



CREATING THE EMR ADVANTAGE

THE ARCH COLLABORATIVE EMR BEST PRACTICES STUDY

KLAS® | NOVEMBER 2017 | PERFORMANCE REPORT

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EMR BEST PRACTICES STUDY

We built EMRs to help clinicians deliver dramatically better care and to be more efficient in that care. If clinicians everywhere consistently praised EMRs for revolutionizing the practice of medicine, wouldn't that be an indication that the EMR was a success?

But that is not happening.

In late 2016, in an effort to turn the tide of EMR frustration, KLAS gathered with a handful of provider organizations with the idea of creating a common end-user satisfaction survey to be used as a means of establishing satisfaction benchmarks and enabling provider organizations to learn from each other's successes and failures. Today, this effort—called the Arch Collaborative—has collected 15,535 user perspectives from 55 organizations.



Making EMR Success a Science

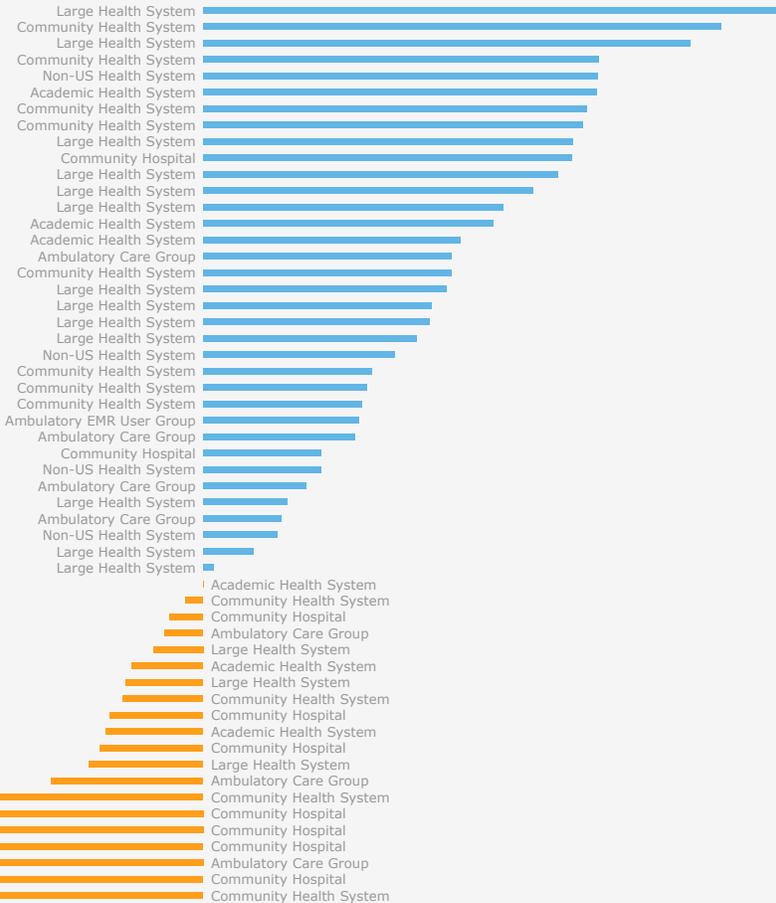
Of the 7,609 physicians who participated in this research, 43% report overall dissatisfaction with their EMR experience. The story of their dissatisfaction is not simply one of too many clicks. Rather, their dissatisfaction stems from a perception of having lost control over the care they were trained to deliver as well as a perception that they cannot improve their current situation.

More than just calling out the *problems* with the EMR, their feedback reveals how provider organizations can help make the EMR *consistently successful* for their clinicians.

Net EMR Experience Score—By Organization



Organizations participating in the Arch Collaborative receive a Net EMR Experience score, which is a snapshot of the overall satisfaction that clinicians report with their EMR environment. Survey respondents report positive, negative, or indifferent feedback regarding EMR efficiency, functionality, impact on care, and so on. As the name implies, the Net EMR Experience score is the percent of negative user feedback subtracted from the percent of positive user feedback. An organization's Net EMR Experience score can range from -100 (all negative feedback) to +100 (all positive feedback).



Participating Organizations

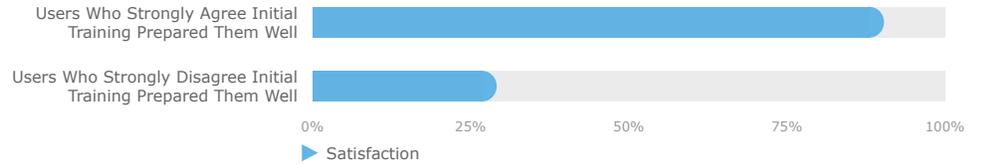


Three Keys of Successful Organizations

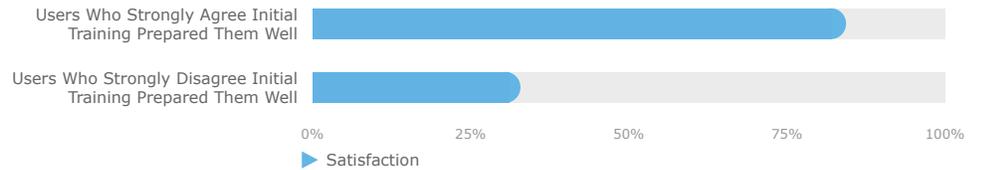
1 Education

Successful organizations recognize the incredible impact of initial and ongoing EMR education. These organizations require newly hired physicians to spend six or more hours in training classes taught by other clinicians. This ongoing training leverages the power of peer pressure to engage users rather than relying on at-the-elbow training or classroom training not taught by a fellow clinician.

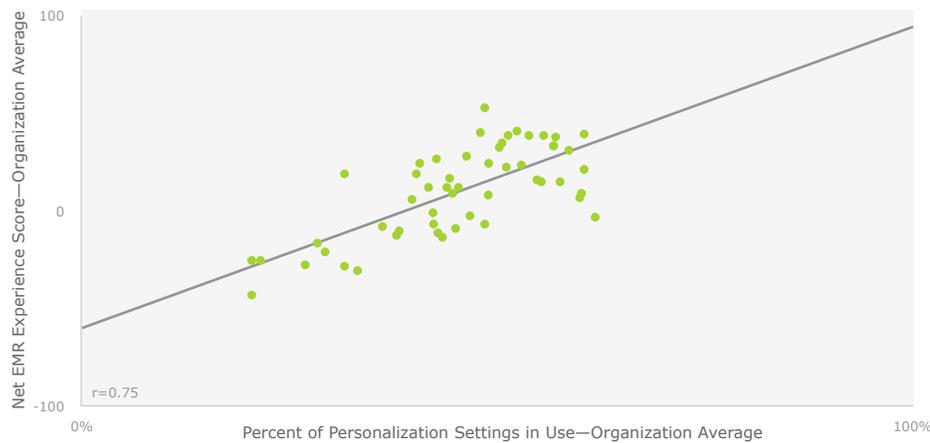
User Satisfaction—After Less Than 12 Months



User Satisfaction—After 5+ Years



Correlation Between Satisfaction and Use of Personalization Settings



2 Personalization

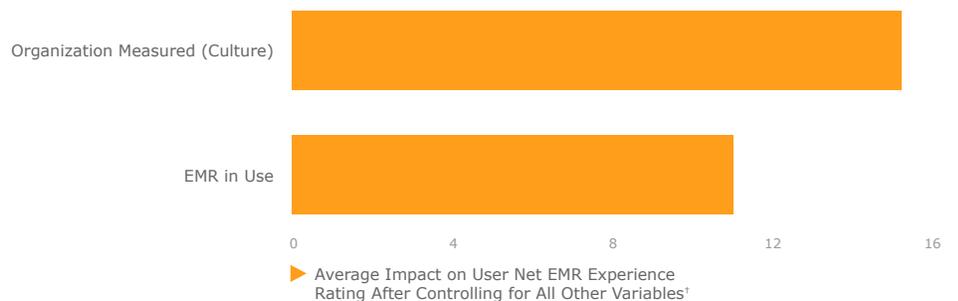
Successful organizations understand that personalization settings are the key to making a one-size-fits-all EMR work for everyone. Personalizations that allow clinicians to quickly retrieve data or review a chart are the most powerful in improving clinician satisfaction.

3 Culture

While culture is the most difficult key to replicate, it is clear that successful organizations have built a culture of IT service and user empowerment. These organizations show the deep care they have for clinician success through their sincere efforts to listen and resolve clinician challenges. They also empower problem solving by not blaming all problems on the EMR vendor.

Organization Culture Matters More Than the EMR Implemented

In an analysis of variance in which 15 other factors were controlled for (e.g., user personalization level, user charting efficiency, user specialty, etc.), organization culture is a better predictor of EMR success than the EMR in use.



Only 1.9 Points:

The marginal improvement in satisfaction for organizations spending more than 4% of operating budget on IT



6 Hours:

The minimum number of hours of initial training that successful organizations require from newly hired physicians



35.9 Points:

The impact of including training in departmental meetings



Zero Points:

The difference in satisfaction between experienced and brand-new users



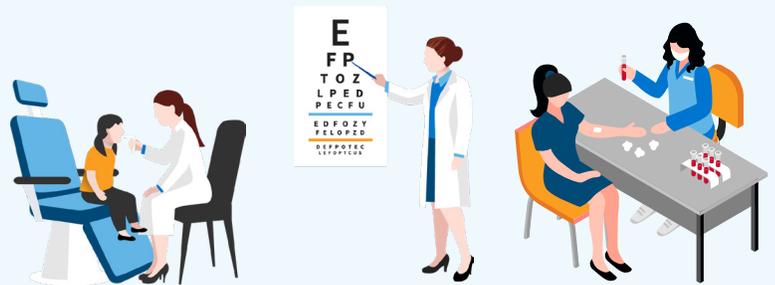
2X:

Chart review filters are two times more powerful in improving satisfaction than documentation macros



The Least Satisfied Specialties:

Allergy/Immunology, Ophthalmology, and Otorhinolaryngology



Canary in the Coal Mine:

Younger users are the most satisfied in highly satisfied organizations and the least satisfied in poor satisfaction organizations



-16.5:

The Net EMR Experience score of community hospitals—the least satisfied organization type



Key Learnings of This Report

With over 600,000 data points collected, the full Arch Collaborative report has many findings. Full findings are available only to Arch Collaborative members, but key learnings are shared below to help all organizations improve.

Drivers of Success

- Initial EMR training is the top predictor of EMR user success. The effects of poor initial training remain with users for years after they come live. (see page 15)
- Organizations that require newly hired physicians to complete more than six hours of training see significantly higher satisfaction. Requiring a test for new physicians is correlated with slightly higher satisfaction. (see page 18)
- Use of personalization settings has a dramatic effect on the user experience, yet fewer than half of the personalization options that users have are actually being utilized. (see page 20)
- Personalization settings that help users get data out of the EMR improve satisfaction more than those that help users get data into the EMR. (see page 22)
- Leadership from high-performing organizations report that good EMR governance is key to their success. (see page 25)
- The Epic Physician Builder program, which essentially makes EMR governance more responsive to the needs of users, enables higher EMR satisfaction and can be copied by other EMR customer bases. (see page 25) Users need to invest about 6 hours per year into better learning the EMR. 54% of EMR users report engaging in no ongoing EMR training. (see page 27)
- Incorporating EMR training into departmental meetings is one of the most effective training methods; on average, organizations that do this have a 30-point higher Net EMR Experience score. (see page 36)
- Survey participants are asked to rate three EMR stakeholders: the end users (themselves), the EMR vendor, and the organization's leadership/IT groups. Organizations where the users rate themselves lower than their EMR vendor and leadership/IT groups have a Net EMR Experience score 40 points higher than those who rate their vendor the lowest. This trend

appears to be in part indicative of a culture in which users possess feelings of self-awareness and enablement regarding their own power to improve their EMR experience. (see page 38)

- A multiple regression model of user feedback, allowing for the isolation of separate factors, highlights the importance of organization culture and its impact on EMR success. (see page 102)

Actions That Lack Impact or Inhibit Success

- Organizations spending a higher percentage of their operating budget on IT see almost no increase on average in the user experience. (see page 65)
- The ratio of support individuals to physicians at an organization matters to EMR success at the extremes but is not a good predictor of EMR success. (see page 67)
- Secure messaging solutions have nearly no effect on EMR satisfaction. (see page 69)
- Organizations with higher adoption of voice recognition as users' primary documentation method report no increase in satisfaction. (see page 70)
- The use of scribes is not tied to higher EMR satisfaction (see page 71) and is not tied to stronger physician fulfillment. (see page 72)
- Automated EMR-monitoring tools do not provide a satisfaction boost for those organizations that have invested time into them. (see page 74)
- Organizations with higher documentation efficiency rates report only slightly higher satisfaction. (see page 75)

Other Trends

- Organization type doesn't seem to be a factor in EMR satisfaction, except for community hospitals, which struggle to support a quality user experience. (see page 12)
- Specialties in which procedures are performed in-clinic (e.g., otorhinolaryngology) and specialties that have very demanding documentation needs tend to have the lowest satisfaction. The user experience for specialists varies widely depending on the EMR. (see page 29)
- There is no correlation between years of experience with an EMR and user satisfaction, highlighting the lack of ongoing investment that organizations and users make in EMR success. (see page 31)
- While organization culture is the top predictor of user EMR success, a close second is which EMR is in use. This report details Collaborative performance by vendor, including organization Net EMR Experience

scores, average personalization levels, and most/least successful user groups. (see pages 40–63)

- Clinicians reporting significant amounts of after-hours charting report much lower EMR satisfaction. (see page 78)
- Younger clinicians might be the proverbial canary in the coal mine for EMR success. Older clinicians report lower satisfaction than their younger counterparts, but mostly in very high satisfaction organizations. In lower satisfaction organizations, it is most often the younger clinicians who are the least satisfied. (see page 80)
- 85% of physicians agree or strongly agree that they find fulfillment in their work as a physician. (see page 82)
- Those clinicians who do not find fulfillment in their work are not necessarily less satisfied with their EMR. Physicians who are burned out (do not find fulfillment) often feel unempowered. (see page 83)
- Physicians consistently report lower satisfaction than nurses and advanced practice providers, with ease of use being a greater concern among physicians. (see page 96)
- In addition to achieving a more positive user experience, clinicians that take advantage of EMR-personalization tools also report better ambulatory documentation efficiency. (see page 99)

Worried your organization does not have the money to deliver a quality experience? The most successful organizations in the Collaborative did not report spending more to get there!



Getting Involved in the Arch Collaborative

- What is your organization's Net EMR Experience score?
- What areas should you be targeting for improvement?
- What can you learn from the most successful EMR deployments in the world?
- How will you know whether you are improving if you are not measuring your progress?

For more information about joining the Arch Collaborative, or to gain access to the full report, email ArchCollaborative@klasresearch.com. So that all organizations can participate, first-time measurement participation is free of charge.

We call upon all provider organizations to measure their performance, learn from industry leaders, and make the improvements that will enable EMR success.



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REPORT INFORMATION

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KLAS data and reports represent the combined opinions of actual people from provider organizations comparing how their vendors, products, and/or services performed when measured against participants' objectives and expectations. KLAS findings are a unique compilation of candid opinions and are real measurements representing those individuals interviewed. The findings presented are not meant to be conclusive data for an entire client base. Significant variables including organization/hospital type (rural, teaching, specialty, etc.), organization size, depth/breadth of software use, software version, role in the organization, provider objectives, and system infrastructure/network impact participants' opinions and preclude an exact apples-to-apples vendor/product comparison or a finely tuned statistical analysis.

We encourage our clients, friends, and partners using KLAS research data to take into account these variables as they include KLAS data with their own due diligence. For frequently asked questions about KLAS methodology, please refer to the KLAS FAQs.

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ABOUT KLAS:

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OUR MISSION:

KLAS' mission is to improve the delivery of healthcare technology by independently measuring and reporting on vendor performance.

NOTE:

Performance scores may change significantly when including newly interviewed provider organizations, especially when added to a smaller sample size like in emerging markets with a small number of live clients. The findings presented are not meant to be conclusive data for an entire client base.



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