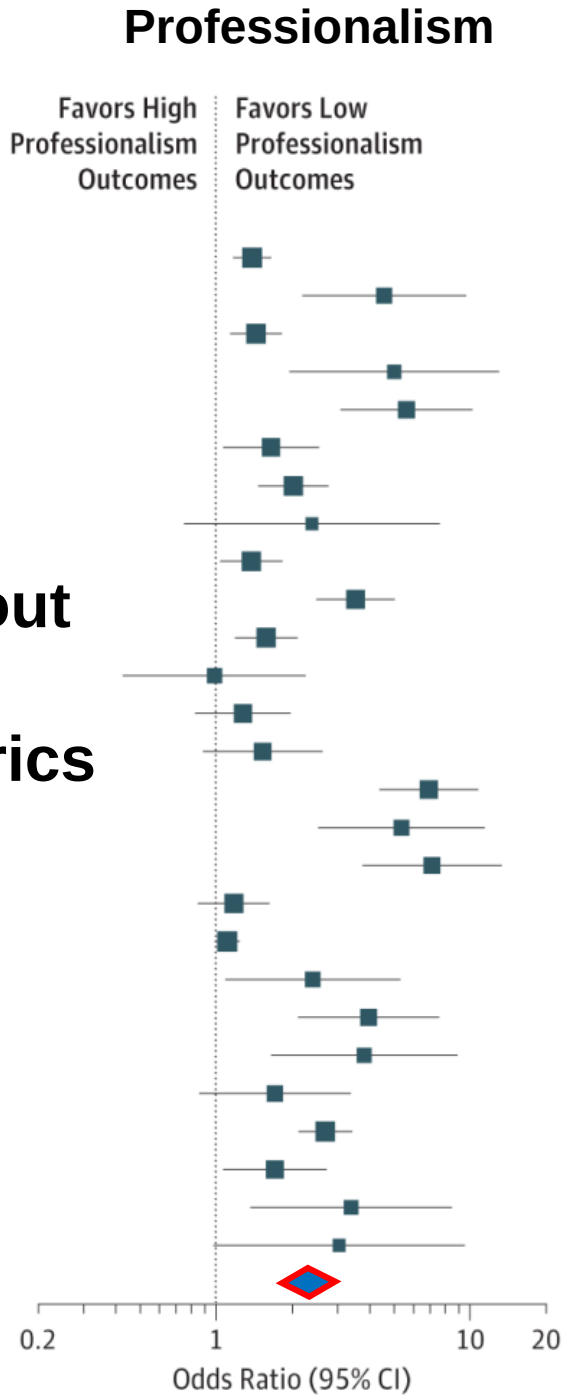
	2018	2014
"Highly engaged"	26.5%	41.5%
"Moderately engaged"	29.5%	30%
"Passive"	26.5%	14%
"Actively disengaged"	17.5%	15%

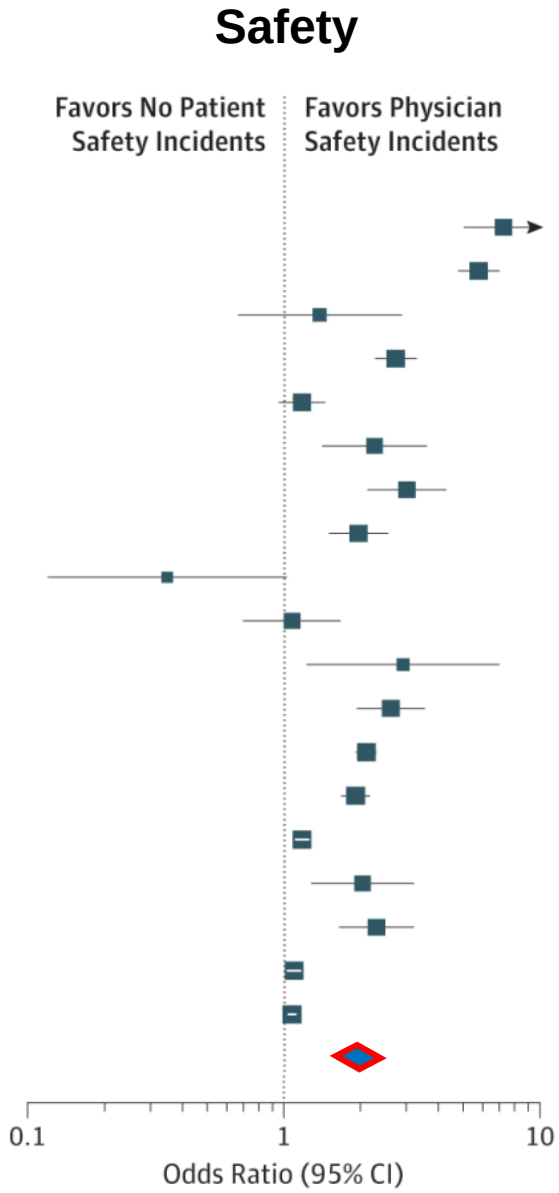
[1]Maslach C, Jackson S, Leiter M. Maslach Burnout Inventory Manual. 3rd ed. Palo Alto, CA: Consulting Psychologists Press; 1996.

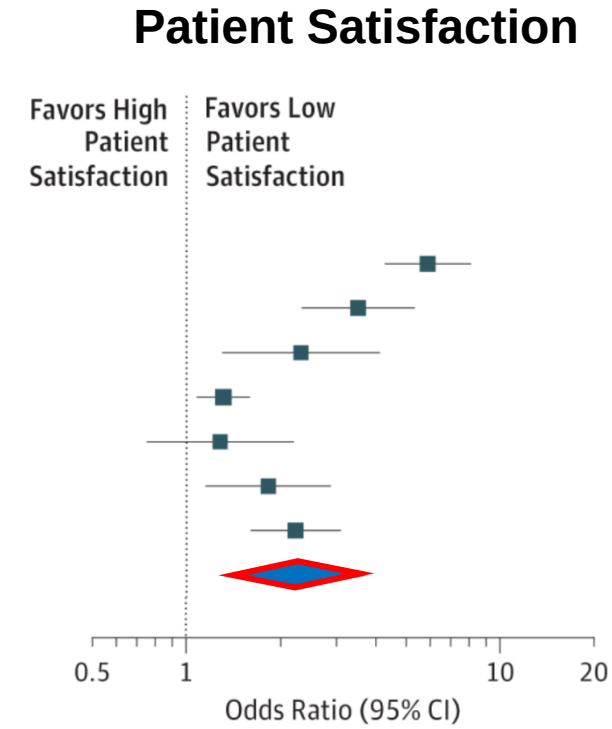
[2]Shanafelt, et al, Mayo Clinic Proceedings, 2015;90:1600-13

[3]https://edhub.ama-assn.org/steps-forward/module/2702510

Physician Burnout & Patient Care Metrics







Panagioti, et al, JAMA Intern Med. 2018;178:1317-1330

What Contributes to Internists' Burnout?

Medscape Physician Lifestyle & Happiness Report 2018; Accessed Dec 11, 2018
https://www.medscape.com/slideshow/2018-lifestyle-happiness-6009320

Clinician EHR Burden and Burnout

- "Computer-based clerical work associated with patient care" [1]
- Major cause of clinician burnout [1,2,3,4]
- Physicians spend 2h on EHR and deskwork for every hour of direct patient care during the workday [1]
- Physicians routinely take 1–2h of EHR/paperwork home each night [1]

[1]Arndt, et al, Ann Fam Med 2017;15:419-26

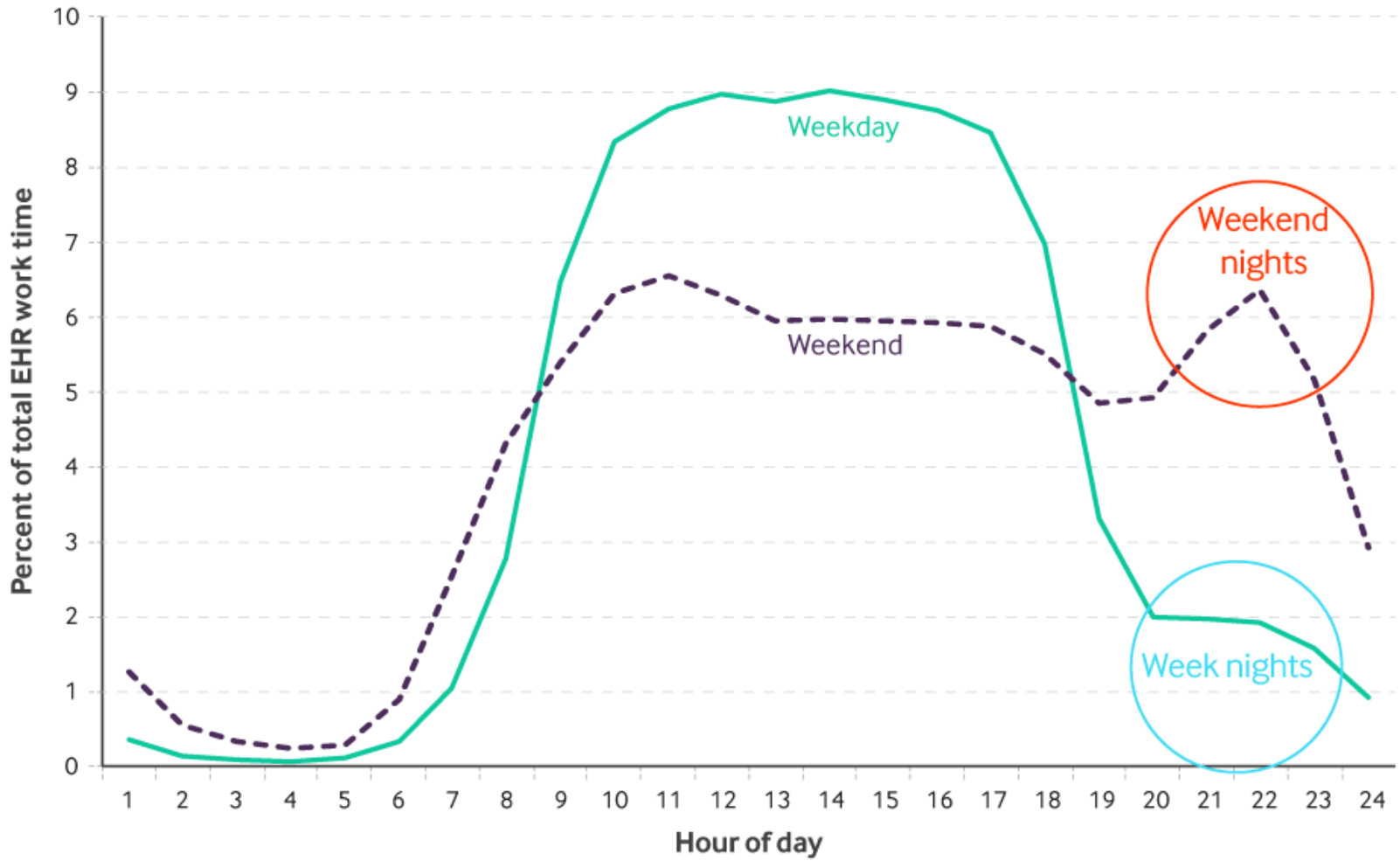
[2]Sinsky, et al, Ann Intern Med. 2016;165:753-60.

[3]Shanafelt, et al, Mayo Clinic Proceedings, 2015;90:1600-13

[4]Shanafelt, et al, Mayo Clinic Proceedings, 2016;91:836-48

Family physicians' EHR use by time of day.

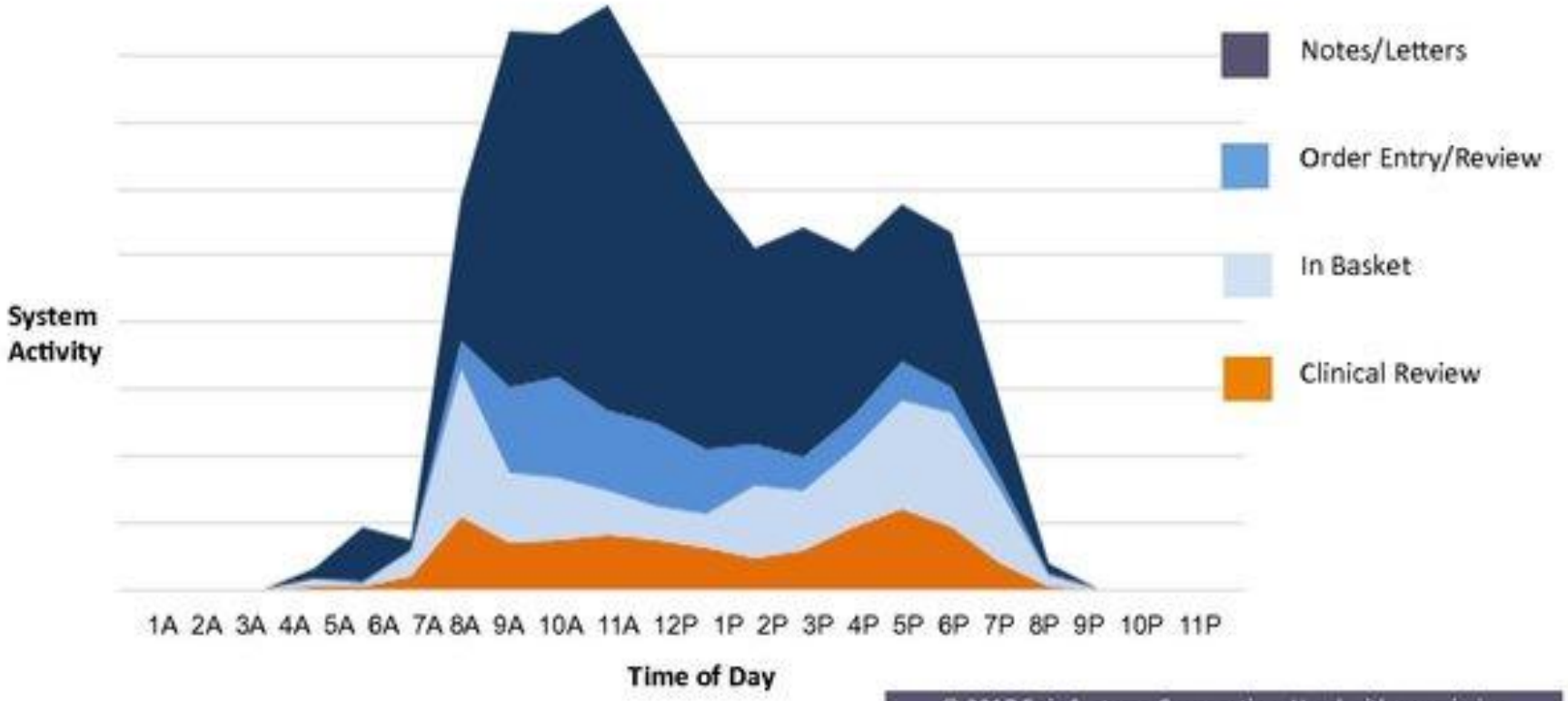
Date nights and the EHR



Modified from B. Arndt, et al., *Tethered to the EHR: Primary Care Physician Workload Assessment Using EHR Event Log Data and Time Motion Observations*, Annals of Family Medicine.

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Epic Usage Data



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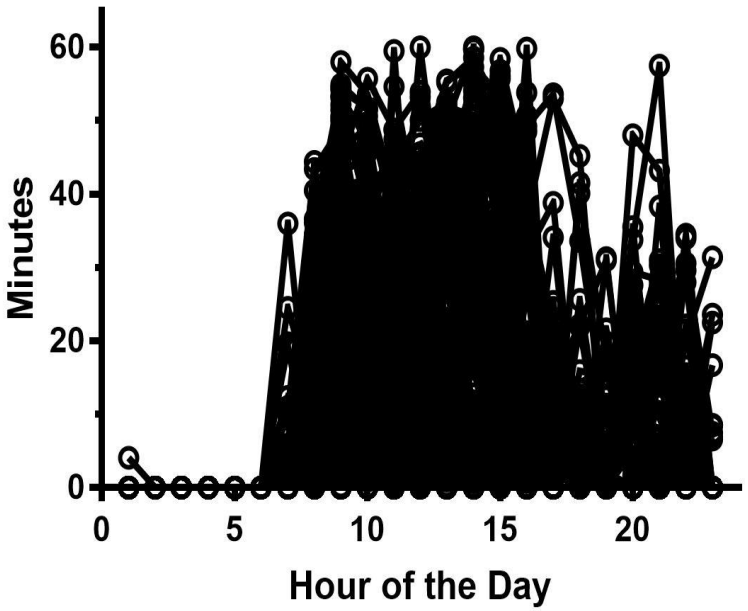
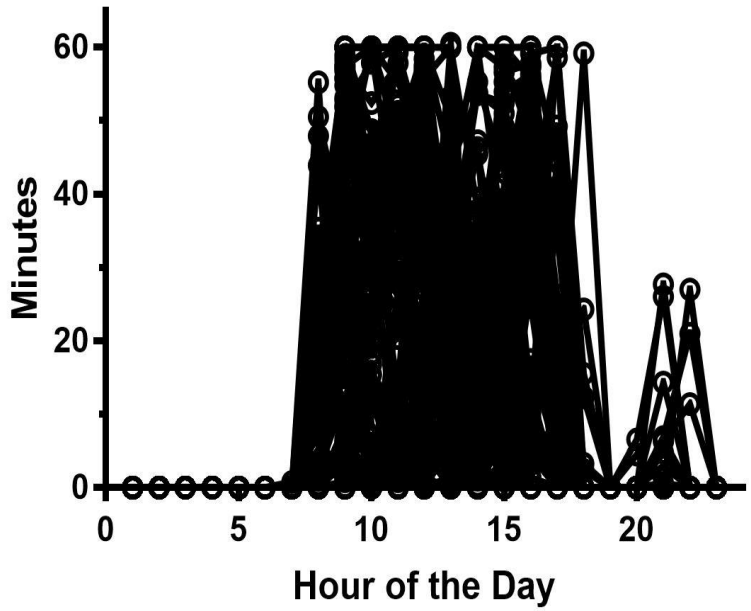
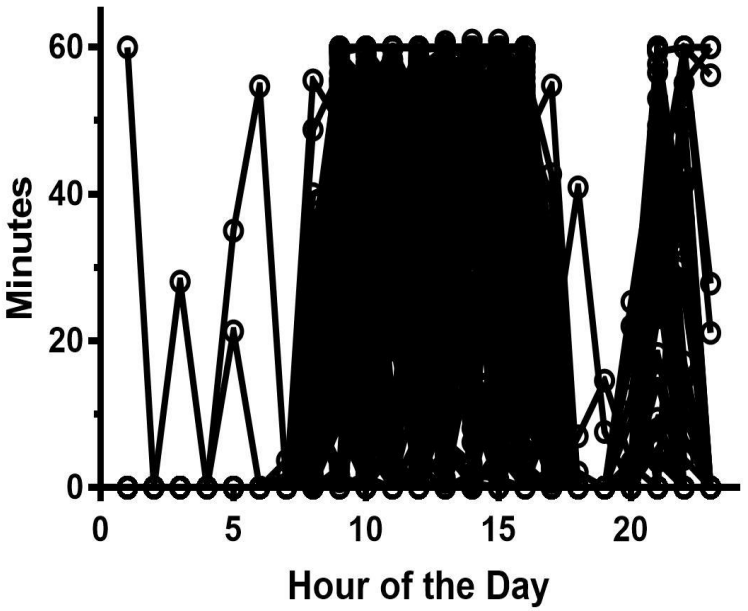
Department of Medicine: Epic Time of Use, April – Sept, 2017



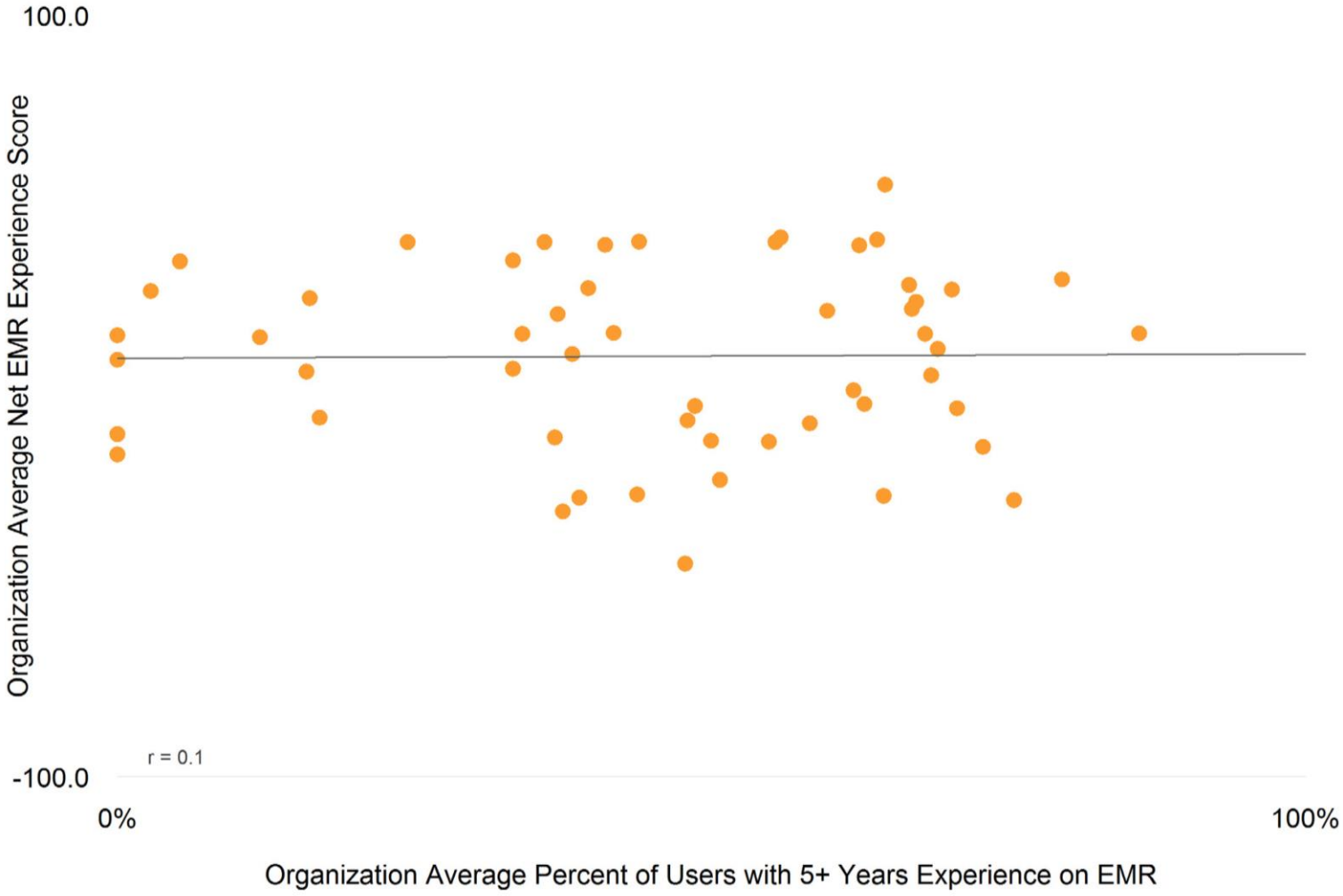




What can we do about this?

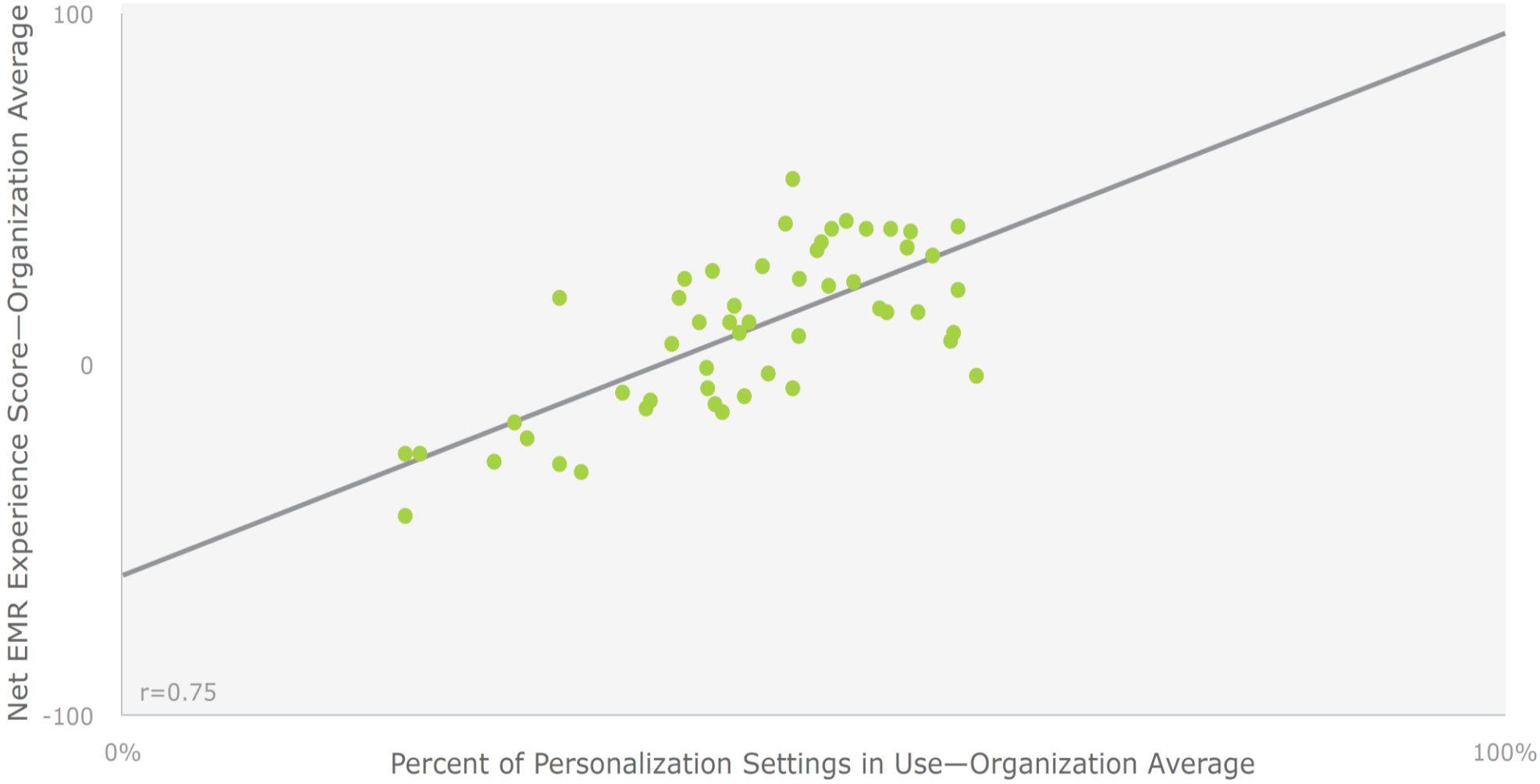
The KLAS Study…

Correlation between Satisfaction & Duration of User EMR Experience



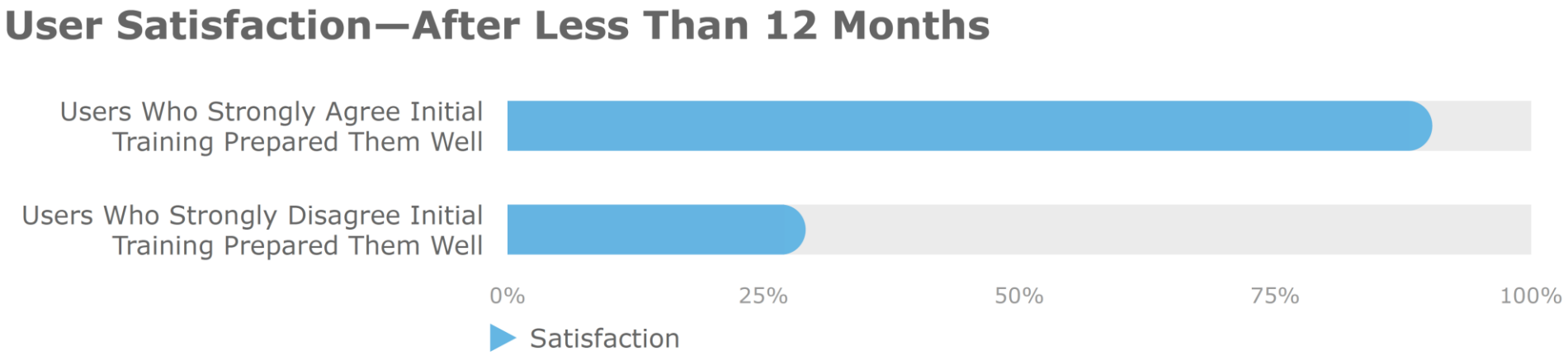
KLAS: Arch Collaborative EMR Best Practice Study, November 2017

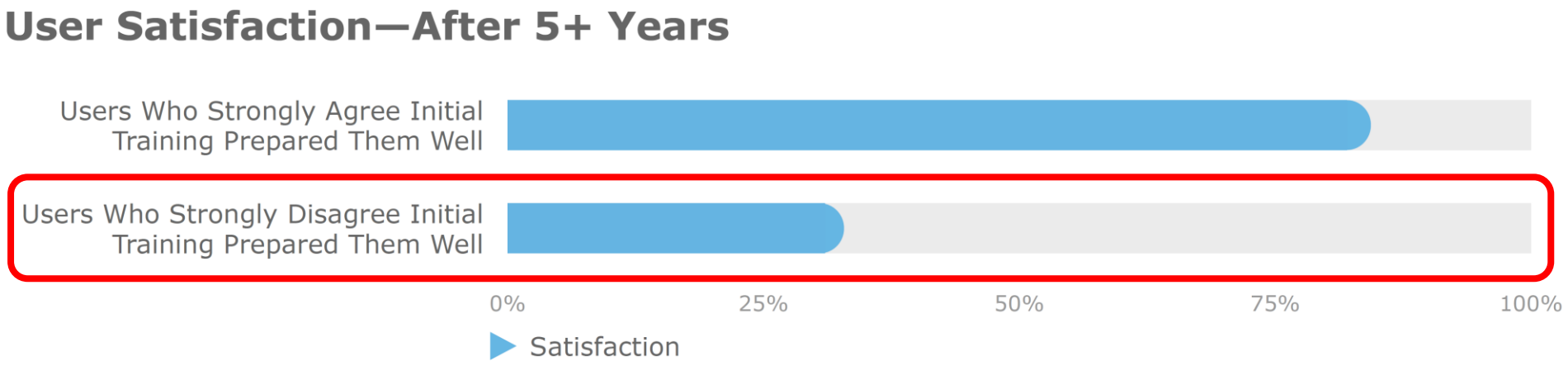
Correlation between User Satisfaction & Use of Personalized Settings



KLAS: Arch Collaborative EMR Best Practice Study, November 2017

User Satisfaction and Effect of Upfront Training





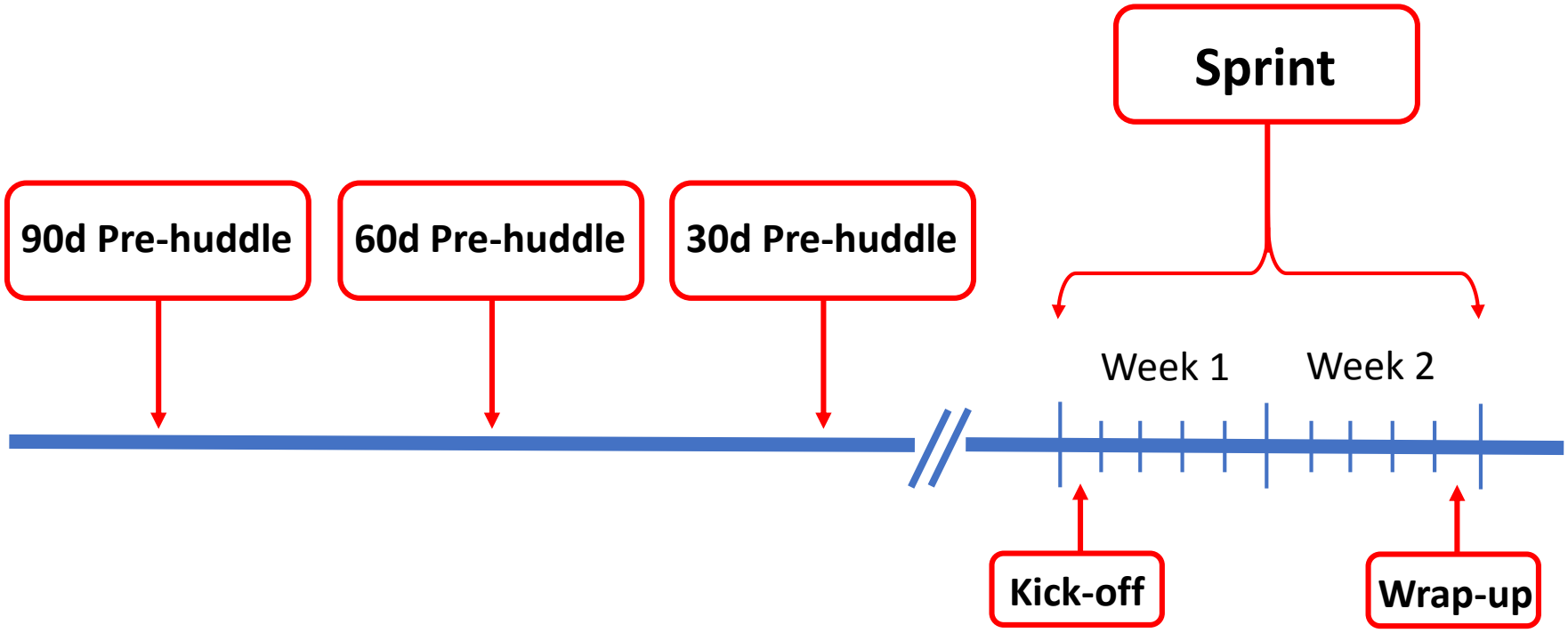
KLAS: Arch Collaborative EMR Best Practice Study, November 2017

What can we do to help “legacy” users?

The University of Colorado Experience

- "**EHR Sprints**":
  - Intensive, on-site, in-context EHR training and workflow optimization
- Net promoter score (NPS): -100 to +100
  - For provider satisfaction with EHR:
  - NPS for Sprint itself was **+52**
- Clinician burnout: **39% → 34%**
- UVM DOM team visited UC in June '18

EHR Sprint Schedule



UVM EPIC Sprint: Structure

- Pre-huddles: Clinic workflow, Epic pain-points, decompression of schedules
- Kick-Off: 1.5h basic small group training/personalization
- Every clinician and staff member:
  - 3 x 1 hour 1:1 training sessions
  - Dragon, Haiku, Canto training (optional)
- Daily inter-professional huddles:
  - Clinic physician leadership & supervisor, super-users for each staff role led by Sprint team
  - Redesign and standardize Epic workflow and integrated team work
  - Identify priorities for Epic fixes/builds
- Drop-in question/training sessions available throughout
- Wrap-Up: 1h session to reinforce operational changes and highlight successes

UVM EPIC Sprint Team

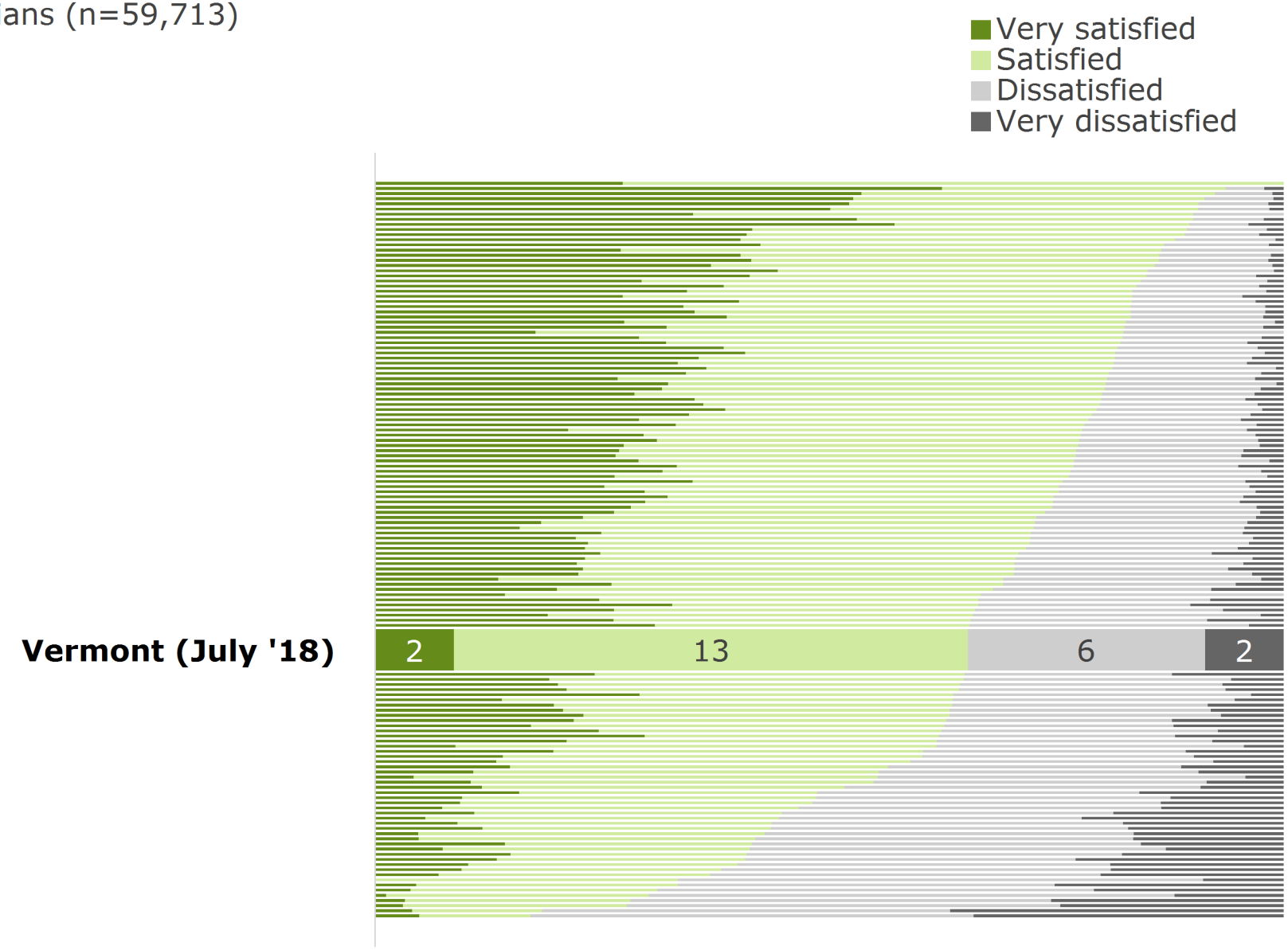
- Physician Informaticists (1-2)
- Operational Leader
- Epic and Medical Group Trainers (2)
- Project Manager
- Epic Ambulatory Analysts (1)
- Clinical Leaders (Clinic Director, Clinic Supervisor)
- Clinic-specific Super-Users (by job type)
- Providers and staff

IT
+
Clinicians
+
Operations
=
ONE Sprint Team

Where did we start?

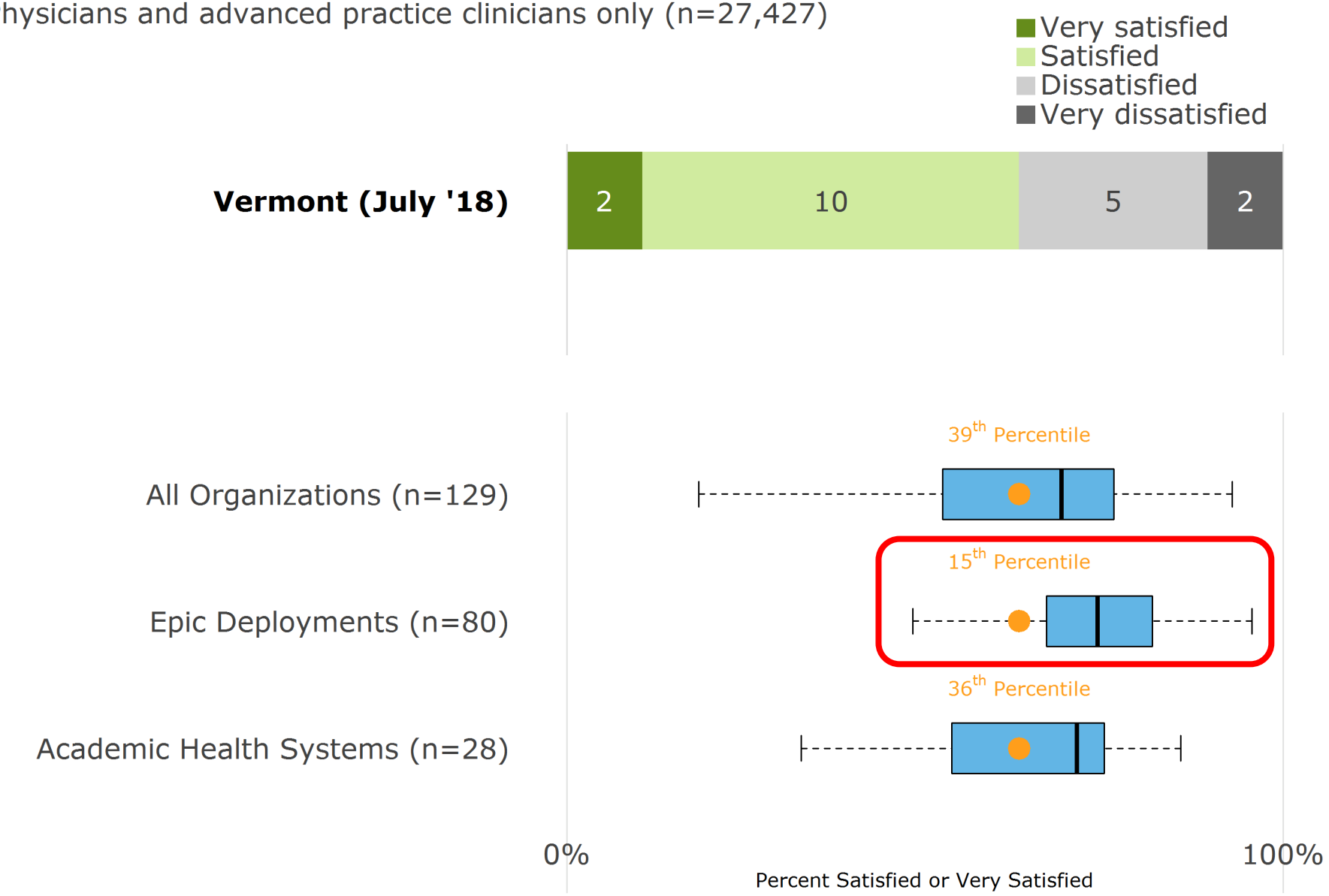
Overall EMR Satisfaction

All clinicians (n=59,713)



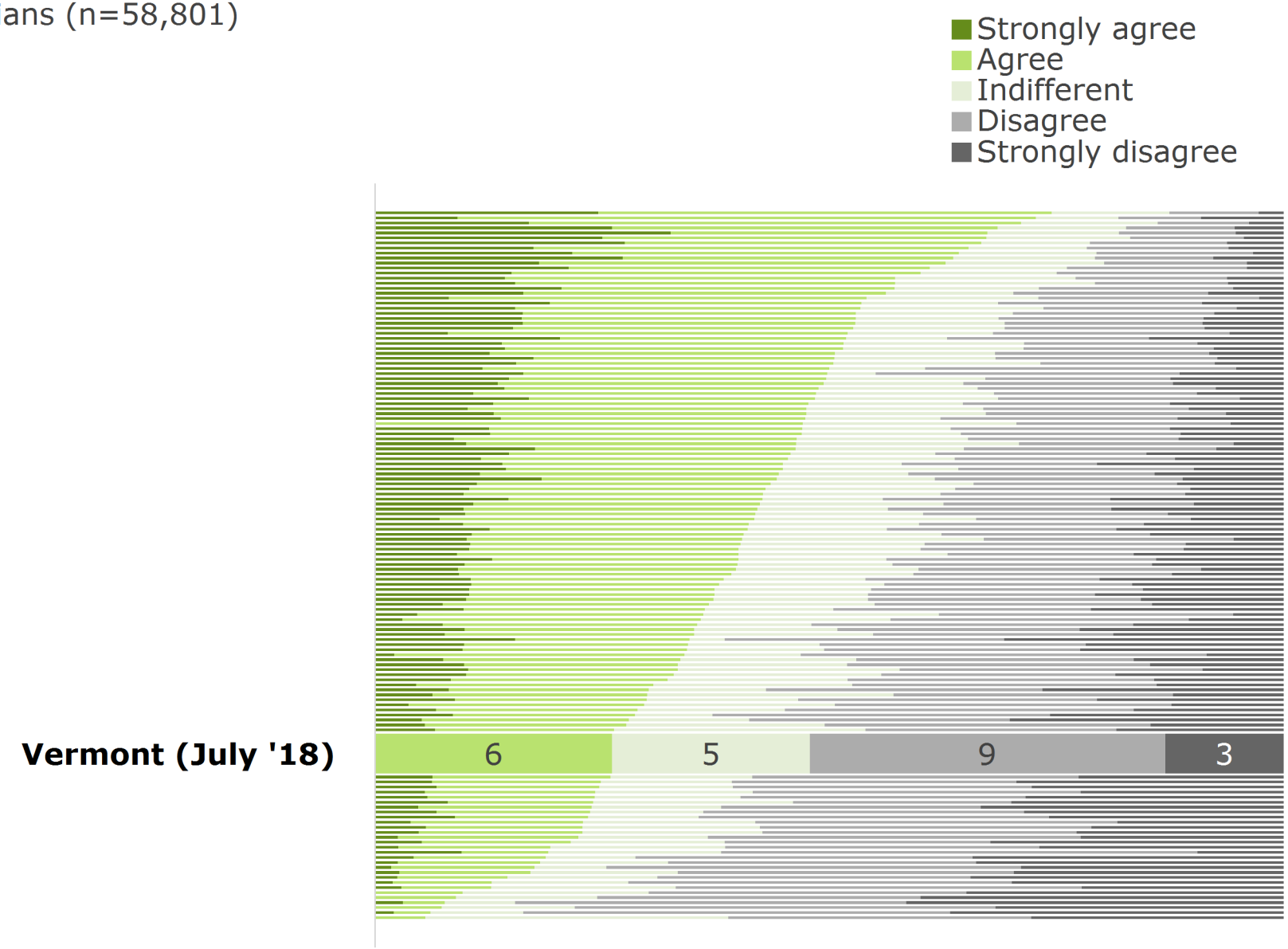
Overall EMR Satisfaction

Physicians and advanced practice clinicians only (n=27,427)



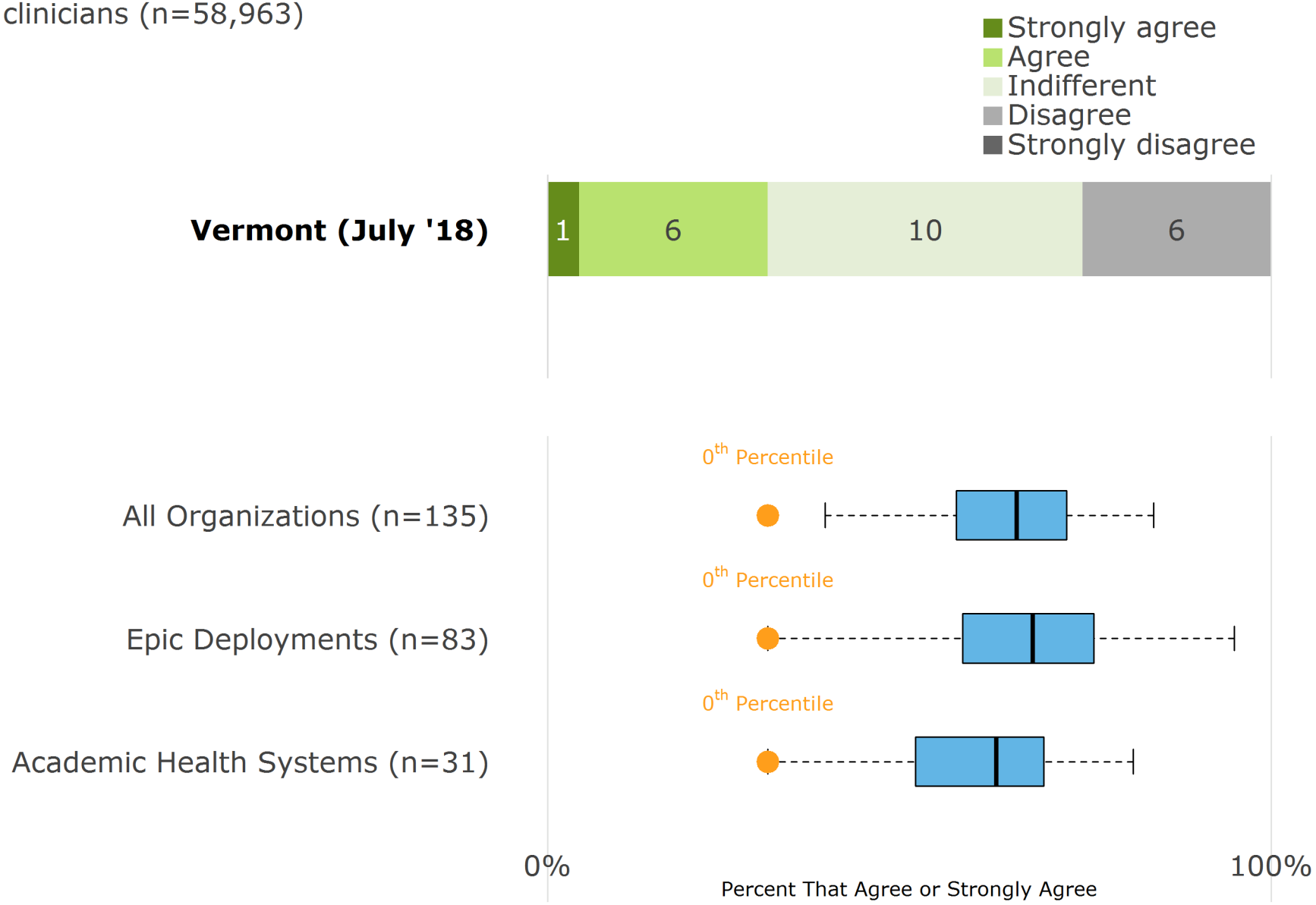
Agreement That EMR Enables Efficiency

All clinicians (n=58,801)



Agreement That User Has Learned EMR Well

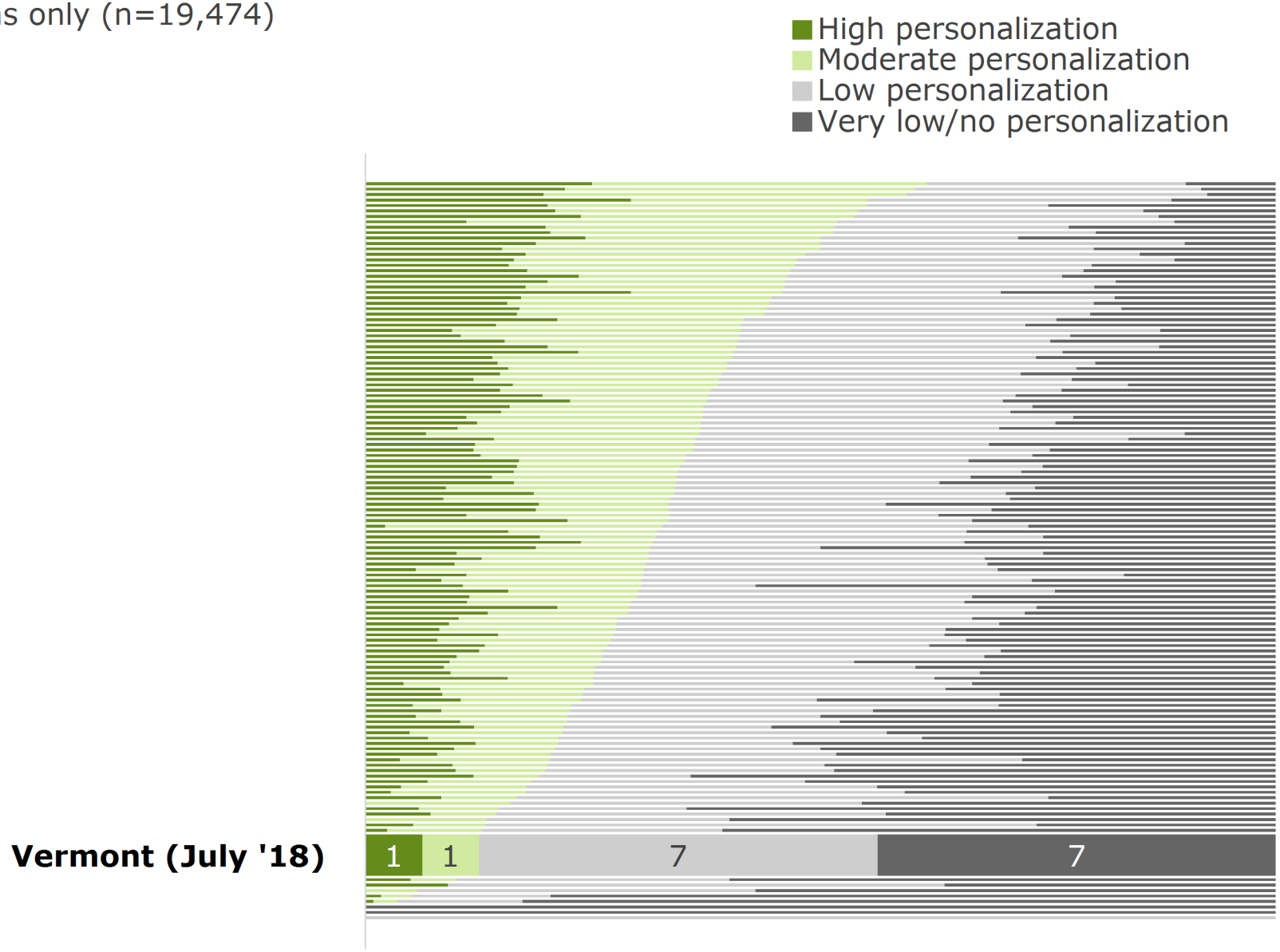
All clinicians (n=58,963)



KLAS

Level of EMR Personalization

Physicians only (n=19,474)



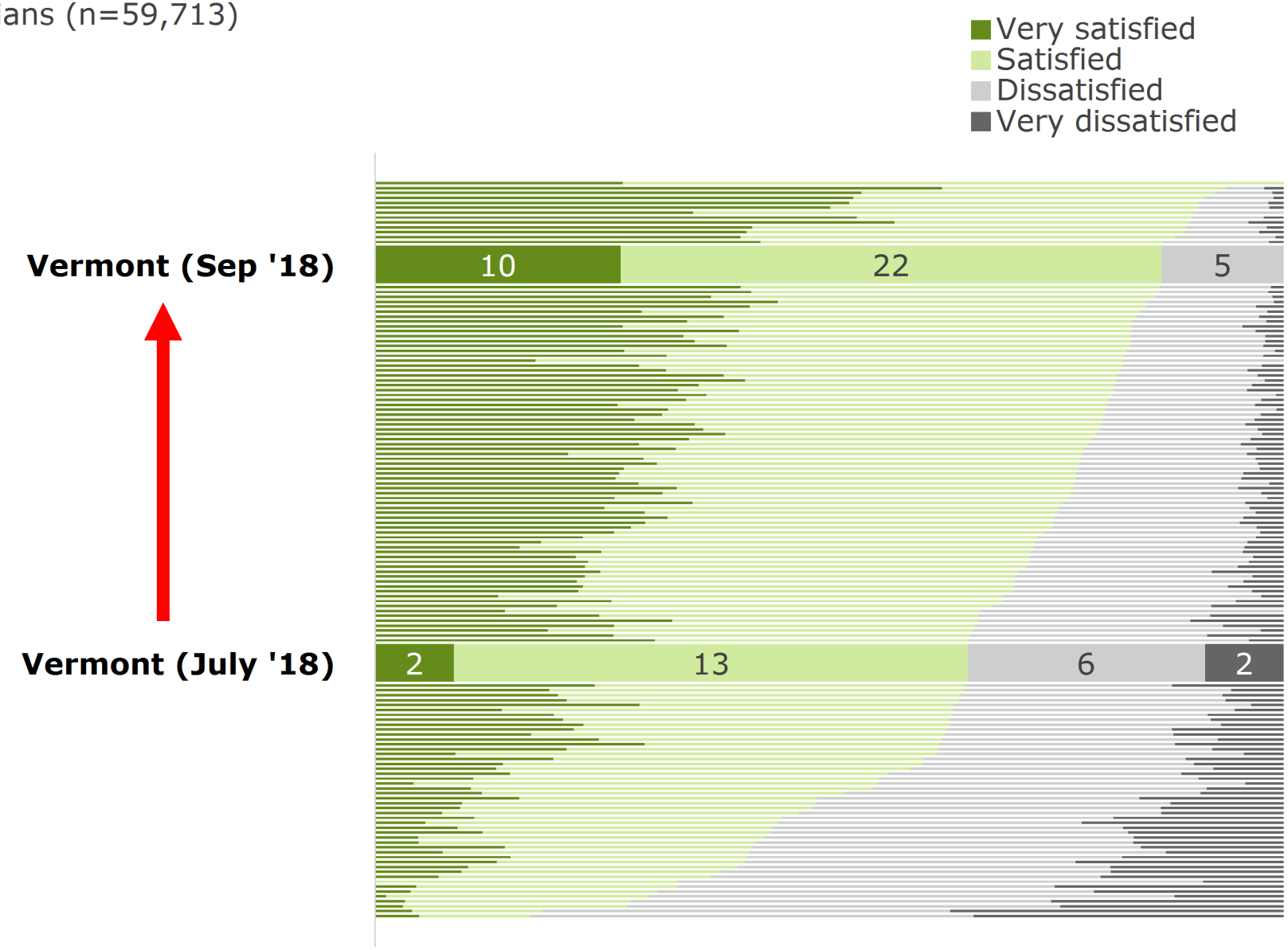
Where did finish?

What we did…

- 157 training sessions + many informal sessions
- 20 Sprint huddles
- Personalized Epic for all users
- Improved Clinic Flow: Check-out, In-Basket, Refills, Scheduling…
- Worked to understand each other’s roles

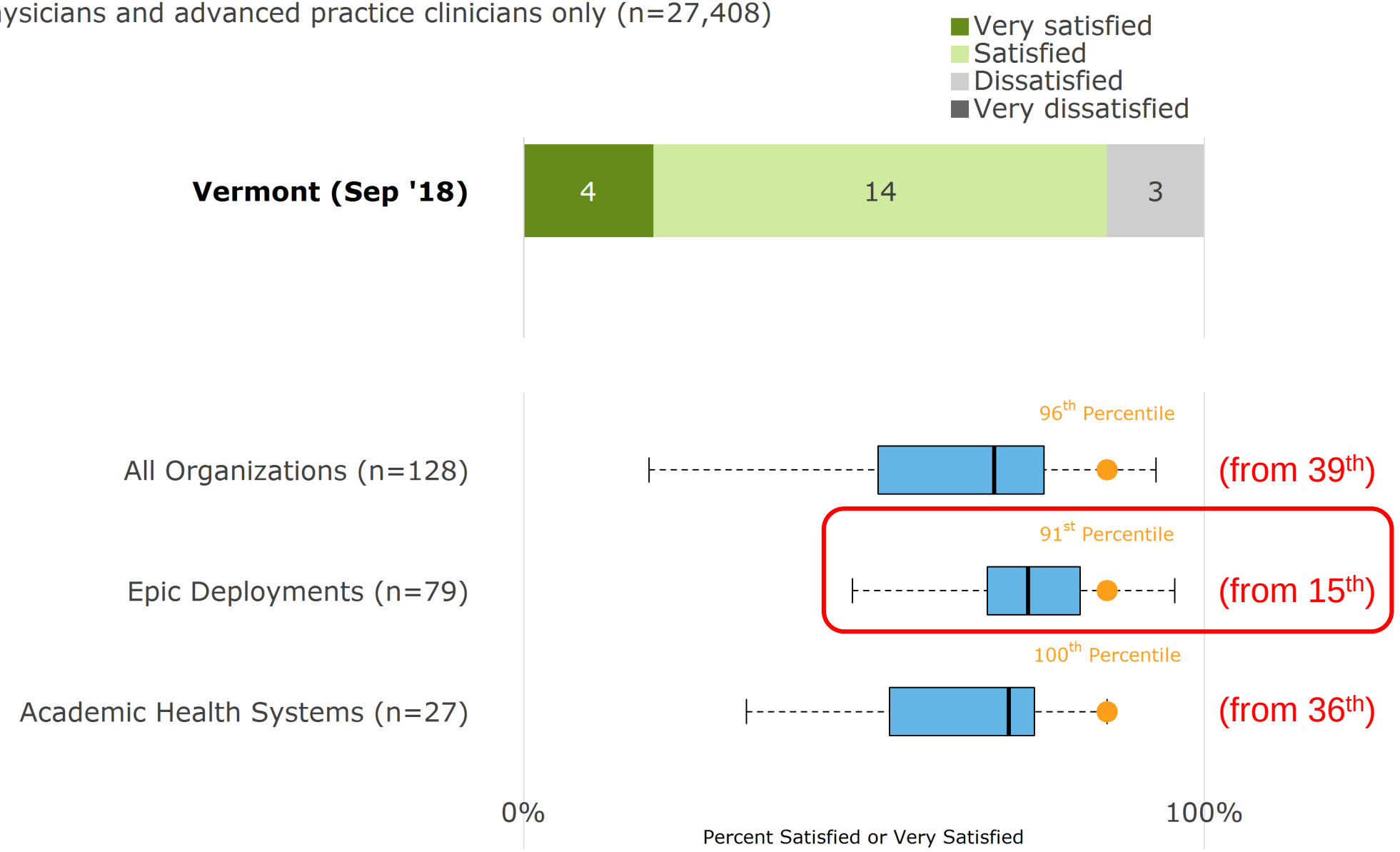
Overall EMR Satisfaction

All clinicians (n=59,713)



Overall EMR Satisfaction

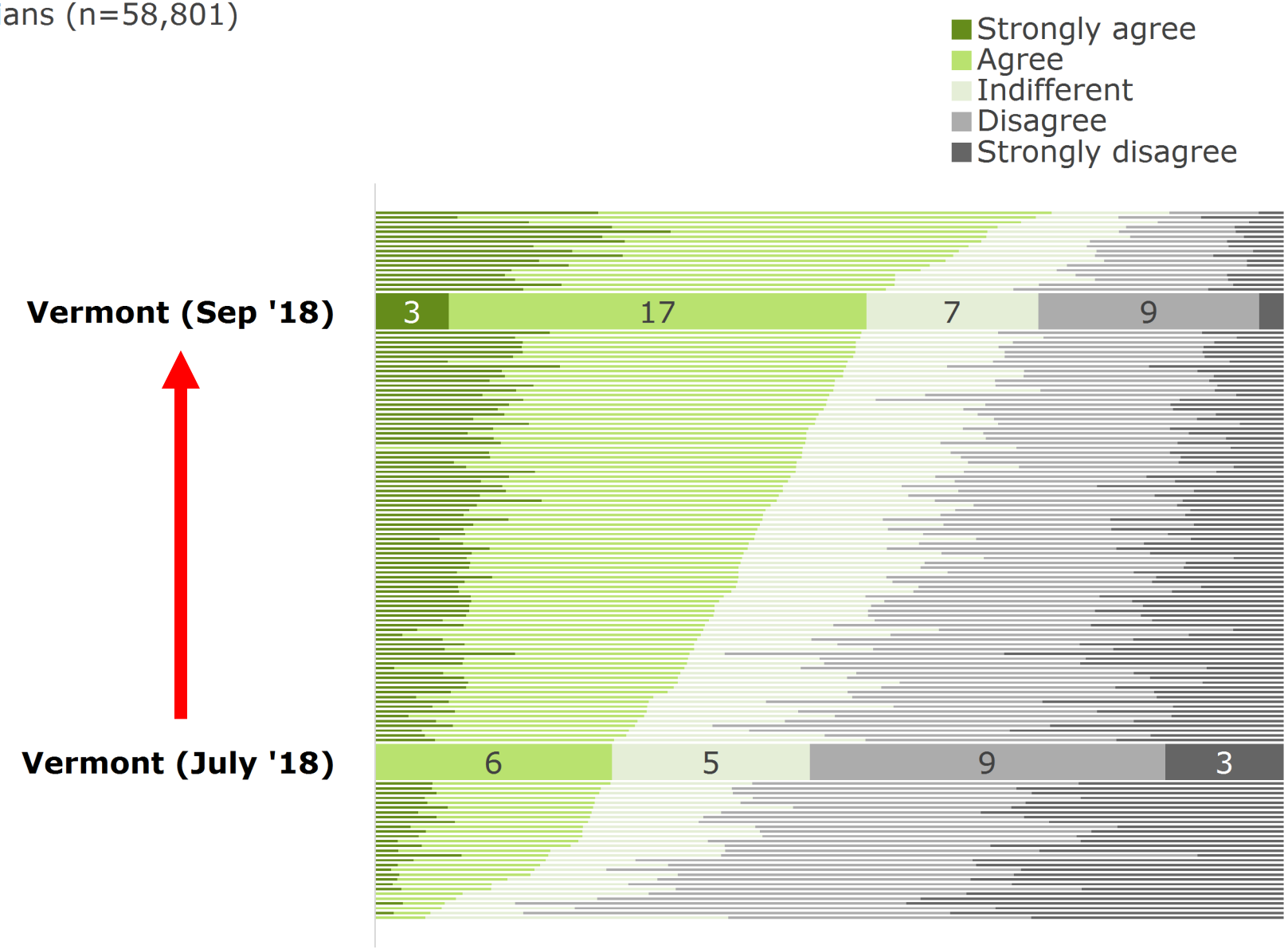
Physicians and advanced practice clinicians only (n=27,408)



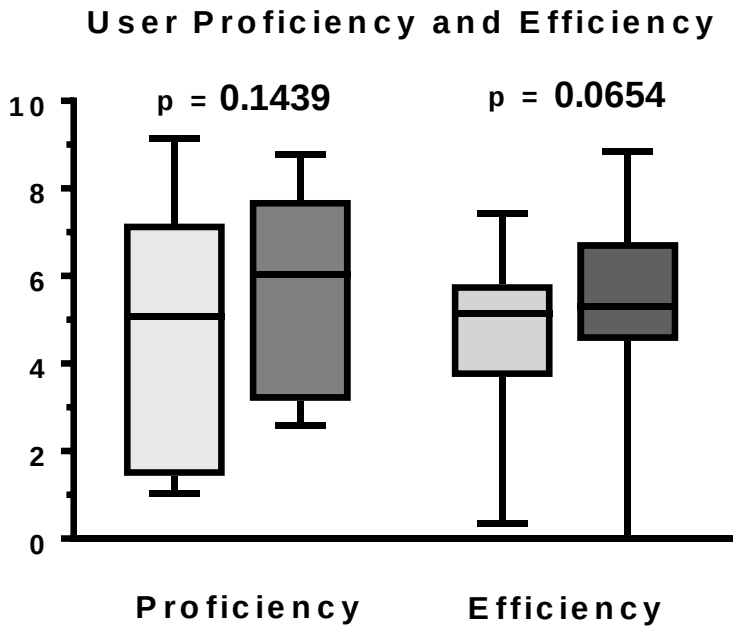
KLAS

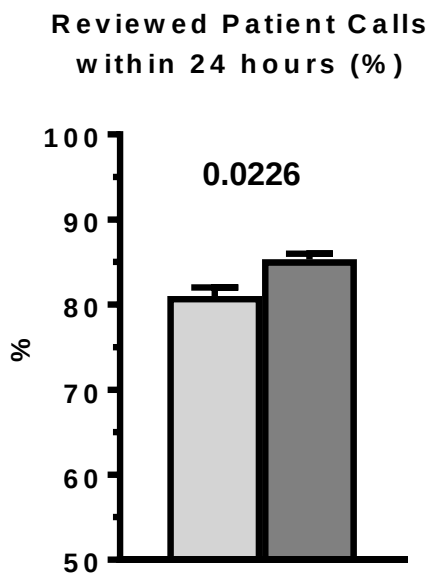
Agreement That EMR Enables Efficiency

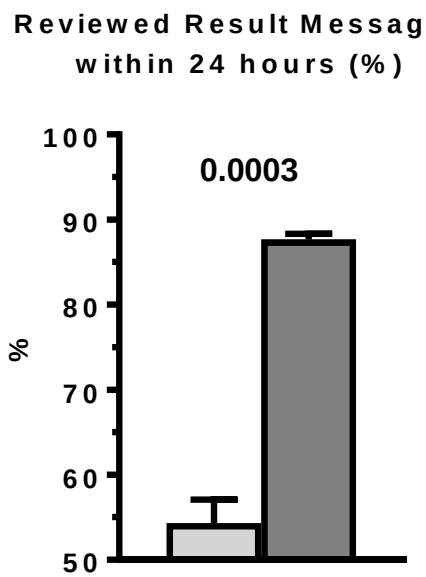
All clinicians (n=58,801)

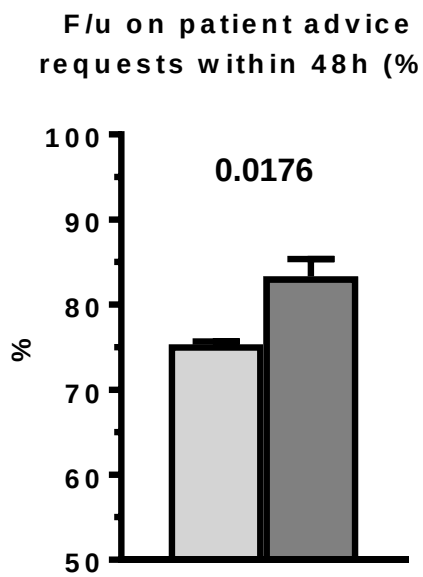


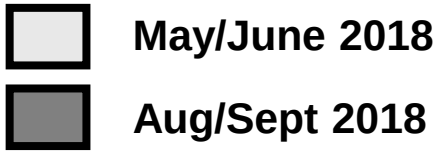
Epic Provider Metrics Improved



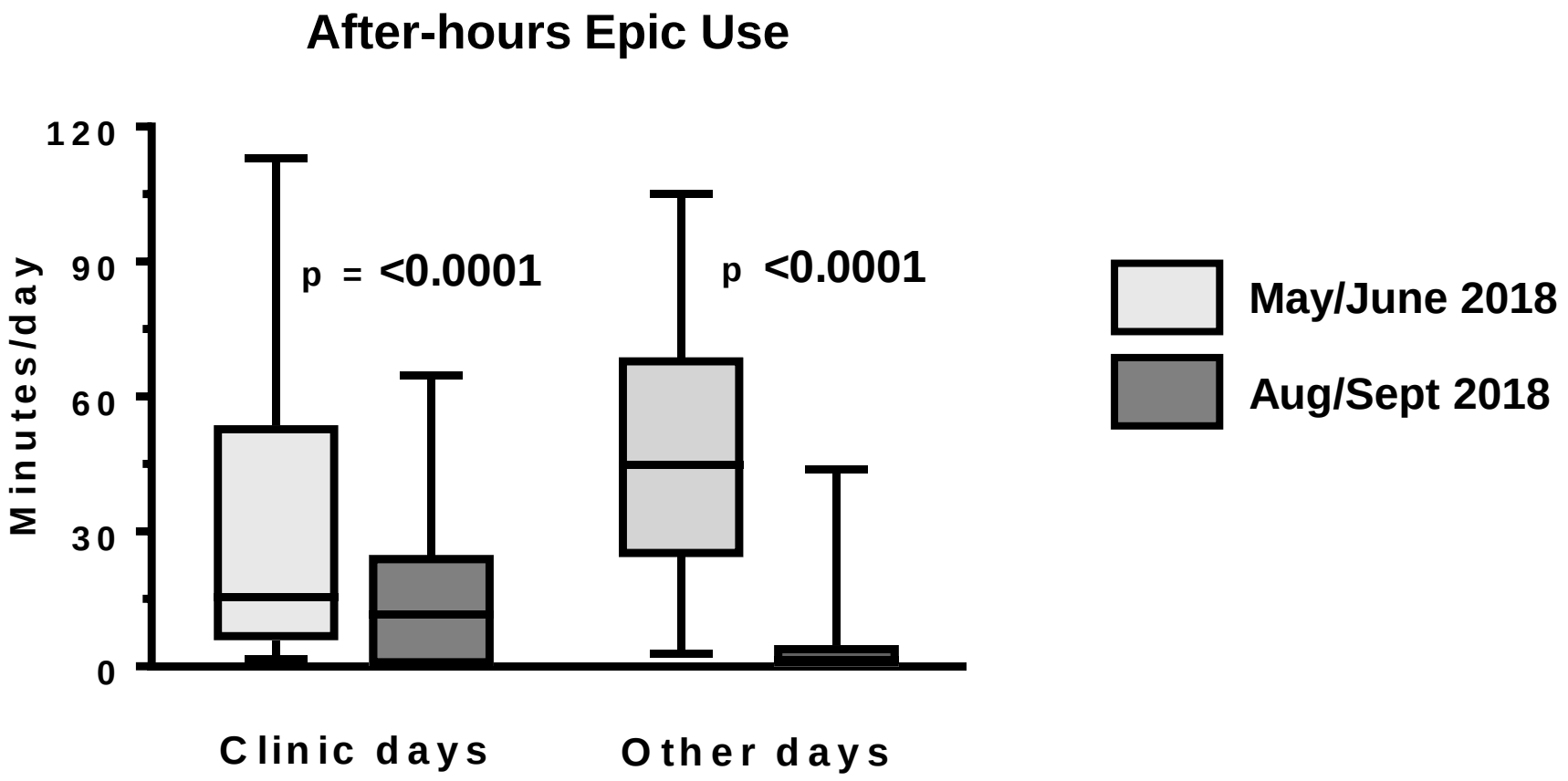








Afterhours Epic Use Was Reduced



Thanks to:

- Polly Parsons & the DOM
- Doug Gentile & UVMMC IT
- UVMMG
- SB PC: Especially Jen Gilwee, Marie Sandoval, and Malick Guisse
- ID Clinic: Especially Kemper Alston, Cindy Noyes, and Casey Darling
- All the SuperUsers and Ninjas

- Sprint Team: Rachel McEntee, David Ziegelman, Chelsey Carpenter, Scott Woytowick, Sue Lee, and Ben Suratt

The *Sprint* Team

South Burlington Adult PC

Infectious Disease Clinic

Quotes from Sprinters:

"I think that we should **expand** this to other clinics because I really do think that the value added is great!"

"The most useful aspect of the Sprint was that it increased **hope** about how the EMR can work for me instead of against me."

"I feel I have much **more control** with using Epic, instead of feeling like Epic is controlling me! Thank you everyone!"

"During the Sprint, I **enjoyed** coming in every day."

"I like the fact that the whole team **enjoyed their time** in clinic and was engaged and ready to give feedback on how we could do better."

"**Wow!** I just completed my first ever Dragon note! Thank you so much - so great!