NHS Acute Supplier Presentation

30 June 2022

Agenda

Arch Collaborative NHS Project Overview – Tom Storey

Arch History – Chris Clune

NHS England Supplier Review – Chris Clune

- Overview of supplier performance (aggregated)
- What can suppliers do to increase clinician satisfaction?

Next Steps – Tom Storey

Q&A – NHS/KLAS Research

Frontline Digitisation ambition

Coverage

- ❑ 90% of providers will have an EPR in place, and all remaining providers will be in implementation, by December 2023
- ❑ 100% of providers will have an EPR in place by March 2025

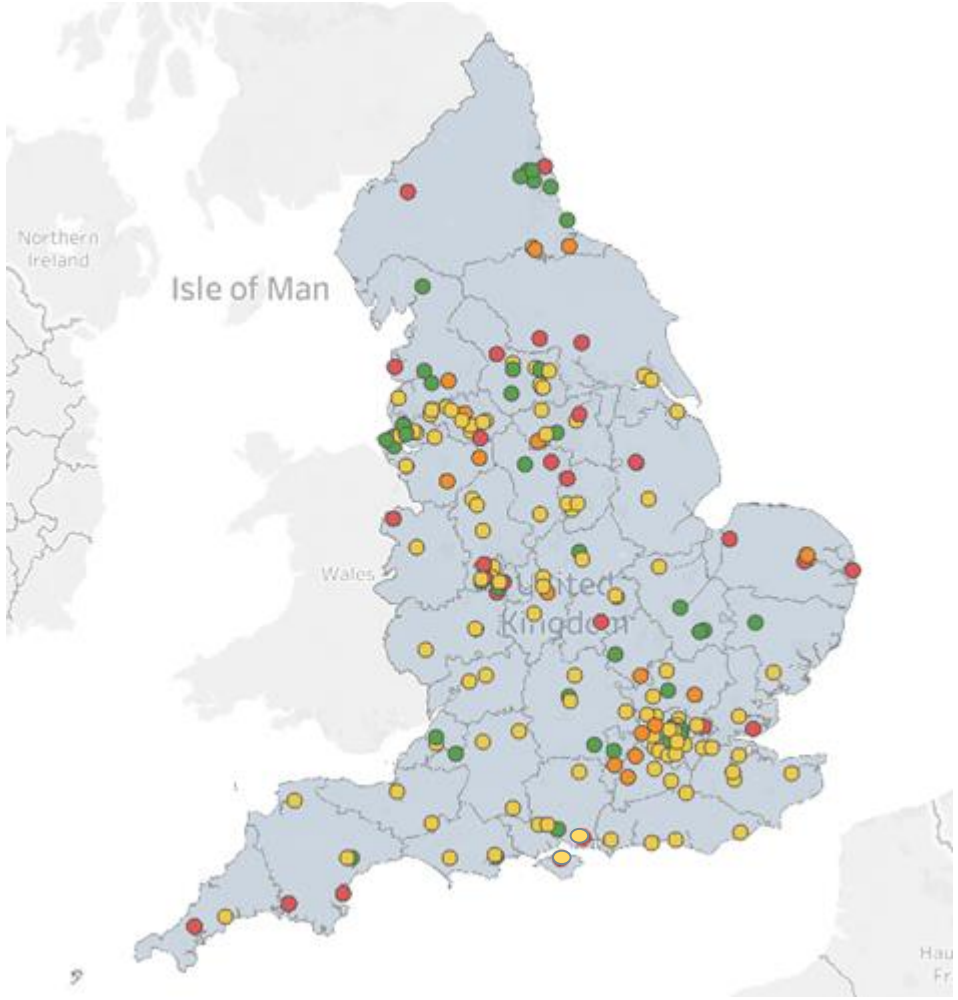
Capability

- ❑ As many providers as possible will meet our minimum capability standard for digitisation (equivalent to HIMSS5) by March 2025

Convergence

- ❑ All ICSs will develop a convergence strategy, appropriate to local context, in Digital Investment Plans

Current EPR landscape



Group	Definition	No of Trusts	% of Trusts
Group 3	Existing EPR meets required standard	49	23%
Group 2	Existing EPR needs extension/optimisation to meet required standard	132	63%
Group 1	No EPR - in procurement or implementation	11	5%
Group 0	No EPR - in business case development	19	9%

Survey Details

Survey commissioned by NHS England to understand the usability of EPRs throughout the NHS

- Partnered with Ethical Healthcare Consulting and KLAS Research to conduct the survey

Survey ran from December 2021, to May 2022

- Sent to 147 Trusts
- Focused on Acute care clinicians
- 4,852 total responses

Checks and Balances to Ensure Report Accuracy

While there is no perfect survey, and there is always the potential risk of abuse, NHS England and KLAS are doing several things to minimize and mitigate that risk:

1. The survey platform being used to administer the survey actively monitors for bots/automated survey completion tools and prevents survey stuffing from reaching our data set. Out-of-the-ordinary survey volume in a short period of time, or a high number of similar responses, are quarantined from the research.

2. KLAS Enterprises, who is administering the survey, has been gathering, analyzing and reporting on survey data for over 25 years. As needed, KLAS will monitor response patterns, check for duplicate respondents, conduct data checking/cleaning exercises, etc. before the results are published.

3. The EPR supplier data being gathered during this process is being benchmarked against 250,000+ other clinician responses, from 250+ provider organisations across the globe. While experiences among the different organisations and EPRs will of course differ, significant outliers will be detected and flagged for review before data is published. There is a rich dataset which makes it very difficult for biased data to avoid detection.

4. In situations where NHS England believes data may have been tampered with, KLAS and NHS England will work with organisations to conduct a respondent audit or results verification for the responses reportedly received from their respective clinicians.

5. All of our efforts to mitigate the risk of bias, or the inclusion of inaccurate data, are of course being balanced against privacy rights, respondent experience, and other factors. We believe we have effectively balanced these considerations and feel comfortable proceeding with the survey in its current format and approach.

What is The Arch Collaborative?

Measurement and Benchmarking

280 provider organizations

Over 308,000 clinicians participating

12 Countries

33 Questions, 7 minutes average time to complete

Collaboration

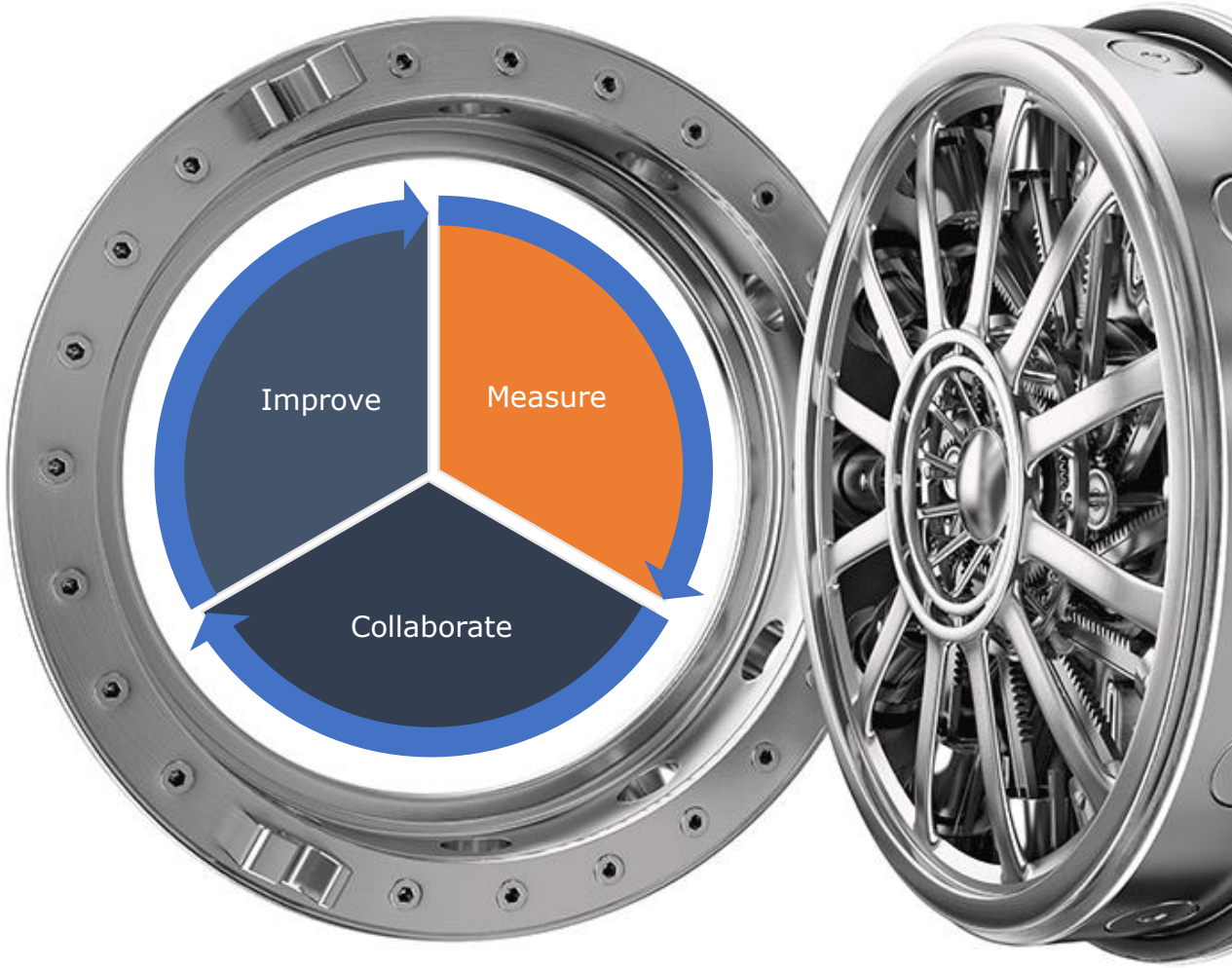
100+ case studies of high-performing organizations

Best practice reports

Webinars

Yearly Summits – Salt Lake City and Portugal (2022)

Training quality benchmarking



280 Organizations Measured
308,000 Clinical Responses

NHS

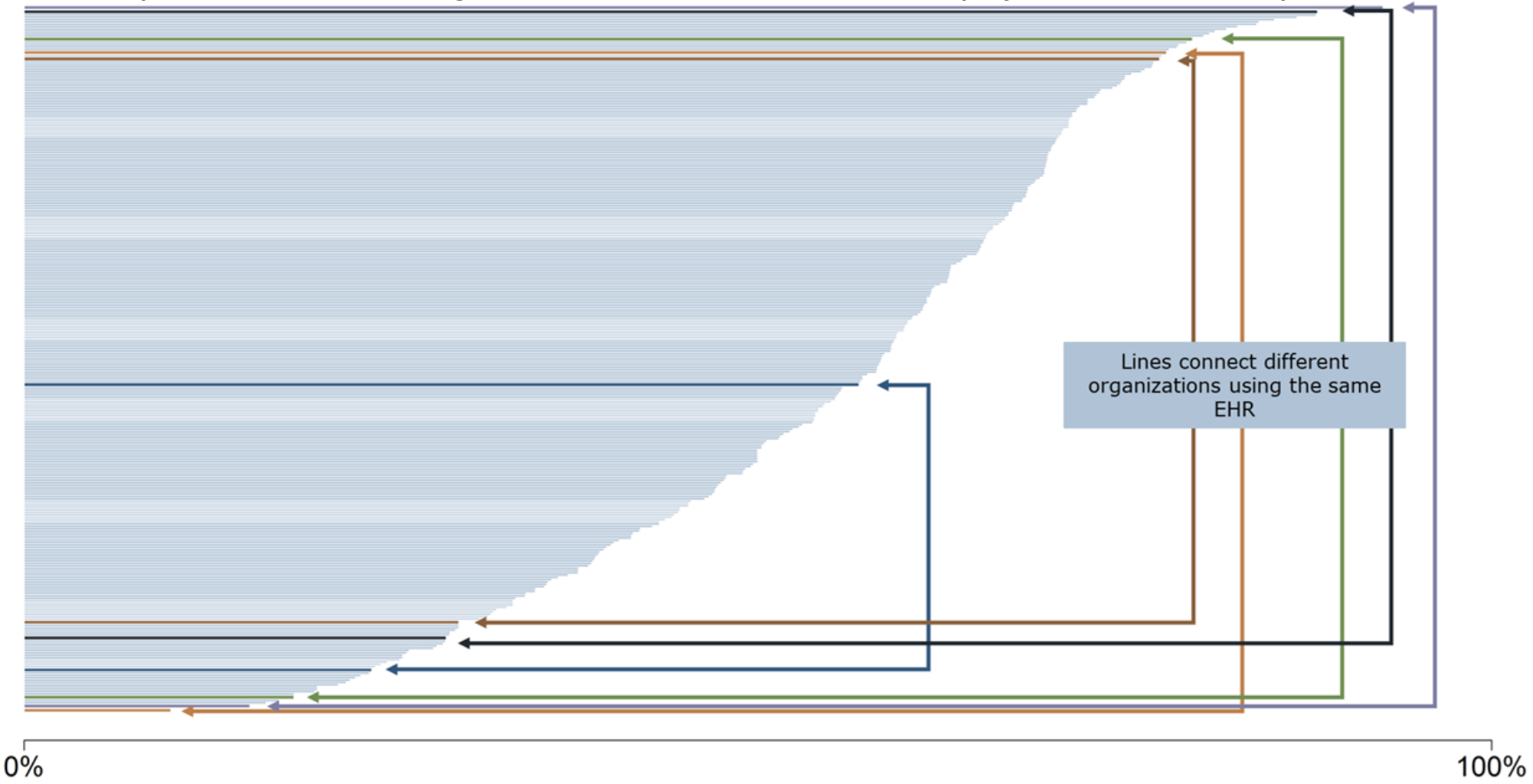
Do you agree that your EPR…

1. is available when you need it (has almost no downtime)
2. has the fast system response time you expect
3. provides expected integration within your organization
4. provides expected integration with outside organizations
5. has the functionality for your specific specialty/clinical care focus
6. is easy to learn
7. makes you as efficient as possible
8. enables you to deliver high-quality care
9. keeps your patients safe
10. this EPR has alerts that prevent care delivery mistakes
11. allows you to deliver patient-centered care

Extreme Polarization Between Different Orgs Using the Same EPR

Percent of Providers Who Agree Their EPR Enables Quality Care

n=61,103 providers from 281 organisations: each bar is an EPR deployment with >20 responses



Responsibility for Variation in Net EPR Experience Score

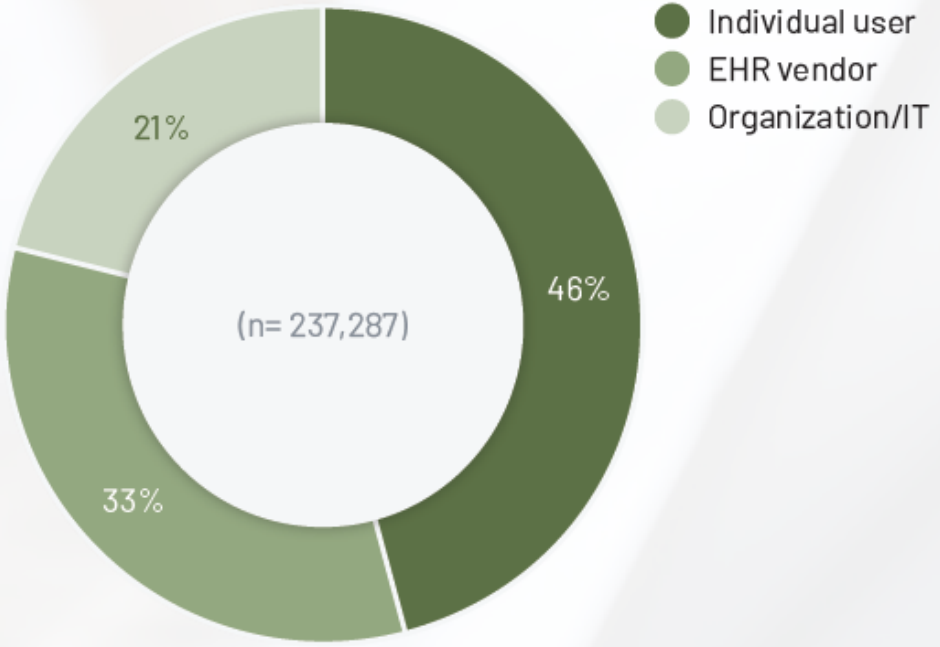
Arch Collaborative data on EHR stakeholders shows that about 33% of the variation in the EHR experience from user to user can be attributed to the EHR vendor in use; the organization and the individual user account for the rest of the variation. While not the most important factor, the EHR vendor still has a big impact. EHR vendors have close relationships with their customer organizations, so they can apply needed solutions to improve end user satisfaction.

73% of organizations have two physicians of the *same specialty* using the *same EPR in which*:

- One physician **strongly disagrees** that the EPR enables them to deliver high-quality healthcare.
- One **strongly agrees** that the EPR enables them to deliver high-quality healthcare.

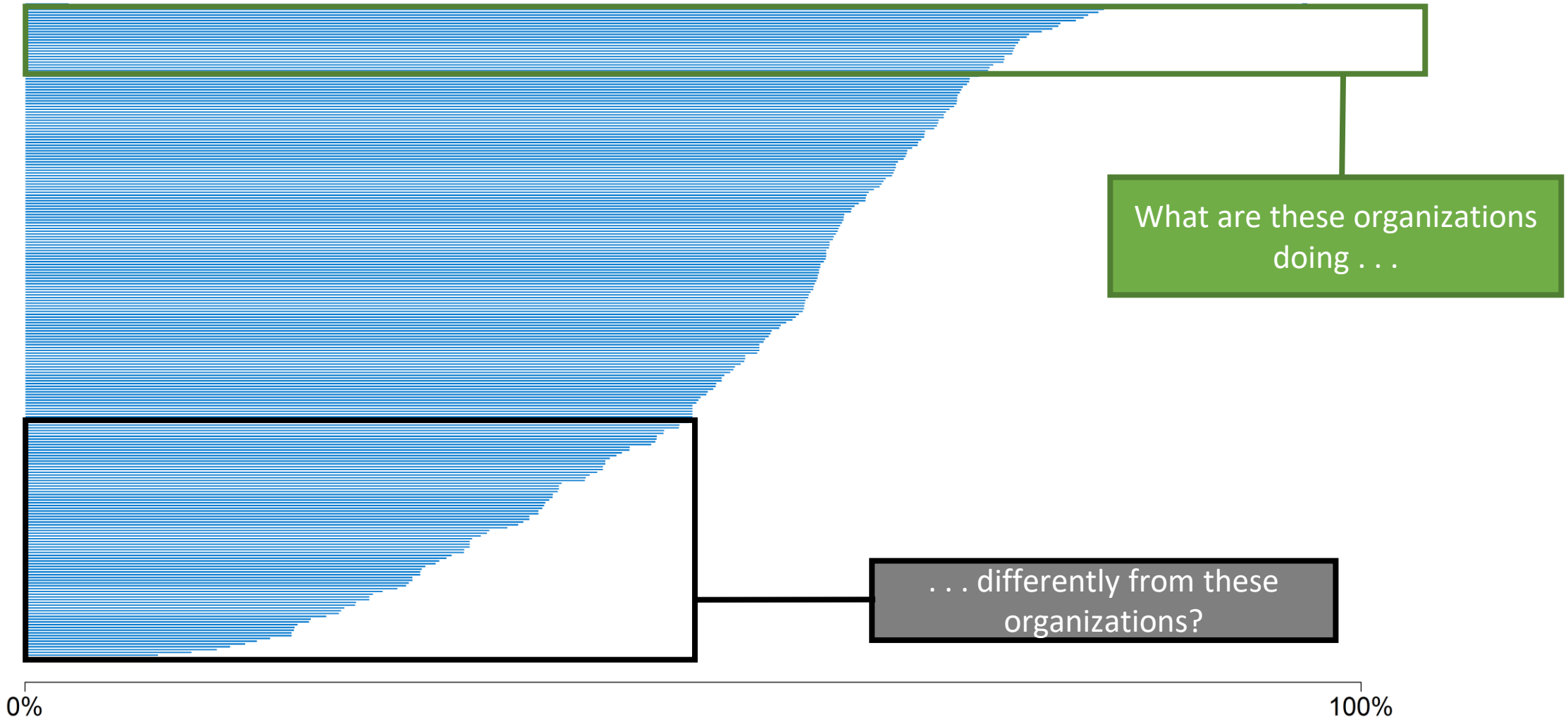
Stakeholder Impact on Net EHR Experience Score†

Percent of variation in satisfaction that is attributable to each EHR stakeholder; all Collaborative respondents



Learn from the Best!

Percent of Providers Who Agree Their EHR Enables Quality Care



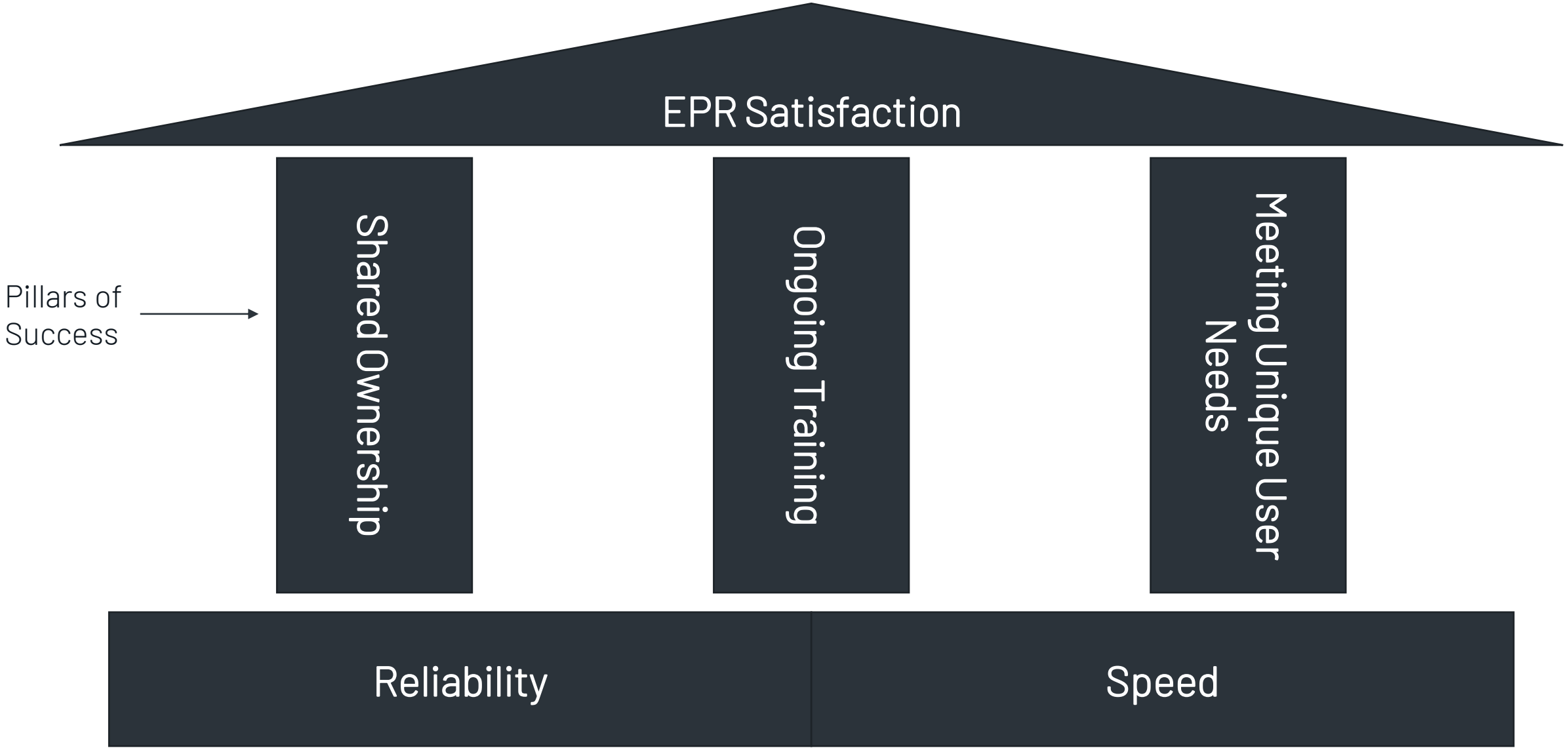
What Makes a Successful Clinical EPR User?

Strong User Mastery
I am confident in my ability to use the EHR effectively and efficiently.

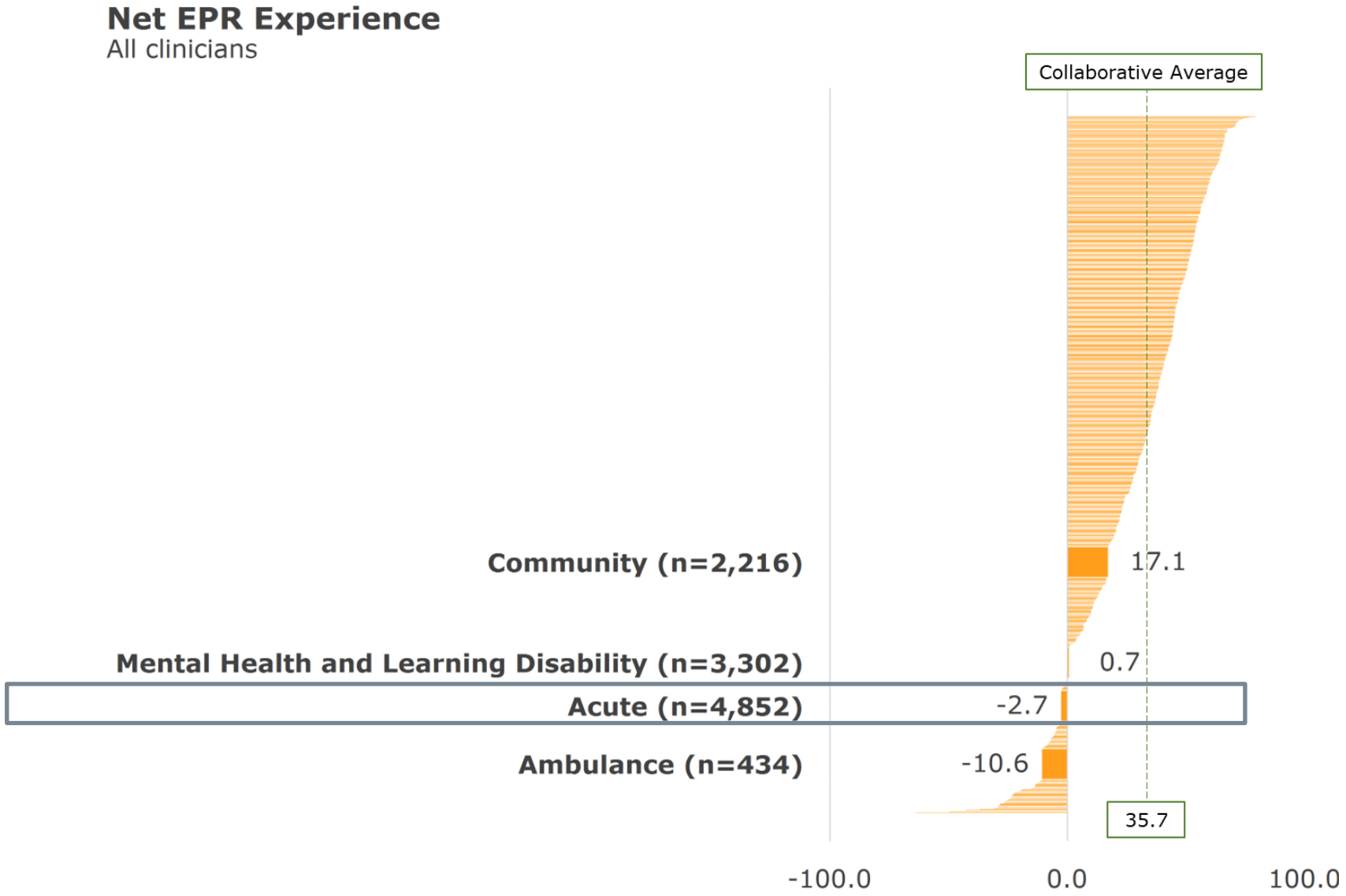
EHR Meets Unique User Needs
We have gotten this EHR to a great place where it meets my specific needs. I have taken the time to personalize the EHR so it works how I need it to.

Shared Ownership
I feel that I have the ability to influence the team that shapes this EHR. My voice is heard and I am seeing progress as we shape this into a successful solution.

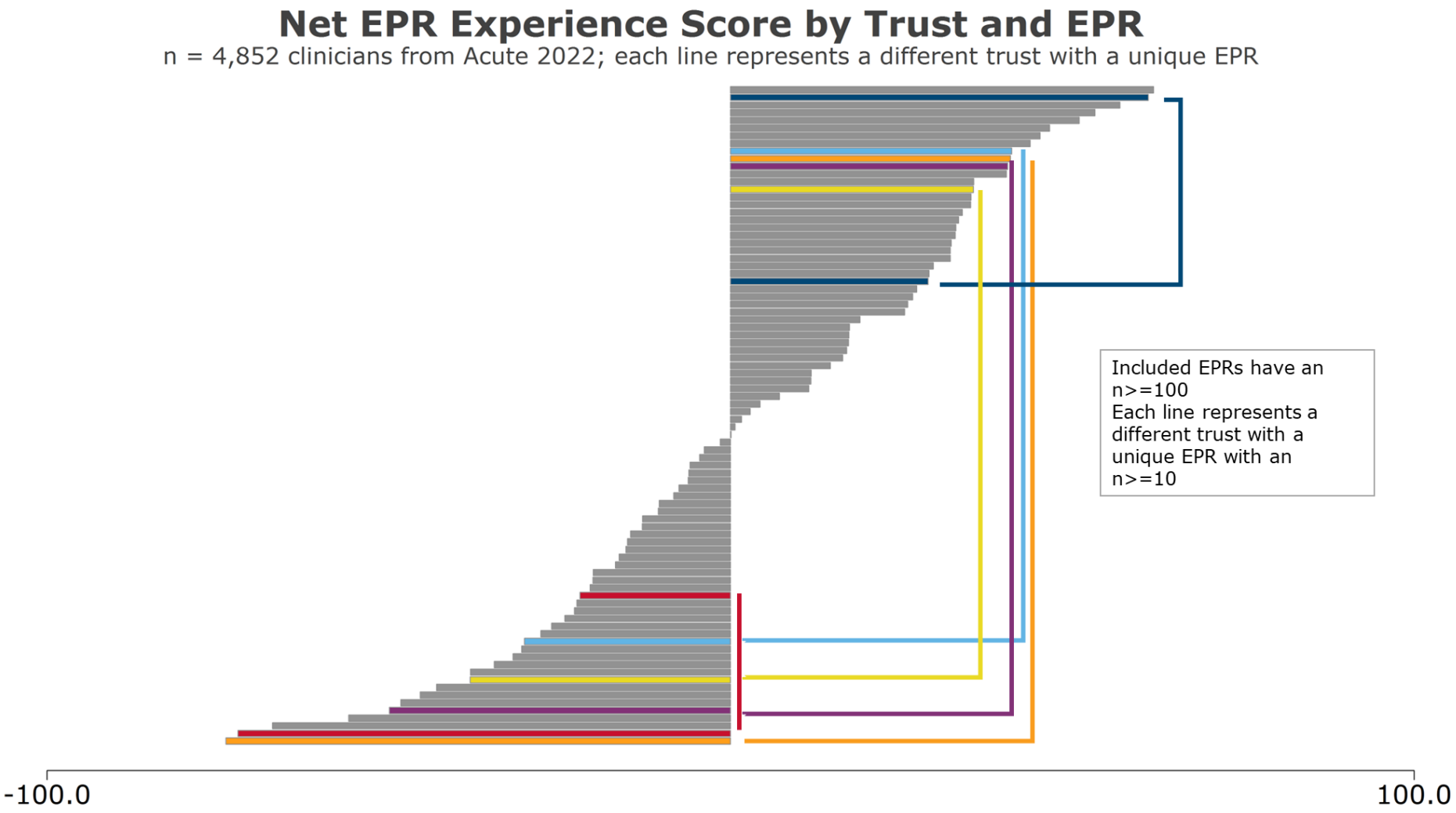
KLAS EPR House of Success



EPR Users at Acute Level Are More Frustrated Than They Are Satisfied



Similar Polarization Exists From One Trust to Another



NHS Providers own 71% of satisfaction, Suppliers own 29% of satisfaction

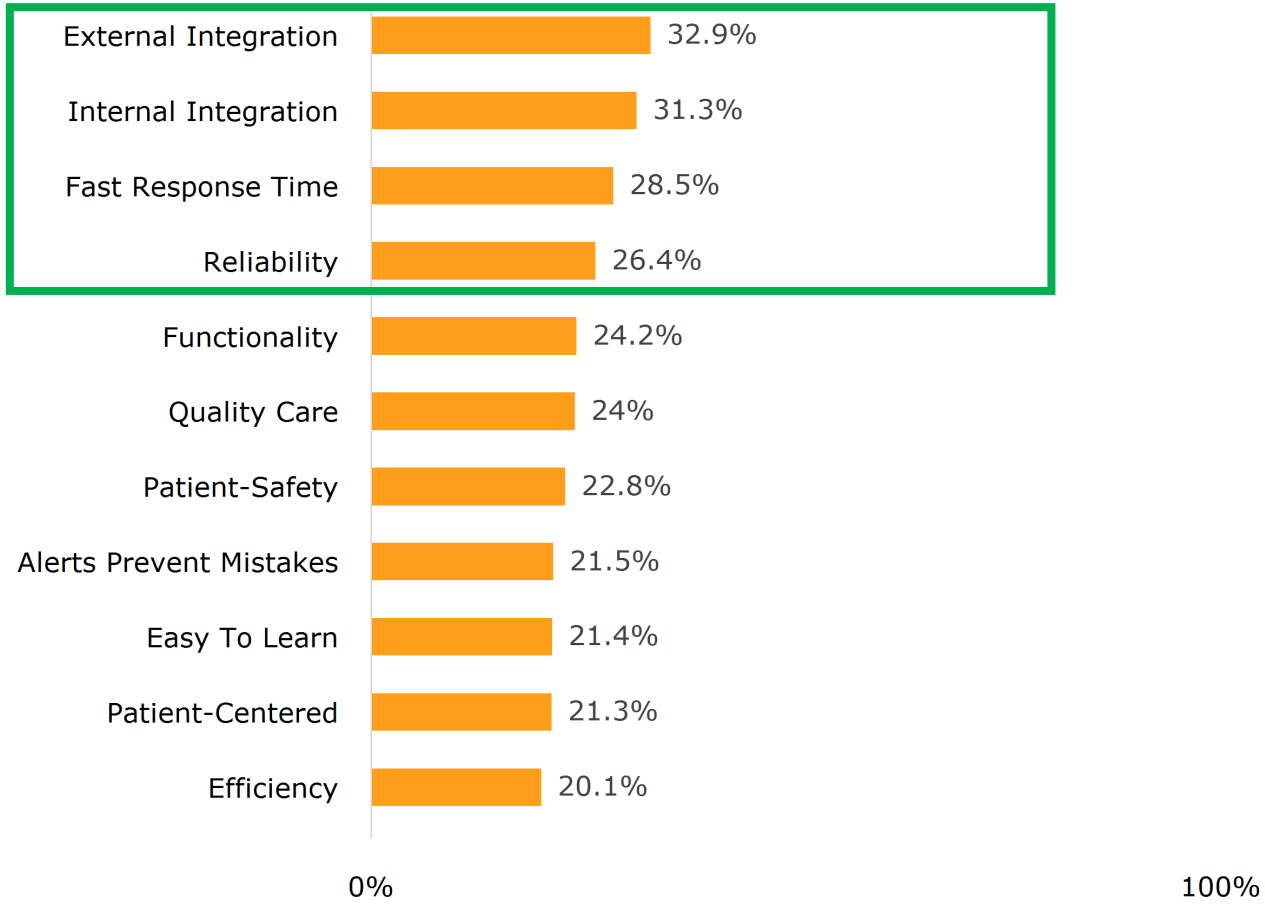
Based on a Regression Model (n=490 deployments)

- Satisfaction with IT: Score swing of ~33 points
- Use of User Settings: Score swing of ~24 points
- Satisfaction with Training: Score swing of ~18 points
- EPR in Use: Score swing of ~32 points

If Suppliers fail, full EPR satisfaction can never, fully be achieved!

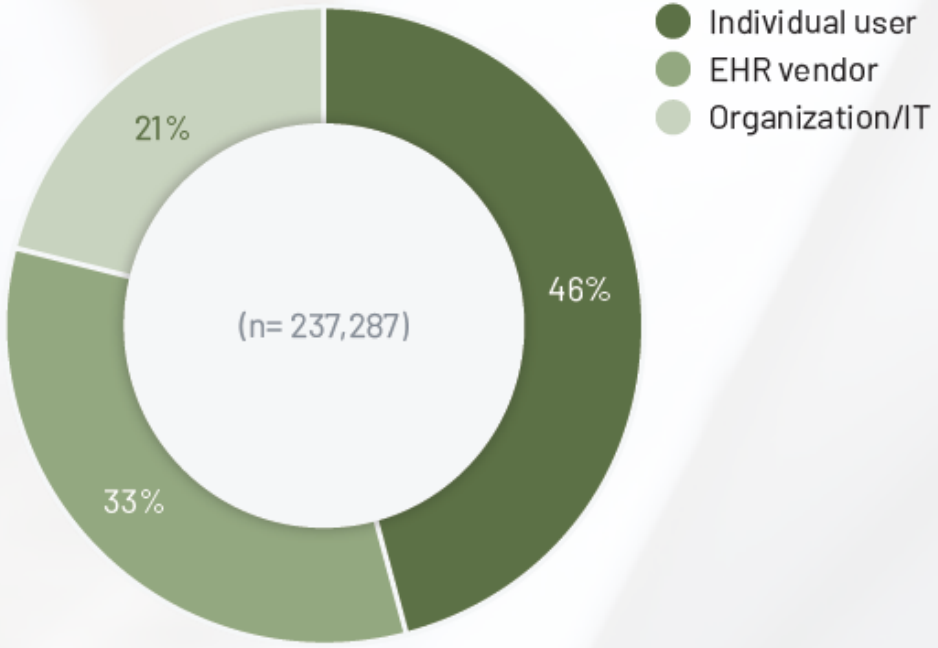
Suppliers Impact Integration, Response Time and Reliability More Than Other

Percent Of Variation From EHR Vendor
Providers Only



Stakeholder Impact on Net EHR Experience Score†

Percent of variation in satisfaction that is attributable to each EHR stakeholder; all Collaborative respondents



Suppliers Can Help Trusts Most by Stabilizing EPR

NHS

What are we doing well?

- Top performing trusts score above Arch Collaborative average in most satisfaction metrics and success drivers, and above the 40th percentile in many metrics – many lessons to be learned from these Trusts

What do we still need to improve?

1. **Improving Shared Ownership is foundational to improving overall satisfaction** – end users need to feel a sense of partnership with IS departments who support the EPR, and the EPR supplier whose technology they are using. Clinicians desire a voice in the prioritisation of enhancements and updates. As clinicians help shape the EPR into a tool that aide's them, their perception of the EPR vendor will improve.
2. **EPR Mastery** – lack of training across most trusts hurting overall satisfaction. Overall, training scores in the 37th percentile. In aggregate, even among top 5 trusts training is rated below the 50th percentile. NHS wide improvements to training resources are needed. Particular attention should be on training for personalisations available to within each EPR.
3. **Infrastructure is hurting satisfaction across all NHS** – there are things NHSX can do to help improve reliability, response time. These are the foundation of EPR usability and satisfaction, moving these from detractors of satisfaction to commodities is crucial for building a strong technical foundation.

KLAS Observations

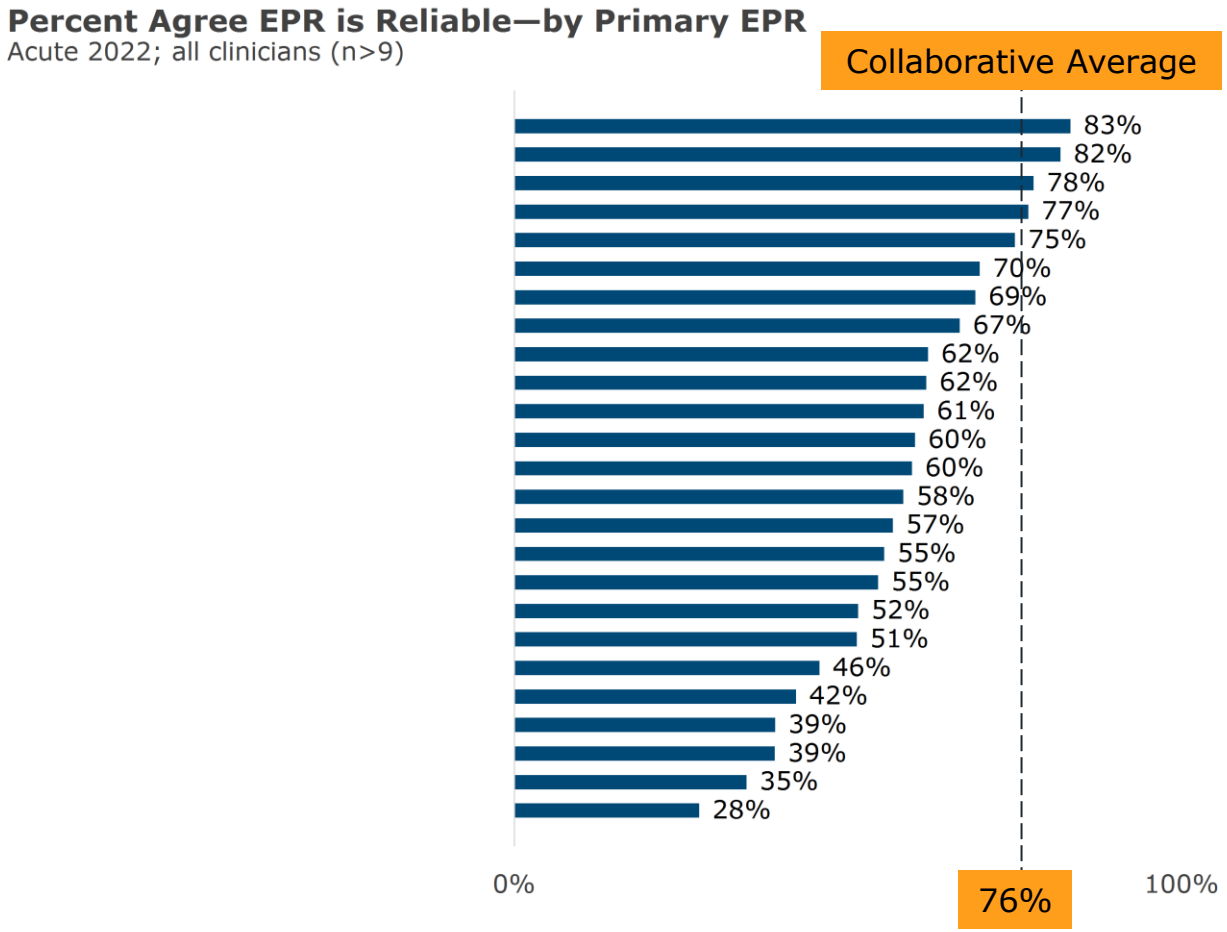
NHS

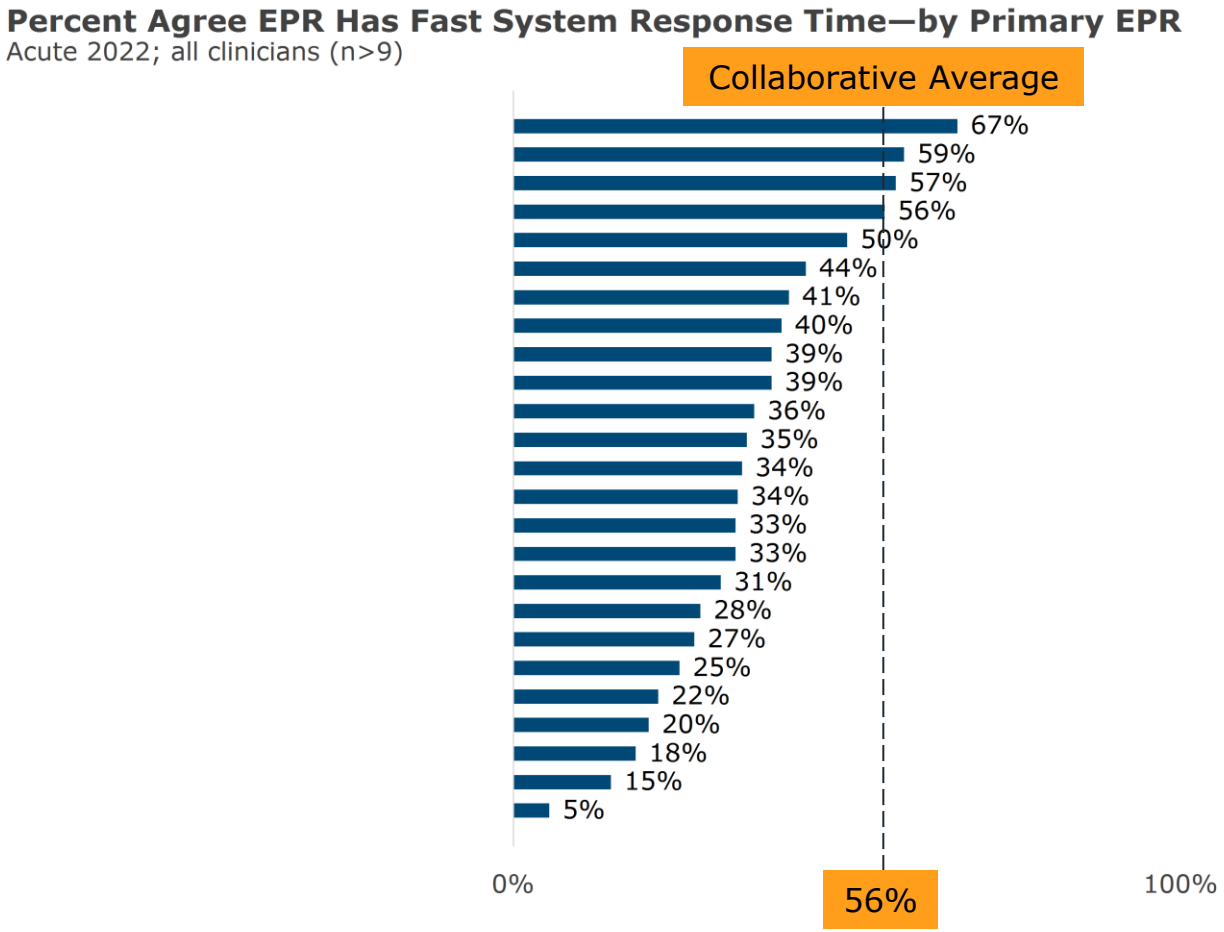
Acute 2022 EPR Satisfaction

All clinicians (n=4,852)

		Score/ Percent Agree	Overall Collaborative (n=258)	Non-US Health Systems (n=23)
	Net EPR Experience	**-2.7**	11th Percentile	4th Percentile
Supplier/ Infrastructure	**Is Reliable**	56%	10th Percentile	17th Percentile
	Has Fast System Response Time	32%	10th Percentile	22nd Percentile
	Has Needed Internal Integration	39%	9th Percentile	22nd Percentile
	Has Needed External Integration	17%	18th Percentile	26th Percentile
	Has Needed Functionality	37%	9th Percentile	9th Percentile
	Is Easy to Learn	44%	22nd Percentile	22nd Percentile
	Enables Efficiency	32%	25th Percentile	13th Percentile
	Enables Patient Safety	34%	5th Percentile	5th Percentile
	Enables Patient-Centered Care	37%	12th Percentile	16th Percentile
	Alerts Prevent Mistakes	32%	7th Percentile	10th Percentile
	Enables Quality Care	44%	17th Percentile	13th Percentile

Few Clinicians Feel that EPR Systems Meet Their Needs





Login, Crashing, Frozen, Slow

All IT is definitely NOT an enabler. We can find old records easily; patients therefore are at risk. **Log on is a nightmare; why do we have to change passwords so often;** can't we just use a fingerprint or face ID like my phone?

Slow, crashes/freezes frequently (requiring reboots once every 10 minutes or so) causing me to have to repeat my work. Minimal personalisation options available. Relevant patient information often held in a different system. Having to use [EPR] is typically the most frustrating and stressful due to the poor design and function of this software.

Better hardware so it runs effectively, none of the WoWs are reliable and most frustration arises because the hardware takes hours to boot and regularly falls over

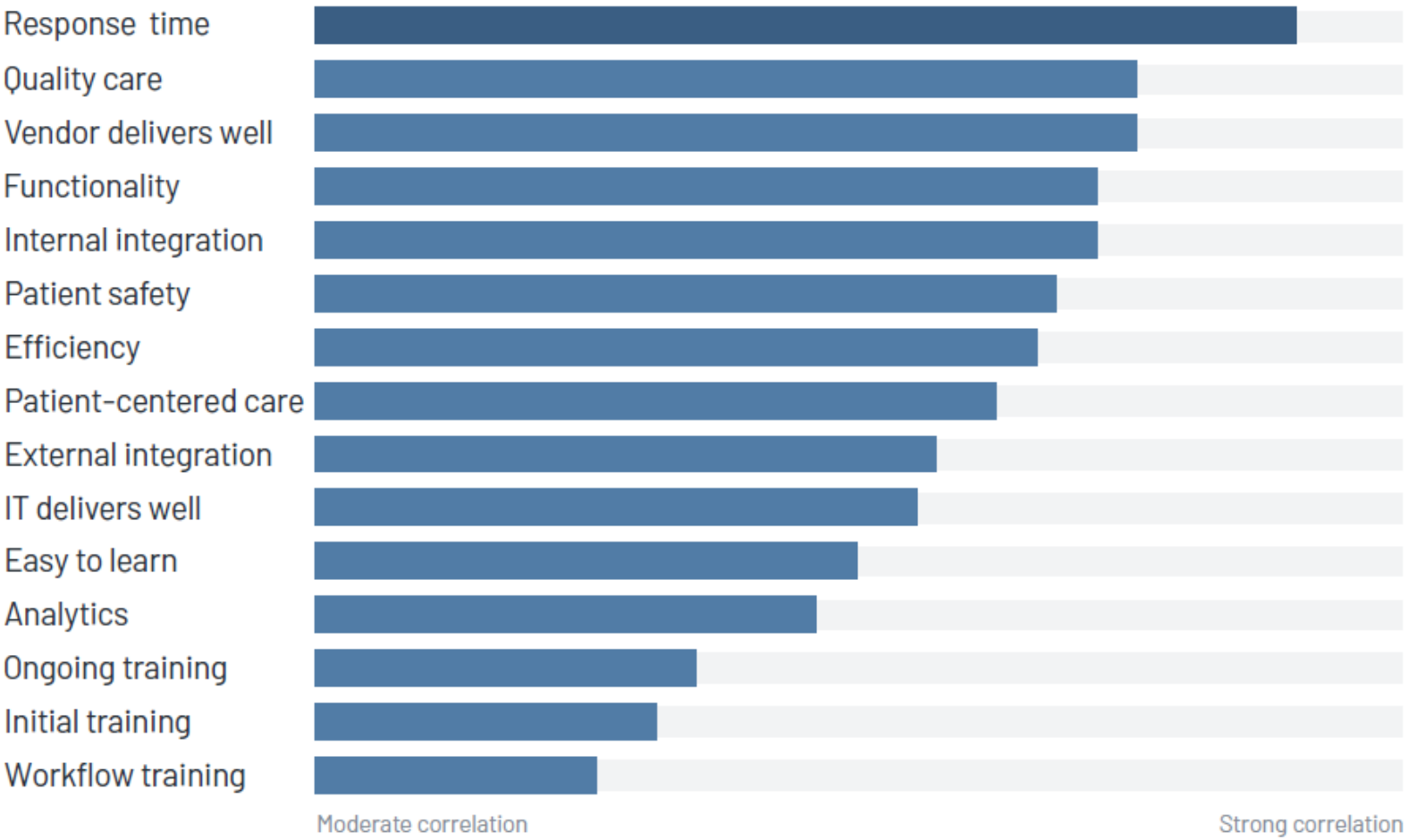
The system is functional and does what it should on the whole**, but it is slow, clunky, and needs too many clicks. It frequently crashes on long prescriptions and needs refreshing if you are working on it for a long spell of time.**

KLAS Observations

Reliability Can Still Be a Problem for Organizations with Very Little Downtime

Clinician perceptions of the EHR's reliability don't depend solely on how often the system is completely down. If the EHR drags, even clinicians at organizations that experience very little downtime can report poor system reliability. In fact, of the various EHR aspects rated by clinicians in the Collaborative survey (e.g., external integration, functionality, EHR training, etc.), response time is the one most closely correlated with clinician perceptions of the system's reliability. This is especially significant given that response time is also one of the aspects with which clinicians across the Collaborative report the lowest satisfaction. If an organization is experiencing high uptime but low satisfaction with system reliability, they may need to focus on increasing the system's speed.

Correlation between System Reliability & Other EHR Metrics (n=166,583)



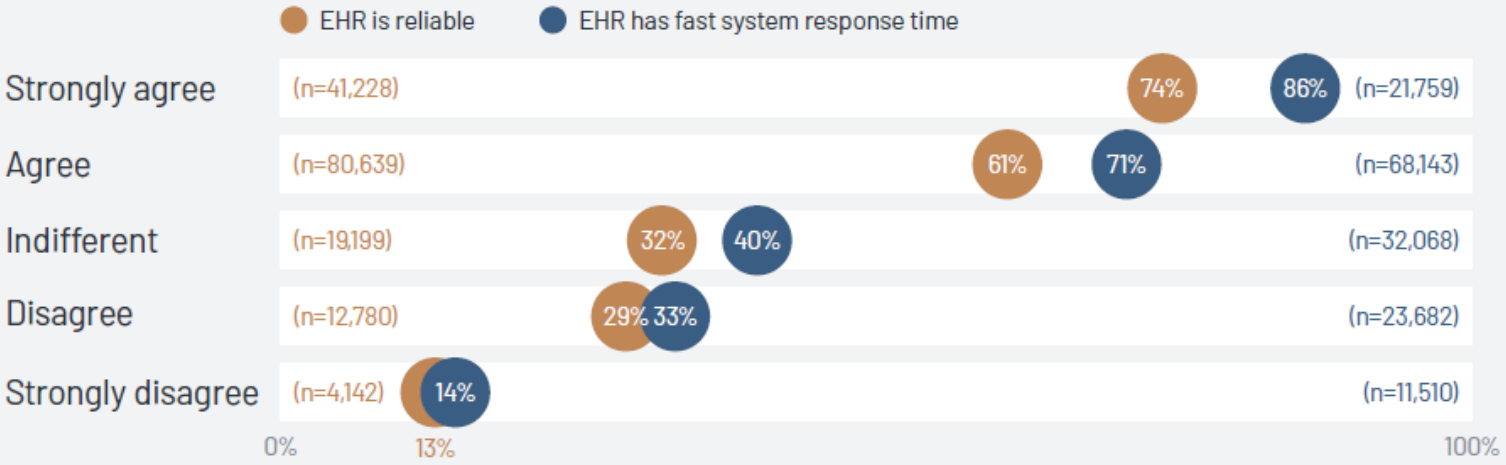
Response Time and Reliability Have Marked Impact on Patient Safety

Response Time & Reliability Issues Compromising Patient Safety

Across the Collaborative, over half (57%) of clinicians agree their EHR enables patient safety, and satisfaction with system response time and reliability factor into these clinicians' perceptions. Clinicians who strongly agree their system is reliable are much more likely to also agree the EHR enables patient safety. This trend is even more significant when it comes to system response time.

"[Our EHR] is extremely slow. It takes 5–10 minutes to log on to a computer, and when we are providing direct care to sick people, that time really matters. There are numerous alerts that pop up all the time that are not helpful at all—not at all. These alerts are repetitive, inappropriate, immediately dismissible, and just another button to push when I am already busy, I have been waiting for 10 minutes for the EHR to load, and my patient who just had major surgery is screaming in pain." —Nurse at a large health system

Percent of Clinicians Who Agree EHR Has the Expected Response Time or Reliability—by Agreement That EHR Enables Patient Safety



KLAS Observations

Challenges with Response Time & Reliability Often Tied to Broader Infrastructure Issues beyond the EHR

A plurality of clinicians who report dissatisfaction with their EHR's response time or reliability also mention issues with their computer, monitors, laptop, workstation, or other IT equipment. Compared to clinicians who strongly agree they have the response time/reliability they expect, clinicians who strongly disagree are 53% more likely to organically mention hardware issues and 67% more likely to report slow login times. For example, one nurse respondent indicated that it takes 60 seconds for the system to load after a password is entered. Given the frequency with which clinicians must log in during a shift, this nurse spends almost 10% of the workday waiting for the EHR to load.

KLAS RESEARCH | Arch Collaborative

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Next Steps: Response Time & Reliability Self-Examination

Your organization may find the following questions to be a helpful starting point as you work to improve system response time and reliability:

1. Do we comply with our vendor's infrastructure recommendations?
2. Do we adhere to a hardware inventory schedule?
3. How does the Wi-Fi perform in our clinics and hospitals?
4. Do our single sign-on and EHR vendors work together to improve the user experience?
5. Do we know how long it takes a user to get into the system?
6. Do we know how long it takes to shift between windows or tabs in the EHR?
7. Are we on the latest version of our vendor's EHR?

Top 5 Trusts Can Improve Reliability and Response Time

NHS

Top 5 Hit Close to Goal to Reach the 80th Percentile for Overall Collaborative in Reliability and Response Time

Bottom 5 Struggles with Reliability and Response Time are Pronounced

Top 5 Trusts EPR Satisfaction
All clinicians (n=375)

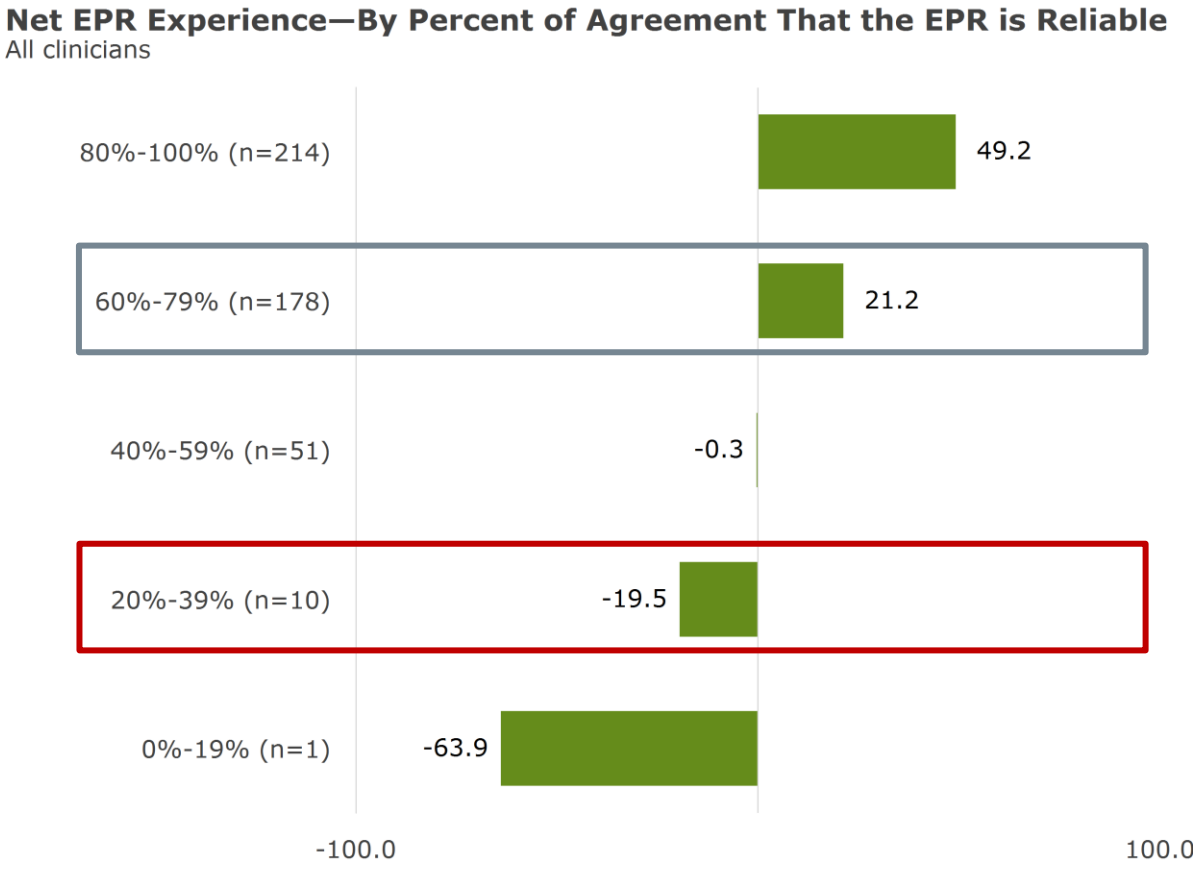
	Score/ Percent Agree	Overall Collaborative (n=259)	Non-US Health Systems (n=24)
Net EPR Experience	**39.7**	54th Percentile	67th Percentile
Is Reliable	76%	42nd Percentile	71st Percentile
Has Fast System Response Time	55%	45th Percentile	75th Percentile
Has Needed Internal Integration	63%	36th Percentile	58th Percentile
Has Needed External Integration	26%	30th Percentile	54th Percentile
Has Needed Functionality	63%	49th Percentile	71st Percentile
Is Easy to Learn	66%	88th Percentile	71st Percentile
Enables Efficiency	59%	88th Percentile	75th Percentile
Enables Patient Safety	61%	54th Percentile	70th Percentile
Enables Patient-Centered Care	62%	72nd Percentile	60th Percentile
Alerts Prevent Mistakes	48%	38th Percentile	64th Percentile
Enables Quality Care	74%	83rd Percentile	71st Percentile

Bottom 5 Trusts EPR Satisfaction
All clinicians (n=768)

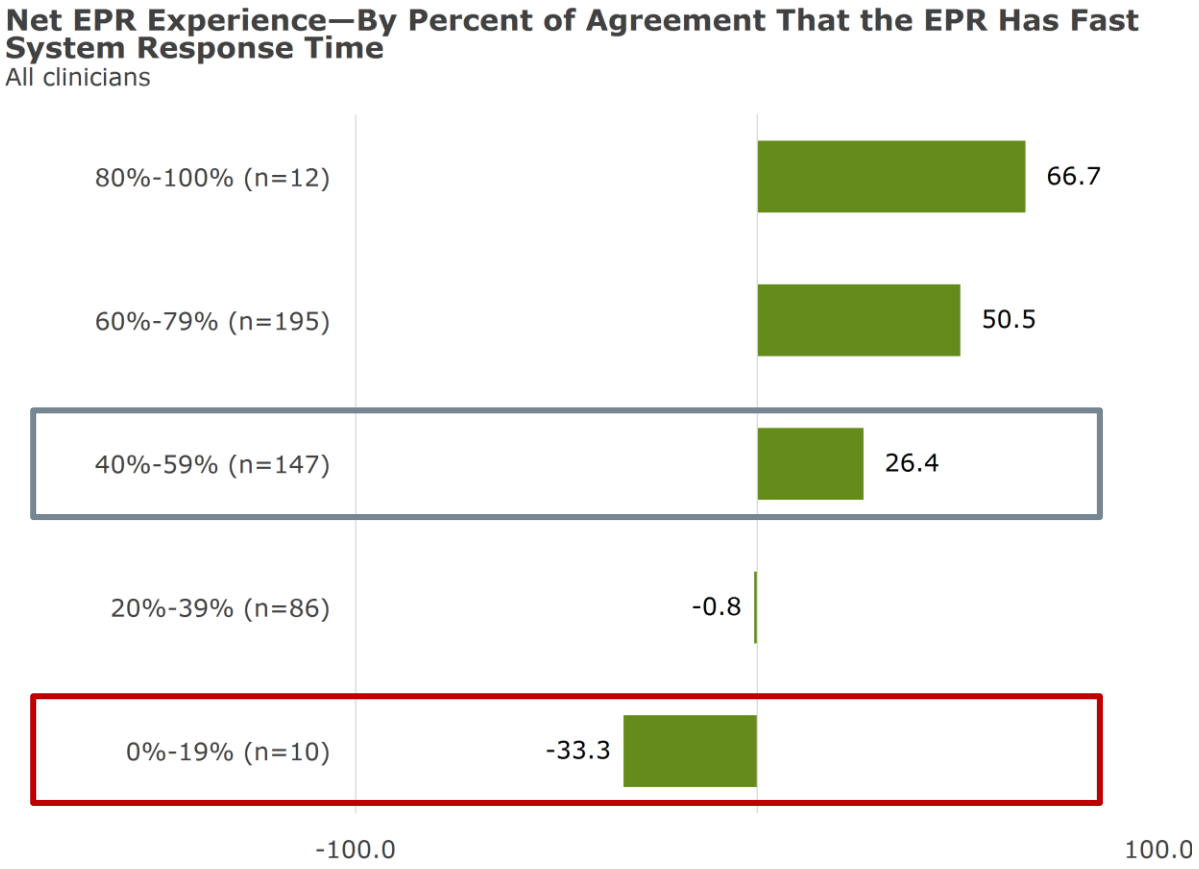
	Score/ Percent Agree	Overall Collaborative (n=259)	Non-US Health Systems (n=24)
Net EPR Experience	**-45.3**	1st Percentile	1st Percentile
Is Reliable	35%	1st Percentile	4th Percentile
Has Fast System Response Time	13%	1st Percentile	1st Percentile
Has Needed Internal Integration	19%	2nd Percentile	1st Percentile
Has Needed External Integration	8%	5th Percentile	4th Percentile
Has Needed Functionality	16%	1st Percentile	1st Percentile
Is Easy to Learn	16%	1st Percentile	1st Percentile
Enables Efficiency	12%	3rd Percentile	1st Percentile
Enables Patient Safety	16%	1st Percentile	1st Percentile
Enables Patient-Centered Care	15%	1st Percentile	1st Percentile
Alerts Prevent Mistakes	24%	2nd Percentile	1st Percentile
Enables Quality Care	21%	1st Percentile	1st Percentile

Top vs Bottom Reliability/ Response Time

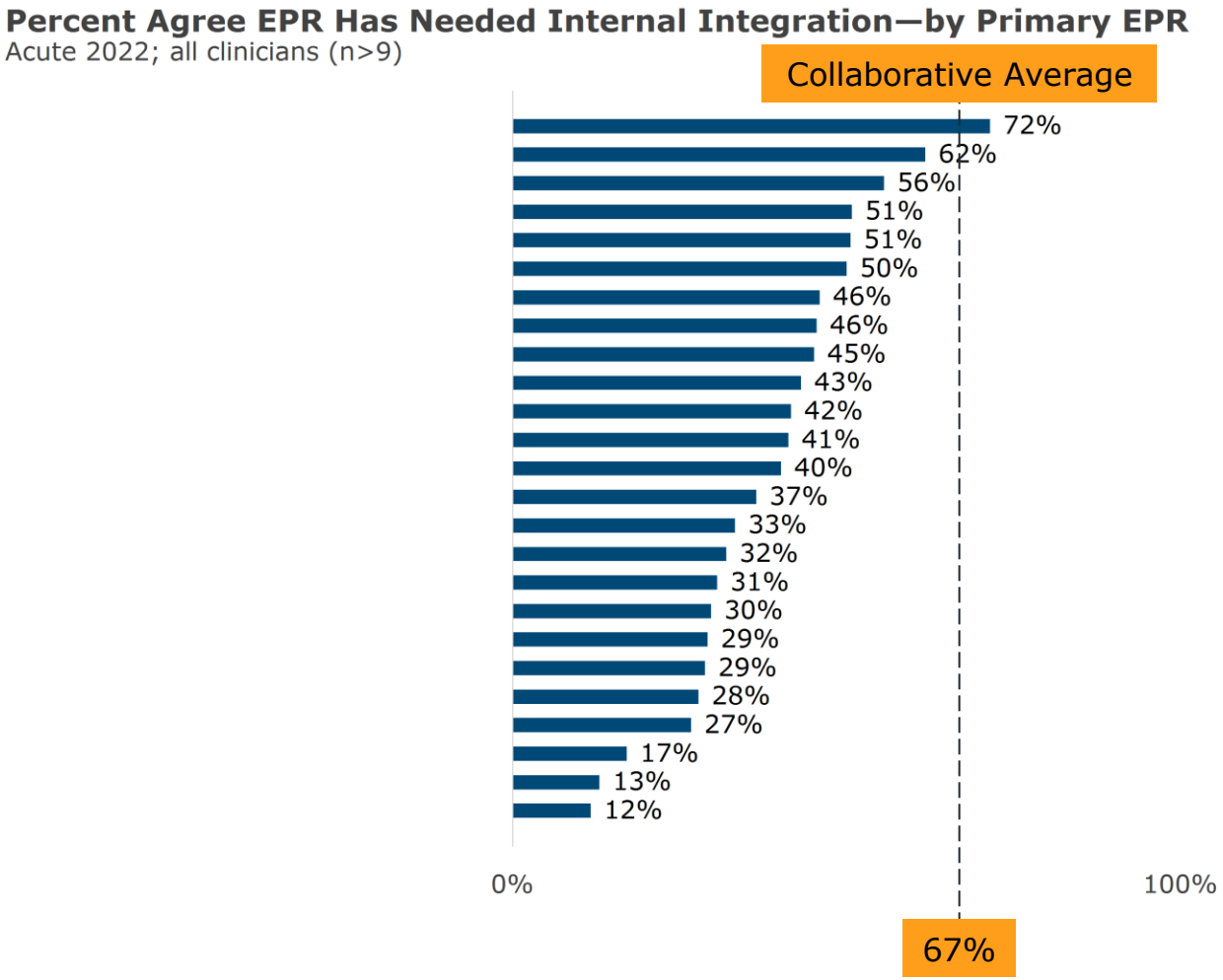
Is Reliable should be minimum 80% agree in order to move from satisfaction detractor to satisfaction driver.

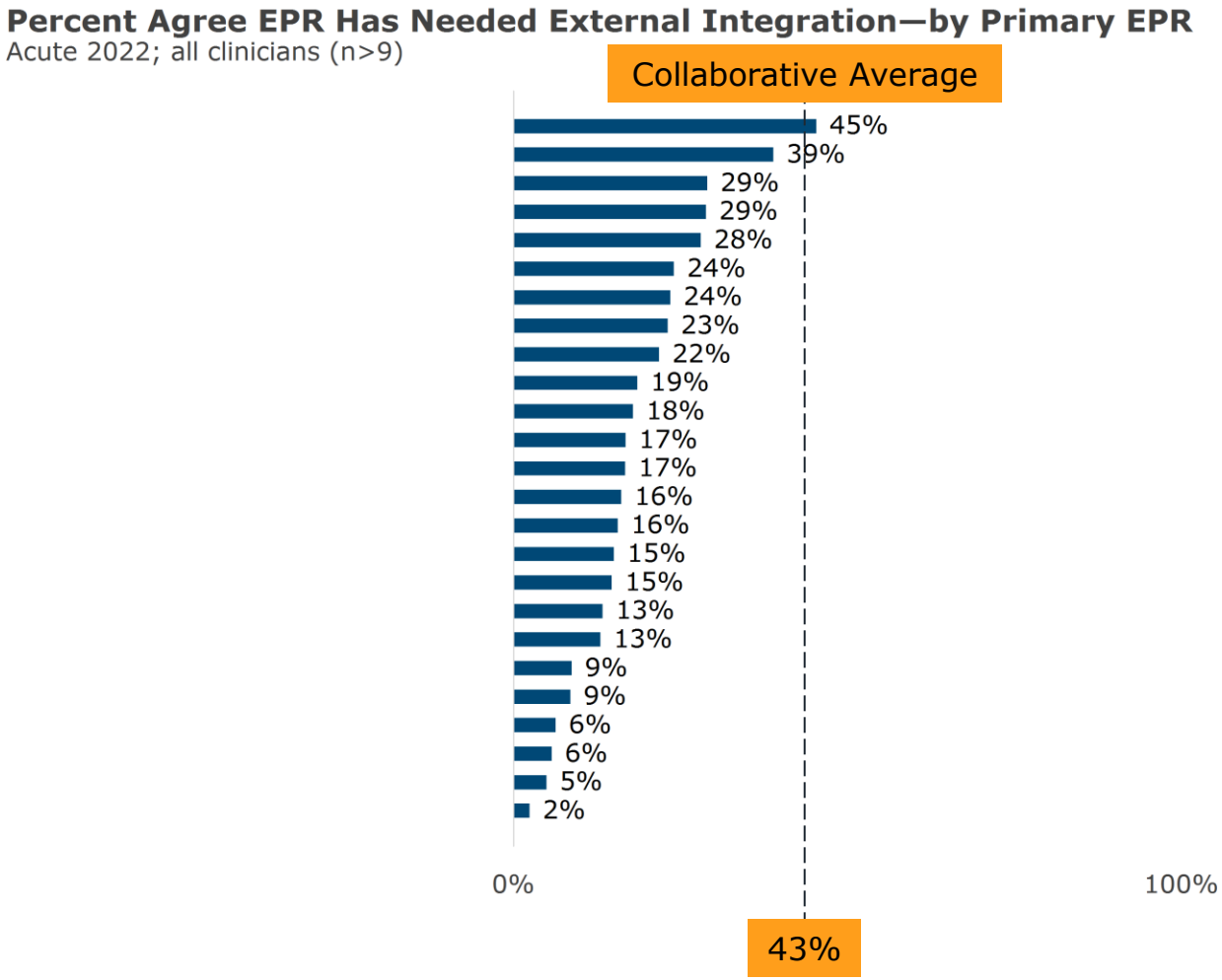


Response time should be minimum 60% agree in order to move from satisfaction detractor to satisfaction driver.

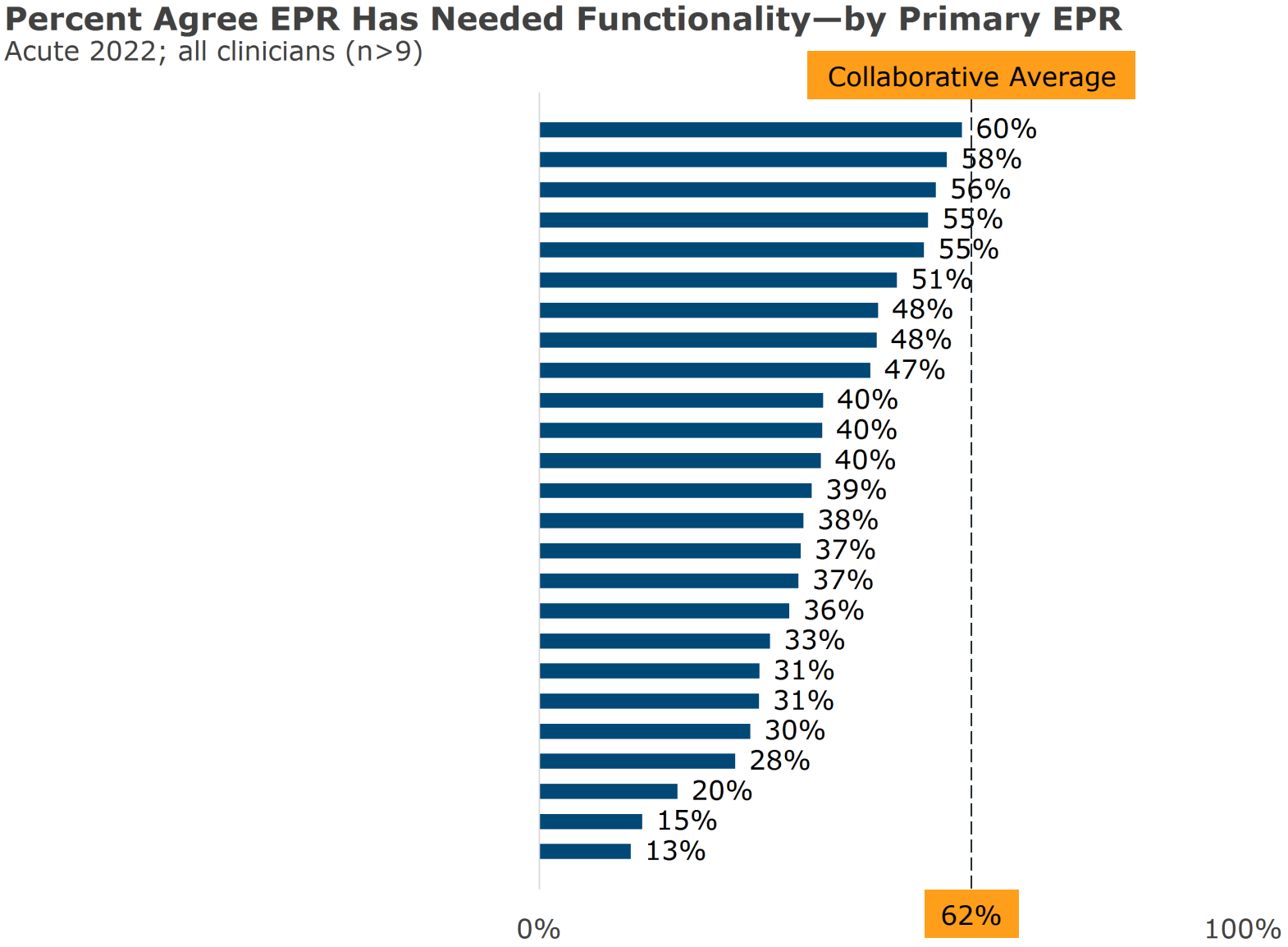


Internal/External Integration Across the Trusts is Lacking





Provider Perception of Functionality is Below Collaborative Average



Next Steps

- **Industry engagement:**
  - Overall findings shared at Tech UK event
  - Strategic supplier relationship meetings with all suppliers
- **Frontline Digitisation:**
  - We presented detailed findings to trust CIOs on Thursday 23rd June
  - All trusts that produced >30 survey responses have received a findings dashboard personalised for their organisation (emailed to the CIO).
  - Take findings to support EPR implementations. For example:
    - Funding for infrastructure within FD allocations
    - Training now an important requirement in procurements
- **Clinical engagement:**
  - Work with Digital nurses to increase understanding of usability
  - Engage with NHS England & improvement to increase clinical engagement
- **EPR summit** in October for EPR programme teams, clinical staff and suppliers to share best practice

Questions

Thank you!

FRONTLINE DIGITISATION

ACHIEVING WGLL ON THE FRONTLINE