Physician & Patient Satisfaction: Does IT Make a Difference?



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Turn Off the Computer and Listen to the Patient

The practice of medicine is a subtle art. Doctors need to give patients their undivided attention.

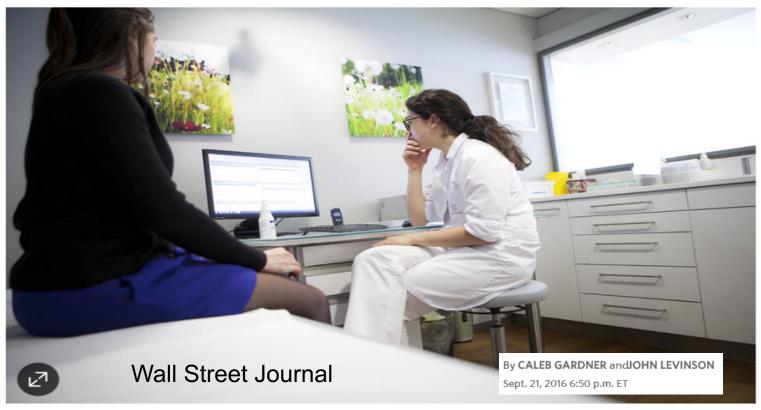
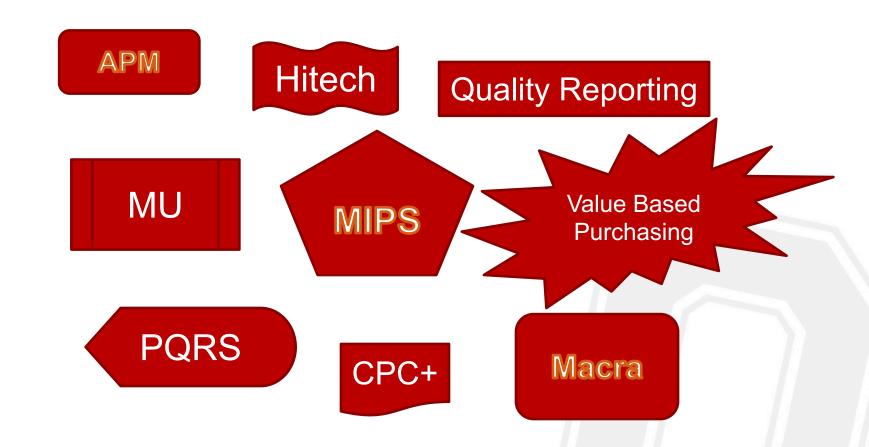


PHOTO: GETTY IMAGES

How did we get here? One cause is the development of third-party health-care financing, which grew out of the Great Depression and eventually led to the ascendance of insurance corporations with the ability to influence the clinical practice of hospitals. Similar economic forces have decimated private medical practice, as physicians become employees of hospitals and larger hospital systems. Medicine has become corporatized.







Physician Efficiency



Physician Survey: EHRs Increase Practice Costs, Reduce Productivity

October 3, 2016 by Heather Landi



Three out of four physicians believe electronic health records (EHRs) increase practice costs, outweighing any efficiency savings, and seven out of 10 think EHRs reduce their productivity, according to a Deloitte's recent 2016 Survey of U.S. Physicians.

The survey findings indicate that the majority of physicians hold negative perspectives on some aspects of EHRs, similar to a 2014 survey of physicians by Deloitte. However, the survey also found that physicians believe that EHRs are most useful for analytics and reporting capabilities compared to other attributes, such as supporting value-based care or improvements to clinical outcomes.

Researchers at the Deloitte Center for Health Solutions surveyed 600 primary care and specialty physicians on their attitudes and perceptions on a range of topics on the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), value-based payment models, consolidation, and health information technology (HIT).



Supports exchange of clinical information

- 70%
- 50%

Improves Clinical Outcomes

- 61%
- 40%

Reduces Productivity

- 72%
- 57%

- 80%
- 63%



Supports exchange of clinical information

- 70% Employed
- 50% Independent

Improves Clinical Outcomes

- 61%
- 40%

Reduces Productivity

- 72%
- 57%

- 80%
- 63%



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Ten Ways to Use Your EHR More Efficiently

By Aubrey Westgate Jan 9, 2015

Volume: 25

7. Train, train, and train again

Fully utilize all vendor training resources available to your practice, such as any webinars, whitepapers, or training modules. Otherwise, you might be overlooking key details that could help you better utilize the system, says Hopper. "I think a lot of practices are under the belief that when they go through implementation they're going to know everything they need to know about that software, which is never the case," she says. In fact, she says, "... It's almost impossible for that practice to learn that in a week's worth of training ..."

8. Stay up to date

Ensure that your practice is always aware of changes and improvements the vendor makes to the system. That way, you are always using it in the best ways, says Hopper. She recommends asking a "super user" to regularly review new information and guidance released by the vendor, such as information released through the user portal.



The Ohio State University EMR Satisfaction and Efficiency







Can I Improve EMR Satisfaction and Efficiency?

With over 10,000 evaluations collected to date across dozens of organizations, caregiver EMR users are providing clear feedback that they will be satisfied with the EMR when it meets their specific care-giving workflow needs. This research is busting the myth that EMR dissatisfaction is largely a result of factors outside the healthcare organization's control (user age, organization size, physician burnout, etc.).

This research is aimed at continual learning, but factors that have already been clearly identified to improve user efficient and satisfaction include:

- Effective, Ongoing Training: Training often means to physicians being locked in a room and learning a few things that might be
 helpful over the course of hours. The most effective organizations are finding ways to engage physicians early and often so that they
 learn for each other and training leaders. The link between training and EMR success is dramatic.
- EMR Personalization: The majority of EMR users accept and use the configuration that was handed to them along with their
 credentials. Users who take the time to personalize their EMR usage to their needs are 3 to 5 times more likely to be highly satisfied
 with their EMR.
- EMR Governance/Physician Engagement: Effective organizations have found ways to quickly incorporate end-user feedback into the EMR optimization process. Less effective organizations struggle to get anyone to show up to governance meetings.

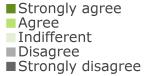
KLAS Trends after 3,500 Surveys

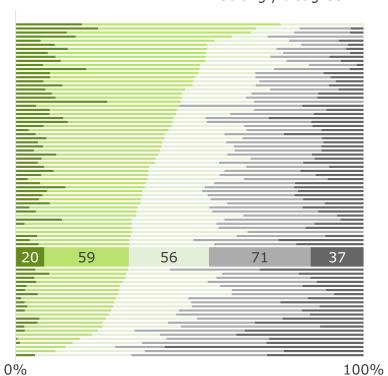
- The less efficient physicians are the most dissatisfied
- The older users are the least satisfied.
- Those who have used the EMR for several years are more satisfied ~ new users struggle.
- Those who use scribes are much more satisfied with the EMR.
- Physicians are far less satisfied with the EMR than are nurses or advanced practice providers.
- Physicians with great staffing ratios are the most happy with the EMR.
- Physicians who work a lot of hours are the least satisfied because the EMR slows them down the most.

KLAS Trends after 3,500 Surveys

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Agreement That EMR Is Easy to Learn Physicians only (n=9,206)





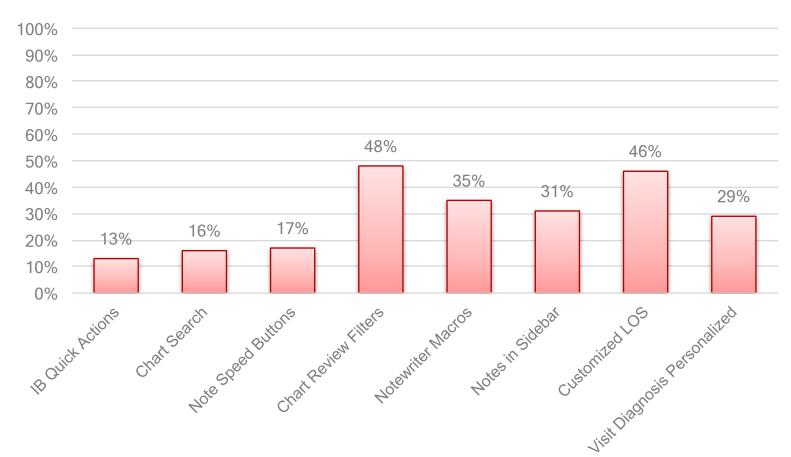
The Ohio State University

Importance of Training

Comments on Desired Improvements:

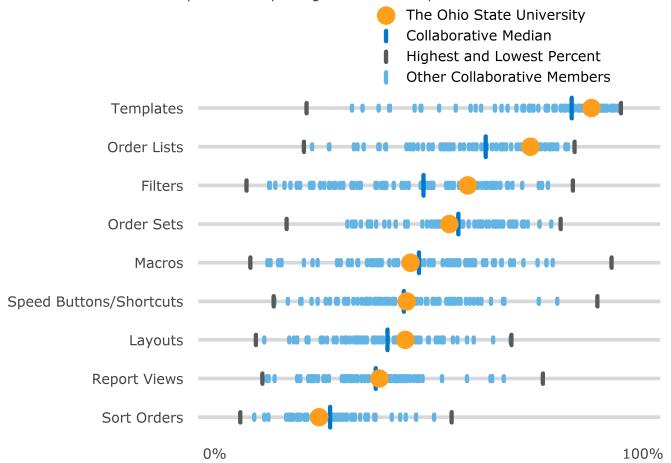
- "Autocorrect for spelling errors." Since 2008
- "Labs from outside vendors coming back to the in box." Since 2017
- "Ability to prioritize problem list and medication list." Since 2008
- "Integration with outside records from Mt. Carmel." Since 2016
- "Faster approval for smartlists." Can do they yourself since 2015
- "Ability to build own smartlists." Since 2015
- "Ability to personalize my order sets, smartlinks, and templates." Since 2015
- "As an APP I cannot enter home meds." Since 2011

EMR Personalization



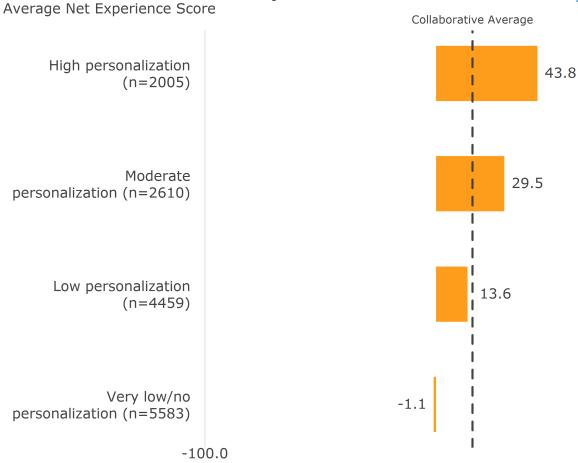
EMR Personalization Comparison

All clinicians. Percent of respondents reporting some effort in personalization.





100.0





Keys to EMR Success

National Collaborative Findings

- Mastery (Training): Everyone knows that training matters, but do we actually know? For training to be powerful . . .
 - The time matters: Newly hired physicians need more than six hours of initial training.
 - The quality matters: Clinicians learn best from clinicians, and the quality of trainers obviously matters.
 - Peer pressure helps: Training that is held during departmental meetings and led by physicians is one of the best methods of ongoing training.
 - Training users on how to get data *out* of the EMR matters as much as, or more than, training them on how to get data *into* the EMR.
- Control (Personalization): Level of EMR personalization is the best predictor of organizational clinician EMR satisfaction, with personalizations that <u>help users get data out of the EMR helping</u> the most.
- **Teamwork (Trust):** Organizational culture matters more than the EMR that is selected. Strong cultures have strong trust between IT/informatics and clinicians, and everyone works together to use technology to improve care. Successful organizations help users feel that they have control over their own success and avoid the temptation to blame all problems on the EMR vendor.

Physician Satisfaction

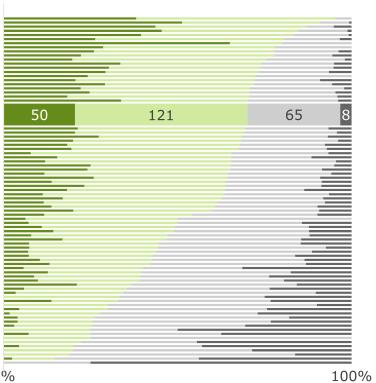


Overall EMR Satisfaction

Physicians only (n=9,386)

■ Very satisfied ■ Satisfied Dissatisfied ■ Very dissatisfied

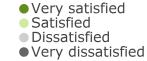


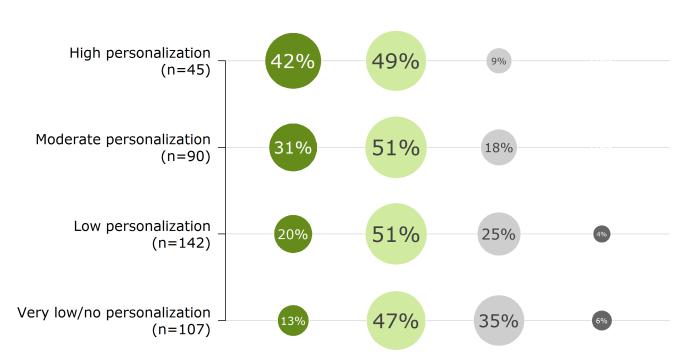


0%

Satisfaction—By Level of EMR Personalization

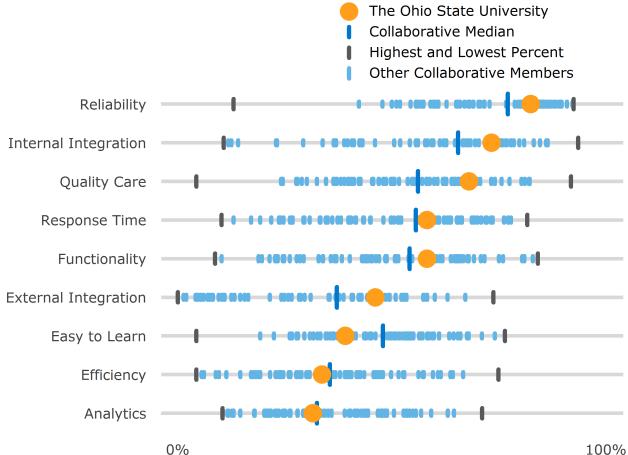
The Ohio State University. All clinicians.





EMR Satisfaction Comparison

All clinicians. Percent of respondents reporting satisfaction.



0%

Healthcare IT News

EHR satisfaction survey 2017: After years of frustrations, user wish-list turns positive

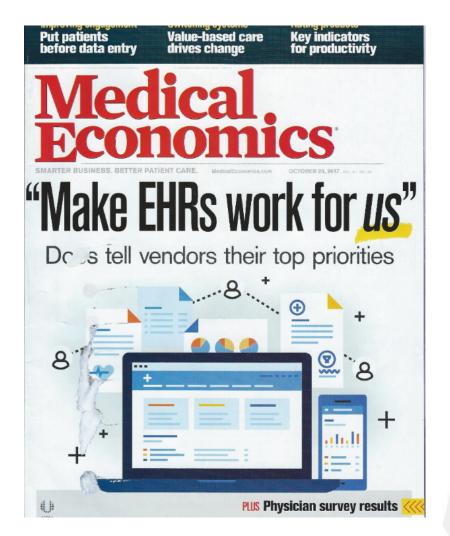
CIOs, clinical staff still want better interoperability and ease of use, but the focus is shifting to improving EHRs, not just fixing them.

By Mike Miliard | October 09, 2017 | 01:12 PM



When asked, "What was your overall satisfaction with the EHR system?" nearly 42 percent of respondents gave their system either an eight or nine on a scale of 1-10. More than 5 percent gave it the top "Most Satisfied" score.







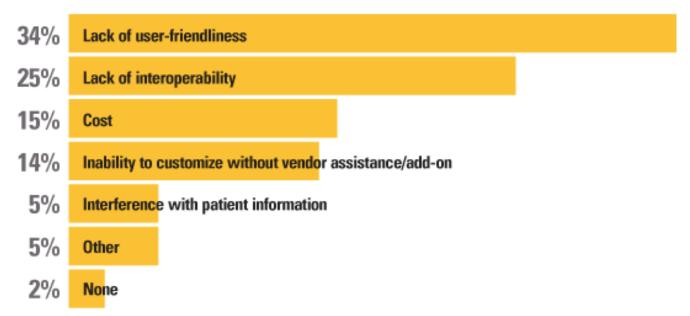
AVERAGE EHR PHYSICIAN USER

Does not plan to switch Works as a primary Has used 3 or more EHR systems in 2017 Works for independent practice care physician **EHR** systems Works in a practice Biggest EHR benefit: Biggest EHR fault(s): with 1-5 physicians e-prescribing . Too much data entry · Not user friendly Has used EHR systems Feels just OK about for 6.2 years their EHR: 3.2 average on 1-5 scale. Would recommend their EHR to a colleague **EHR** Improvement "Wish list" Better... switched in the past, it was due to Customization change in practice / employment · Quality metrics Vendor support Effects on patients: 48% harmed patient engagement •51% harmed patient interaction Not concerned about data security *Bata based on majority replies in 2017 EHR Report

2017 EHR Report AVERAGE EHR PHYSICIAN USER Does not plan to switch Works as a primary Has used 3 or more EHR systems in 2017 Works for independent practice care physician EHR systems Works in a practice Biggest EHR benefit: Biggest EHR fault(s): with 1-5 physicians e-prescribing . Too much data entry · Not user friendly Has used EHR systems Feels just OK about for 6.2 years their EHR: 3.2 average on 1-5 scale. Would recommend their EHR to a colleague **EHR Improvement** "Wish list" Better... switched in the past, it was de Customization change in practice / employment · Quality metrics Vendor support Effects on patients: 48% harmed patient engagement •51% harmed patient interaction Not concerned about data security

*Bata based on majority replies in 2017 EHR Report

• In your opinion, what is the biggest problem with EHR systems across the marketplace?



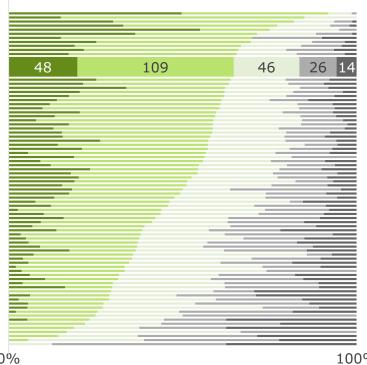


Agreement That EMR Enables Quality Care

Physicians only (n=9,235)

■Strongly agree Agree Indifferent ■Disagree ■Strongly disagree

The Ohio State University



0% 100%

Patient Satisfaction



How Does Physician EHR Use Affect Patient Satisfaction Levels?

By putting a computer screen between a providers communicating with their patients, EHRs may pose challenges in boosting patient satisfaction.







ORIGINAL RESEARCH

EHR use and patient satisfaction: What we learned

In this study, how much time a physician spent looking at the patient predicted greater patient satisfaction. Overall, however, patients were highly satisfied with their physicians despite high EHR usage. Neil J. Farber, MD: Lin Liu, PhD; Yunan Chen, PhD; Alan Calvitti, PhD; Richard L. Street, Jr., PhD: Danielle Zuest, MA: Kristin Bell, MD: Mark Gabuzda, MD; Barbara Gray, MA; Shazia Ashfaq, MD, MBA; Zia Agha, MD, MS University of California, San Diego (Drs. Farber, Liu, Calvitti, and Agha); University of California, Irvine (Dr. Chen); Texas A&M University, Dallas (Dr. Street); Veterans Medical Research Foundation, La. Jolla, Calif (Mss. Zuest and Gray); VA San Diego Healthcare System (Drs. Bell, Gabuzda, and Ashfaq)



TABLE 2
Patient satisfaction scores*

Domain	Mean (SD)	Median (range)
Patient-centered communication	4.52 (0.51)	4.69 (2.06-5)
Physician clinical skills	4.71 (0.56)	5 (1.67-5)
Physician interpersonal skills	4.86 (0.32)	5 (3-5)
Total	4.64 (0.38)	4.77 (2.74-5)

SD, standard deviation.



^{*}Scale of 1 to 5, with 1=least satisfied and 5=most satisfied.

TABLE 3

Physician EHR usage and gaze time at EHR and patient per visit

	Mean (SD)	Median (range)		
Visit length (min)	30.7 (11.5)	29.2 (8.68-68.2)		
EHR mouse click/scroll count	192 (150)	156 (0-685)		
Gaze at EHR				
Time (min)	12.7 (8.22)	10.1 (1.38-36.1)		
Percentage of time over whole visit (%)	39.4 (16.9)	34.9 (6.8-81.3)		
Gaze at patient				
Time (min)	10.8 (5.63)	10.5 (1.19-27.3)		
% of time over whole visit	36.3 (16.5)	35 (5-76.1)		

EHR, electronic health record; SD, standard deviation.



Association between patient satisfaction and EHR use and gaze time

	Coefficients (beta)	P value
Patient-centered communication	•	-
EHR mouse click/scroll count	0.0004	.34
Gaze at EHR	-	
Time (min)	0.002	.80
Percentage of time over the visit	-0.364	.24
Gaze at patient	*	
Time (min)	0.02	.02
Percentage of time over the visit	0.483	.12
Physician clinical skill	-	
EHR mouse click/scroll count	0.0001	.86
Gaze at EHR		
Time (min)	-0.0004	.95
Percentage of time over the visit	-0.239	.47
Gaze at patient	*	-
Time (min)	0.008	.39
Percentage of time over the visit	0.251	.46
Physician interpersonal skill	-	
EHR mouse click/scroll count	0.0002	.24
Gaze at EHR		
Time (min)	0.003	.42
Percentage of time over the visit	-0.085	.64
Gaze at patient	-	
Time (min)	0.013	.017*
Percentage of time over the visit	0.225	.22
Total satisfaction	-	
EHR mouse click/scroll count	0.0003	.34
Gaze at EHR		
Time (min)	0.0024	.63
Percentage of time over the visit	-0.210	.37
Gaze at patient		
Time (min)	0.014	.027
Percentage of time over the visit	0.286	.23

EHR, electronic health record.

* Sensitivity analysis has been done by dichotomizing the subscales (5 vs <5).

 \dagger P value changed from .017 to .12 while dichotomizing the subscale of physician interpersonal skill.



Patient Satisfaction With Electronic Health Record Use by Primary Care Nurse Practitioners

Mysen, Katie L. DNP, APRN, FNP-BC; Penprase, Barbara PhD, RN, CNE, ANEF; Piscotty, Ronald PhD, RN-BC

CIN: Computers, Informatics, Nursing: March 2016 - Volume 34 - Issue 3 - p 116-121

doi: 10.1097/CIN.0000000000000218

Feature Articles





Author Information

Article Outline

The purpose of this research study was to determine if satisfaction and communication between the patient and the nurse practitioner are affected by allowing patients to view their electronic health records during the history portion of the primary care office visit compared with patients who do not view their records. A cross-sectional, experimental design was utilized for this study. The intervention group was shown several components of the electronic health record during the history portion of the nurse practitioner assessment. This group's scores on a patient satisfaction survey were compared with those of the control group, who were not shown the electronic health record. The study findings suggest that the introduction of the electronic health record does not affect patients' satisfaction related to the office visit by the nurse practitioner.



The Use of Electronic Health Records in the Exam Room and Patient Satisfaction: A Systematic Review

Jihad S. Irani, MD, MPH, Jennifer L. Middleton, MD, MPH, Ruta Marfatia, MD, Evelyn T. Omana, MD, and Frank D'Amico, PhD

Background: Physicians may hesitate to implement electronic health record (EHR) systems because they fear a decrease in patient satisfaction. We conducted a systematic review to determine whether physician EHR use in the patient room affects patient satisfaction.

Methods: We searched the literature using MEDLINE (Ovid), EMBASE, CINAHL, Cochrane Library, PsycINFO, Proceedings First, and ProQuest Digital Dissertations. Our inclusion criteria were a description of physician EHR use in the examination room, EHR use in an outpatient setting, setting in the United States, publication year no earlier than 2000, and measurement of patient satisfaction. We included both qualitative and quantitative research. We included 7 articles in the final analysis: 3 cross-sectional, and 4 pre-design and post-design.

Results: Several studies had methodological concerns. Six studies found that physician EHR use had either a positive or neutral effect on patient satisfaction. One study found a negative effect on the physicians' perception of patient satisfaction. The reported statistical results from these studies were not homogenous enough for meta-analysis.

Conclusion: Studies examining physician EHR use have found mostly neutral or positive effects on patient satisfaction, but primary care researchers need to conduct further research for a more definitive answer. (J Am Board Fam Med 2009;22:553–562.)



Perspect Health Inf Manag. 2017 Winter; 14(Winter): 1g.
Published online 2017 Jan 1

Ambulatory Care: A Study of

Working with an Electronic Medical Record in Ambulatory Care: A Study of Patient Perceptions of Intrusiveness

Milisa K Rizer, MD, MPH, professor of family medicine and biomedical informatics, <u>Cynthia Sieck</u>, PhD, MPH, assistant professor of family medicine, <u>Jennifer S. Lehman</u>, clinical research manager, <u>Jennifer L. Hefner</u>, PhD, MPH, assistant professor of family medicine, <u>Timothy R. Huerta</u>, PhD, MS, associate professor of family medicine and biomedical informatics, and <u>Ann Scheck McAlearney</u>, ScD, MS, professor and vice chair for research

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Abstract

Go to: ☑

PMCID: PMC5430115

PMID: 28566996

Objective

To assess patient perceptions of electronic medical record (EMR) intrusiveness during ambulatory visits to clinics associated with a large academic medical center.

Method

We conducted a survey of patients seen at any of 98 academic medical center clinics. The survey assessed demographics, visit satisfaction, computer use, and perceived intrusiveness of the computer.

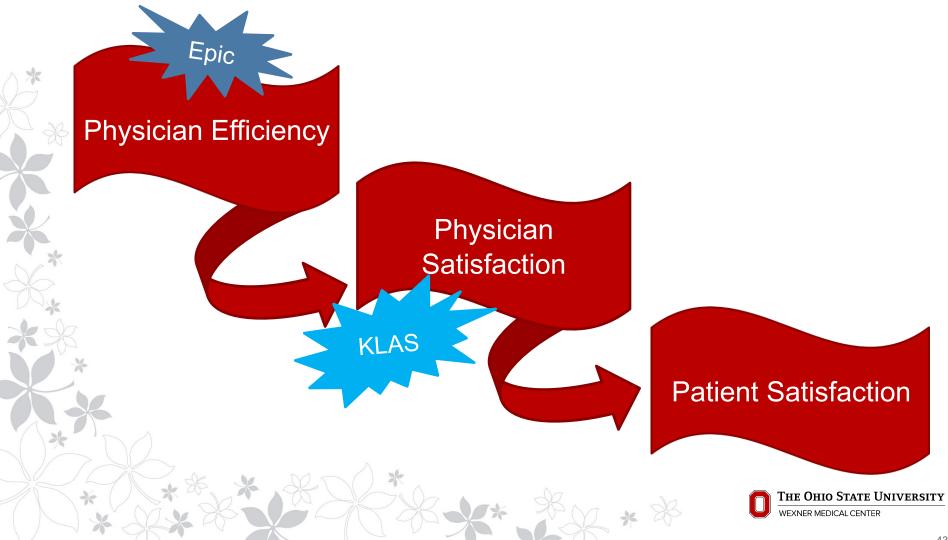
Results

Of 7,058 patients, slightly more than 80 percent reported that the physician had used the computer while in the room, but only 24 percent were shown results in the EMR. Most patients were very satisfied or satisfied with their visit and did not find the computer intrusive (83 percent). Younger respondents, those shown results, and those who reported that the physician used the computer were more likely to perceive the computer as intrusive. Qualitative comments suggest different perceptions related to computer intrusiveness than to EMR use more generally.



Does EMR Efficiency Have an Impact on Patient Satisfaction Performance?





Physician & Patient Satisfaction: Does IT Make a Difference?

