TMA's 2023 Health IT Survey

Executive Summary

The Texas Medical Association has tracked Texas physician use and satisfaction with electronic health records (EHR) and health information technology (HIT) since 2012. The results are used to determine new programs to offer members and support their HIT needs.

This year was the first year since 2012 the percentage of physicians using an EHR has remained the same, suggesting EHRs may have been maximally adopted among Texas physicians. Epic continued to be the most used system, likely due to its use by local hospitals and the ability to integrate with them. Overall, only half of the physicians who responded to this survey were satisfied with their EHR. Physicians reported their EHR lacked needed functions. Moreover, 4 in 10 physicians saw adverse impacts on patient safety or care quality due to an EHR, primarily too much information that obscured important information and interference in the patient-physician relationship. Most physicians agreed using an EHR interferes with attentiveness to the patient.

While physicians were concerned about the negative effects on patient safety and care from EHRs, many more reported positive impacts, particularly improved accessibility, and legibility. Overall physicians said the benefits of using EHRs outweigh the risks.

These results suggested efforts to increase the adoption of EHRs have likely been achieved and efforts should focus instead on increasing physician satisfaction with their EHRs and reducing negative effects on patient care. This may include feature development and simplifying the amount of information displayed that obscures important information and distracts physicians' attention from patients. There may be an opportunity for TMA to work with vendors to share physician needs and advocate for physicians at the federal level.
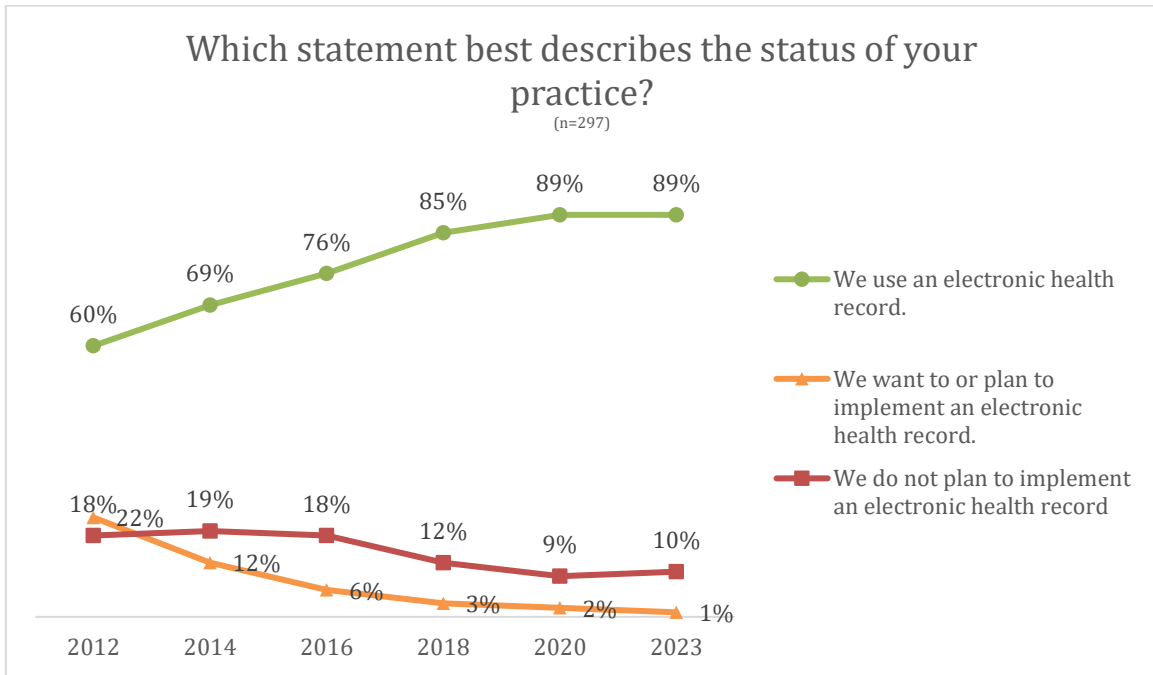
Introduction

Every two years, the Texas Medical Association (TMA) surveys Texas physicians on HIT to measure and benchmark physician use of and satisfaction with EHR systems and related technology. Survey results provide data to track EHR use and answer key questions to influence HIT policy and improve physician resources.

All licensed Texas physicians were invited to participate in the survey through Texas Medicine Today, TMA's email newsletter, and through email. We received 297 responses from March 14 – April 14, 2023. According to January 2023 statistics from the Texas Medical Board, there were 71,941 licensed physicians in the state giving us a 6% margin of error.

Results

Electronic Health Record Use

This was the first year the percentage of physicians using an EHR remained the same as when this question was last asked in 2020. Practice adoption of EHRs appears to have stabilized. The 10% of physicians who do not plan to implement an EHR may be in administrative or non-clinical roles. While continued monitoring of this trend will reveal if that is the case, rather than encouraging physician adoption of EHRs, it may be time for policymakers to encourage vendors to improve their systems so physicians and their patients can maximize the benefits of EHR use.

Which statement best describes the status of your practice?
(n=297)

Legend:
- We use an electronic health record.
- We want to or plan to implement an electronic health record.
- We do not plan to implement an electronic health record

We use an electronic health record: 60% (2012), 69% (2014), 76% (2016), 85% (2018), 89% (2020), 89% (2023)

We want to or plan to implement an electronic health record: 18% (2012), 12% (2014), 6% (2016), 3% (2018), 2% (2020), 1% (2023)

We do not plan to implement an electronic health record: 22% (2012), 19% (2014), 18% (2016), 12% (2018), 9% (2020), 10% (2023)

Electronic Health Record System

The vendors used by physicians in their primary practice also remained consistent with previous years. Nearly a quarter of physicians continued to use Epic. Epic is an established solution for hospitals and large physician practices. Physicians may be choosing Epic for its integration capability.
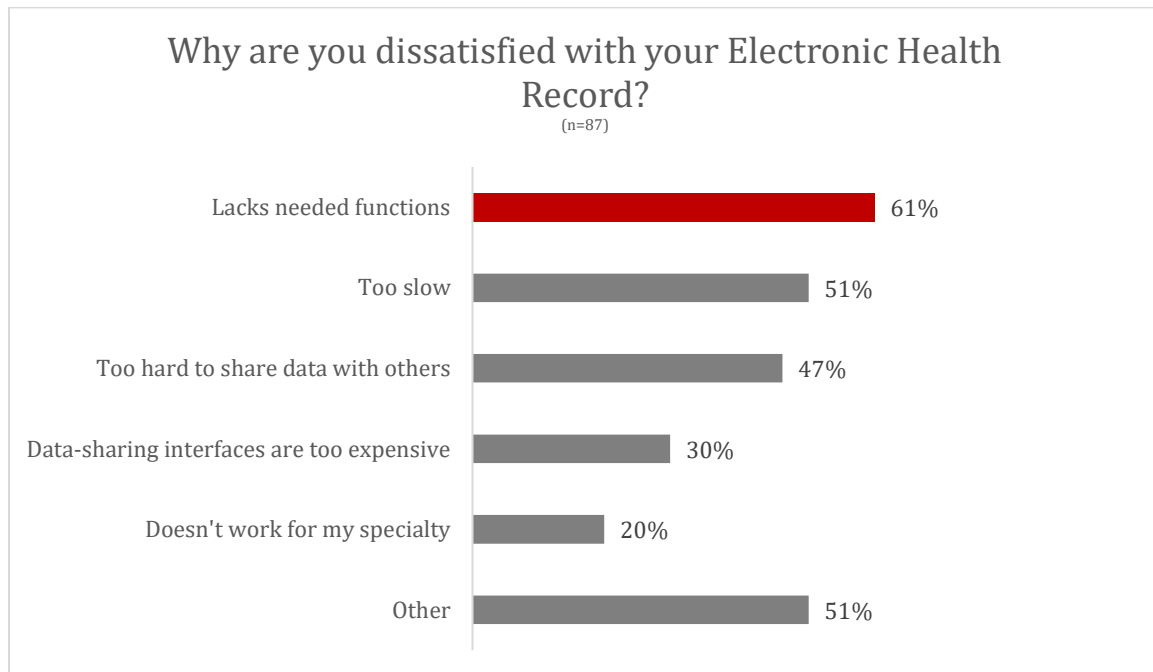

Which EHR system are your using in your primary place of practice?
(n=257)
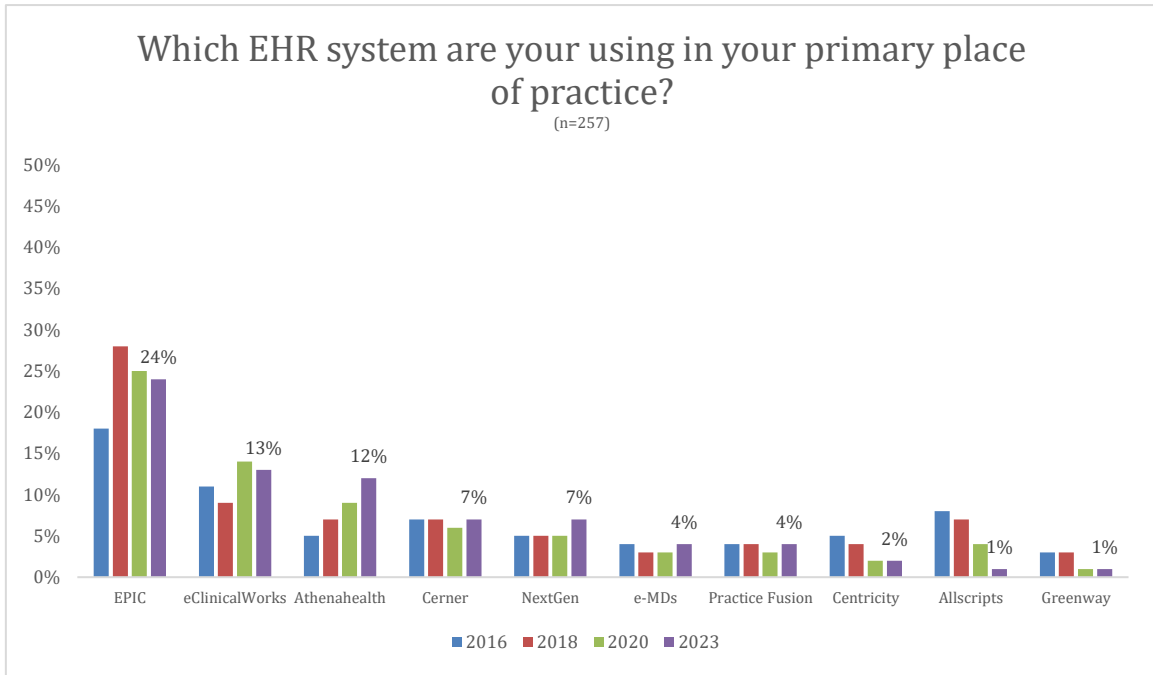
Electronic Health Record System Satisfaction

Overall, 53% of physicians were somewhat or very satisfied with their EHR. The percentage of physicians who were satisfied with their EHR decreased since 2020, again suggesting emphasis should be placed on the improvement of EHR systems rather than physician adoption of systems.

How satisfied are you with your EHR system in your primary place of practice?
(n=257)
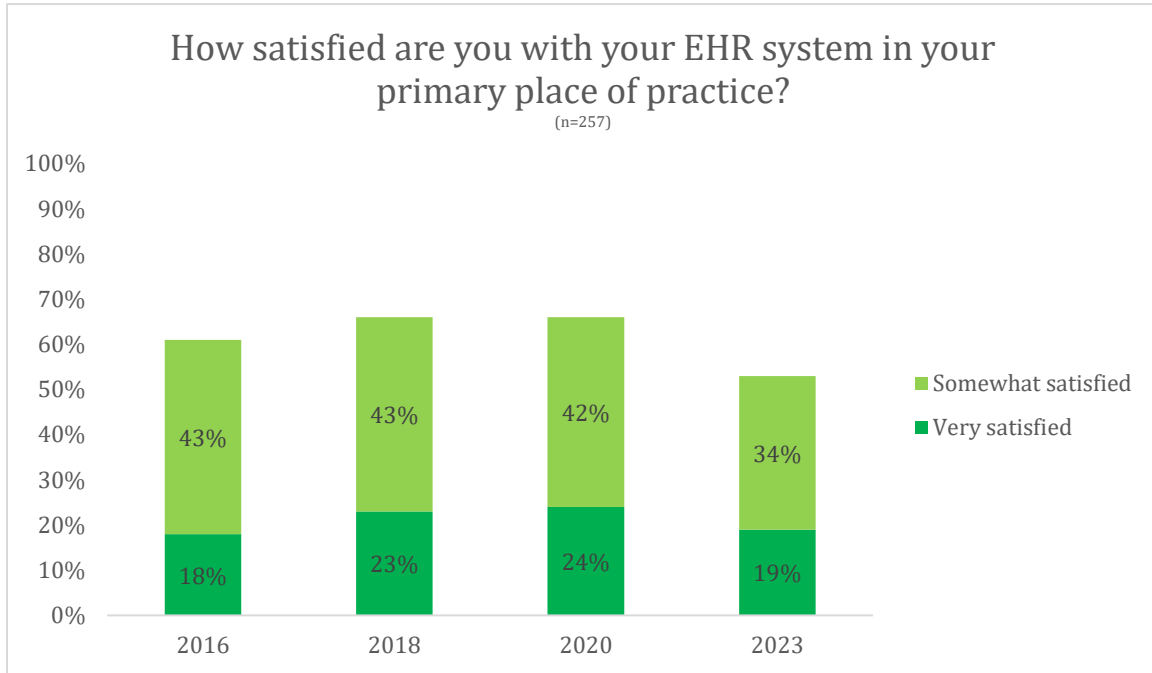
There were not enough responses to determine perceived satisfaction by the system used by physicians.

As in years past, the largest percentage of physicians who were dissatisfied with their EHRs reported they lacked needed functions.

Why are you dissatisfied with your Electronic Health Record?
(n=87)

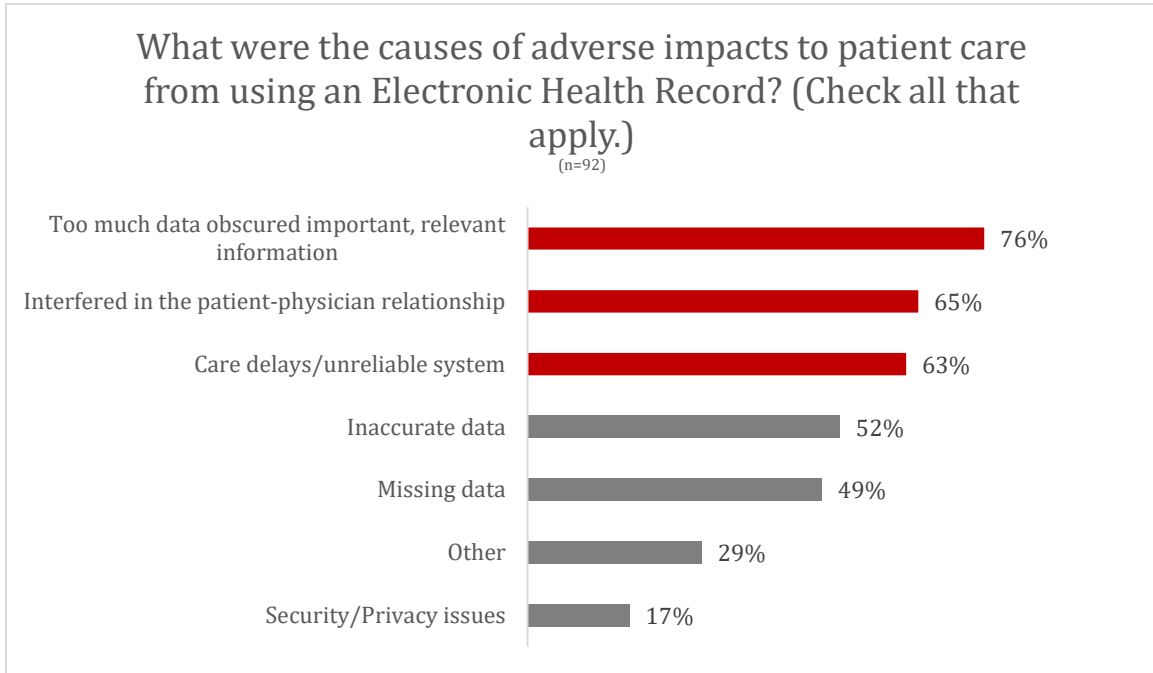| Reason	Percentage
Lacks needed functions	61%
Too slow	51%
Too hard to share data with others	47%
Data-sharing interfaces are too expensive	30%
Doesn't work for my specialty	20%
Other	51%

EHR vendors should focus on feature development rather than incremental improvements in design and functionality. There may be an opportunity for TMA to work with EHR vendors and share physician needs regarding EHR functionality. More research is needed to determine which functions are needed and should be prioritized by vendors.
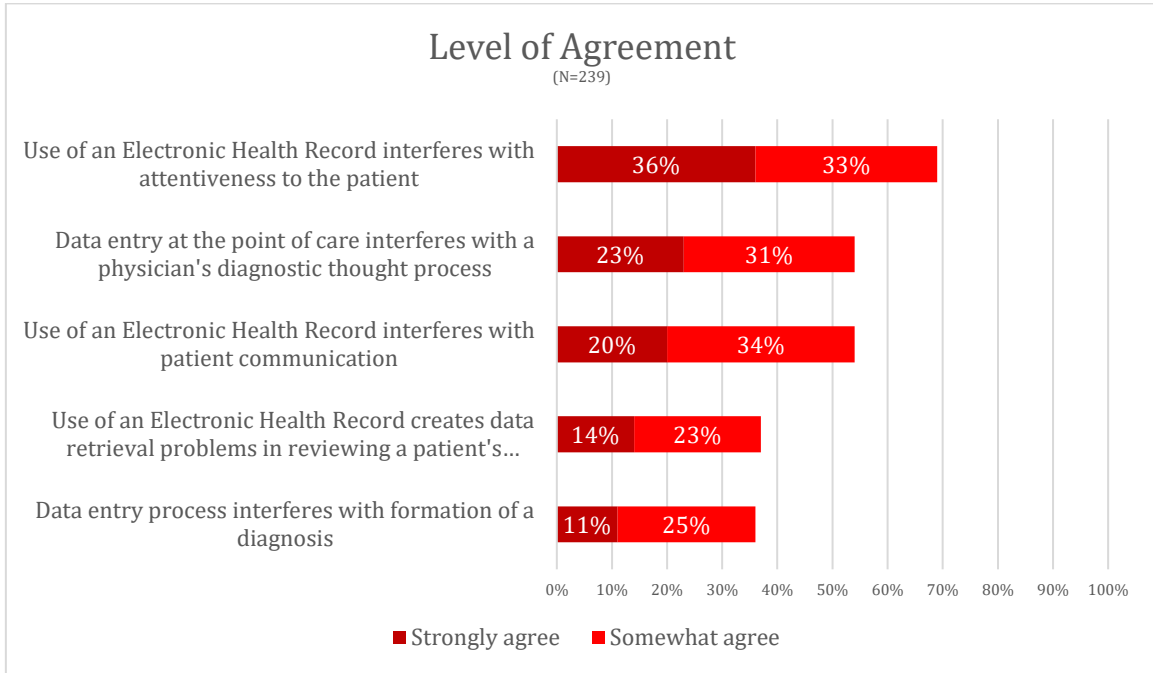
Approximately half of the physicians reported other reasons for dissatisfaction, including too many clicks and redundancies that make the EHR cumbersome.

- "**Too many clicks**, too much time wasted, Poor voice-to-text processing."
- "**Too many clicks**, unable to customize for my practice, **too much on the screen** at a time…"
- "**Too clunky** to use, too much noise, it tries to be everything to everybody and fails. **Too many clicks**."
- "**Not intuitive/user-friendly**, time-consuming, error-prone…"
- "**Template structure of platform cumbersome** and not nimble..."
- "**Extremely cumbersome to use**, typical of any program which did not consider the user's aspects."
- **Too many clicks. Too many reminders. Too much secretarial work. Too little patient contact**

39% of physicians reported the safety or quality of patient care was adversely impacted by using an EHR (up from 30% in 2020). The most frequently cited cause of adverse impacts on care was too much data that obscured important information (75%). Interference in the patient-physician relationship (65%) and care delays/unreliable system (63%) were also frequently cited as causes of adverse care to patients as well.

What were the causes of adverse impacts to patient care from using an Electronic Health Record? (Check all that apply.)
(n=92)

Category	Percentage
Too much data obscured important, relevant information	76%
Interfered in the patient-physician relationship	65%
Care delays/unreliable system	63%
Inaccurate data	52%
Missing data	49%
Other	29%
Security/Privacy issues	17%

A large majority of physicians (69%) strongly or somewhat agreed using an EHR interferes with attentiveness to the patient, which is likely interfering with the patient-physician relationship.

Level of Agreement
(N=239)

Statement	Strongly agree	Somewhat agree
Use of an Electronic Health Record interferes with attentiveness to the patient	36%	33%
Data entry at the point of care interferes with a physician's diagnostic thought process	23%	31%
Use of an Electronic Health Record interferes with patient communication	20%	34%
Use of an Electronic Health Record creates data retrieval problems in reviewing a patient's...	14%	23%
Data entry process interferes with formation of a diagnosis	11%	25%

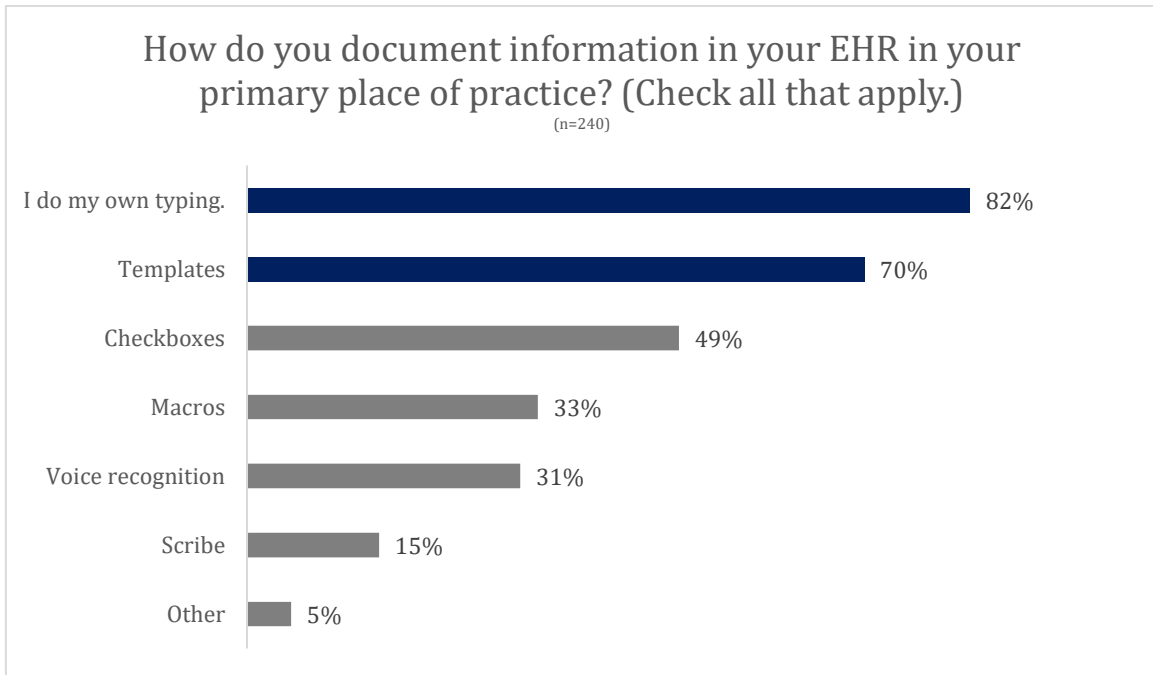■ Strongly agree   ■ Somewhat agree

While there are clearly deleterious effects from using an EHR, 60% of physicians reported the safety or quality of patient care was improved by using an EHR, primarily due to a more legible and accessible medical record (83%)

What were the causes of improved patient safety or care from using an Electronic Health Record? (Check all that apply.)
(N=145)

Cause	Percent
Medical record was more legible	83%
Medical record was accessible	83%
Improved prescription management	63%
An alert or reminder	59%
Medical record was more thorough	51%
Care was better coordinated	43%
Other	3%
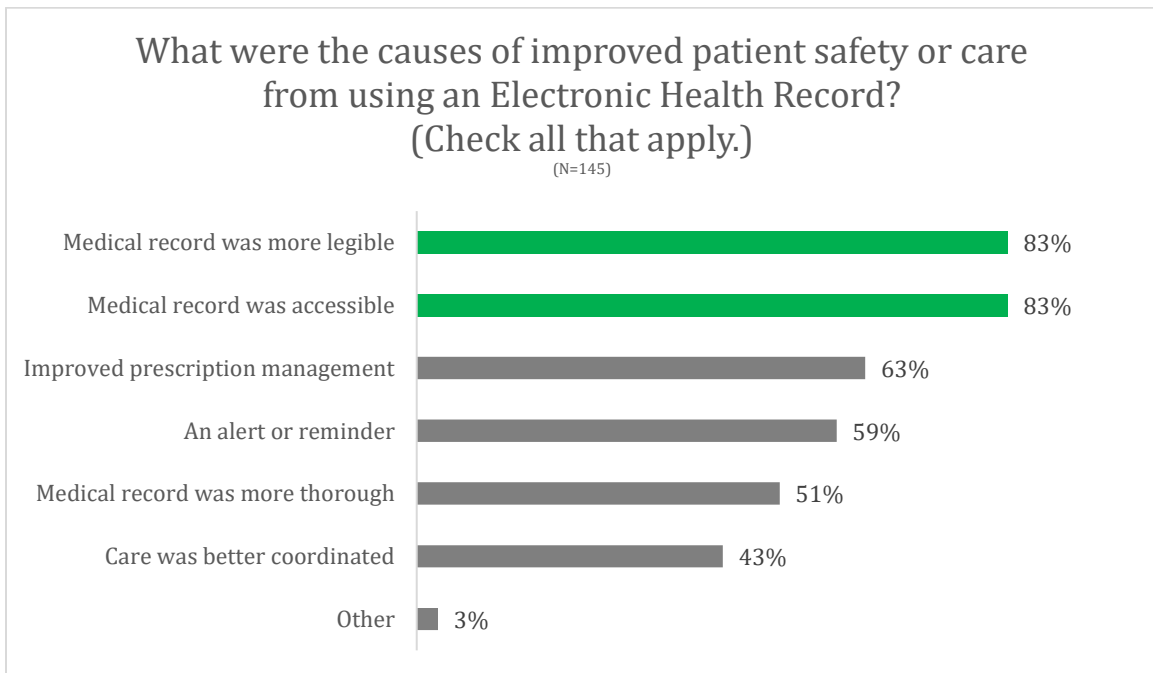
Overall, 62% of physicians agreed patient safety and care quality benefits outweigh the risks to patient safety and care quality.

Electronic Health Record Documentation

As in previous years, most physicians do their own typing (82%) to document information in their EHR and/or use templates (70%).

How do you document information in your EHR in your primary place of practice? (Check all that apply.)
(n=240)

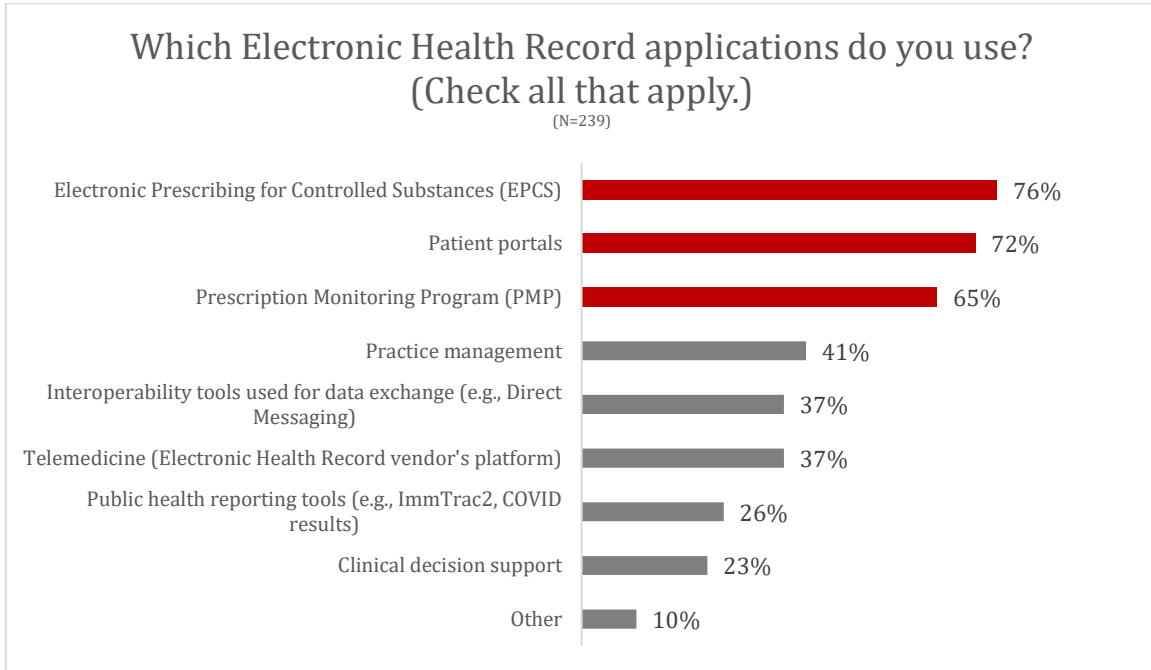|	
I do my own typing.	82%
Templates	70%
Checkboxes	49%
Macros	33%
Voice recognition	31%
Scribe	15%
Other	5%

Troubleshooting

71% of physicians have staff in their practice designated to troubleshoot EHR issues. More research is needed to determine who provides the technical support and how much of their time is spent troubleshooting EHR issues.

EHR System Switching

Consistent with previous surveys, 12% of physicians reported changing their EHR system in their primary place of practice in the past two years. 28% reported the decision to switch systems was made by them.
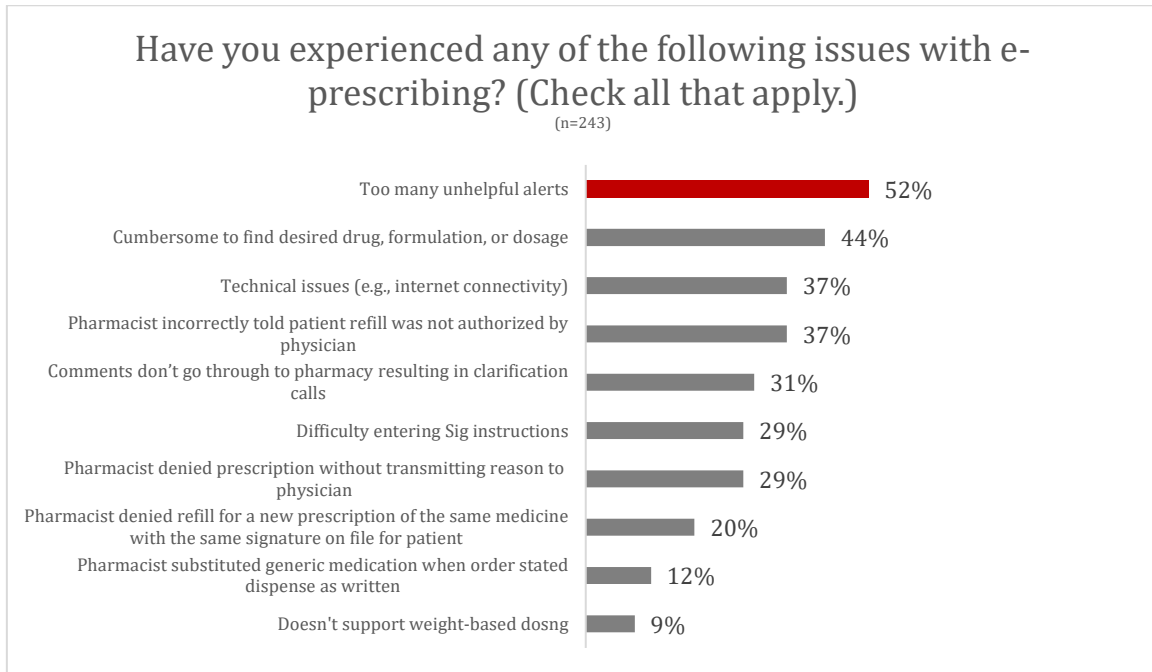
Electronic Health Record Applications

Most Texas physicians are using Electronic Prescribing for Controlled Substances (EPCS), patient portals, and the Prescription Monitoring Program (PMP) through their EHR.

Which Electronic Health Record applications do you use?
(Check all that apply.)
(N=239)

Application	Percentage
Electronic Prescribing for Controlled Substances (EPCS)	76%
Patient portals	72%
Prescription Monitoring Program (PMP)	65%
Practice management	41%
Interoperability tools used for data exchange (e.g., Direct Messaging)	37%
Telemedicine (Electronic Health Record vendor's platform)	37%
Public health reporting tools (e.g., ImmTrac2, COVID results)	26%
Clinical decision support	23%
Other	10%

E-prescribing

Among physicians who experienced issues with e-prescribing, 52% received too many unhelpful alerts.

Have you experienced any of the following issues with e-prescribing? (Check all that apply.)
(n=243)

Issue	Percentage
Too many unhelpful alerts	52%
Cumbersome to find desired drug, formulation, or dosage	44%
Technical issues (e.g., internet connectivity)	37%
Pharmacist incorrectly told patient refill was not authorized by physician	37%
Comments don't go through to pharmacy resulting in clarification calls	31%
Difficulty entering Sig instructions	29%
Pharmacist denied prescription without transmitting reason to physician	29%
Pharmacist denied refill for a new prescription of the same medicine with the same signature on file for patient	20%
Pharmacist substituted generic medication when order stated dispense as written	12%
Doesn't support weight-based dosng	9%

Information Blocking Requirements

Most physicians (76%) used a patient portal to share information with patients to meet Information Blocking requirements as part of the 21st Century Cures Act.
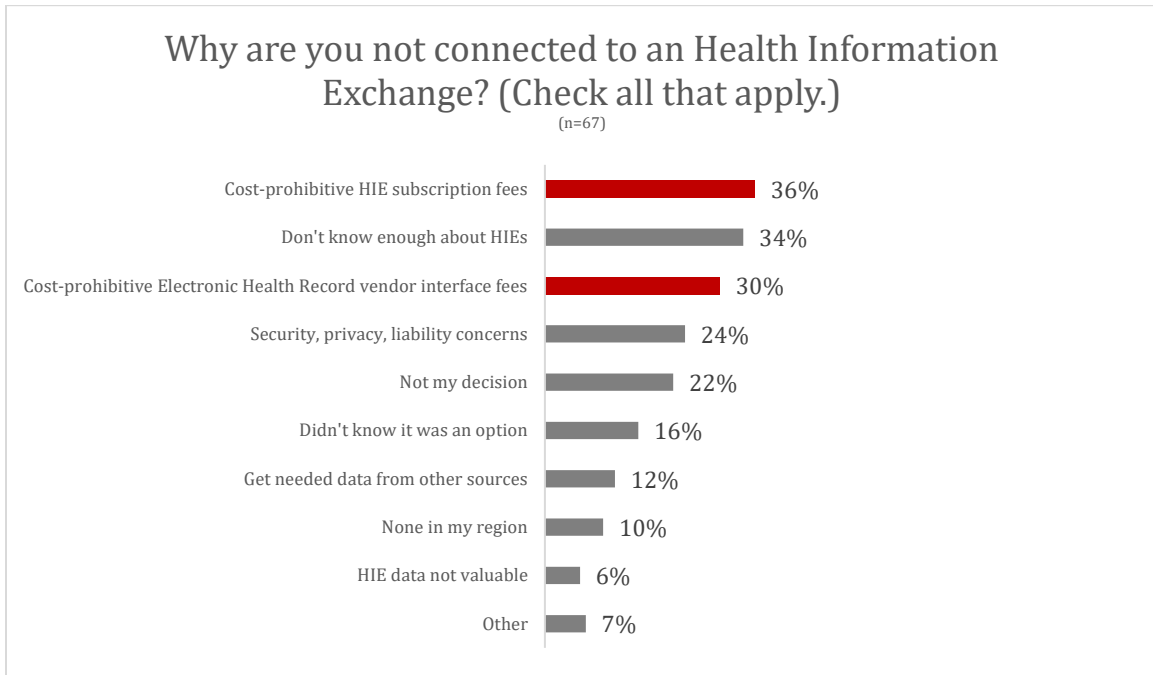
How are you sharing information with patients to meet the Information Blocking requirements part of the 21st Century Cures Act
(n=228)

Patient portal	Print	Other	Patient's 3rd party health application
76%	36%	12%	2%
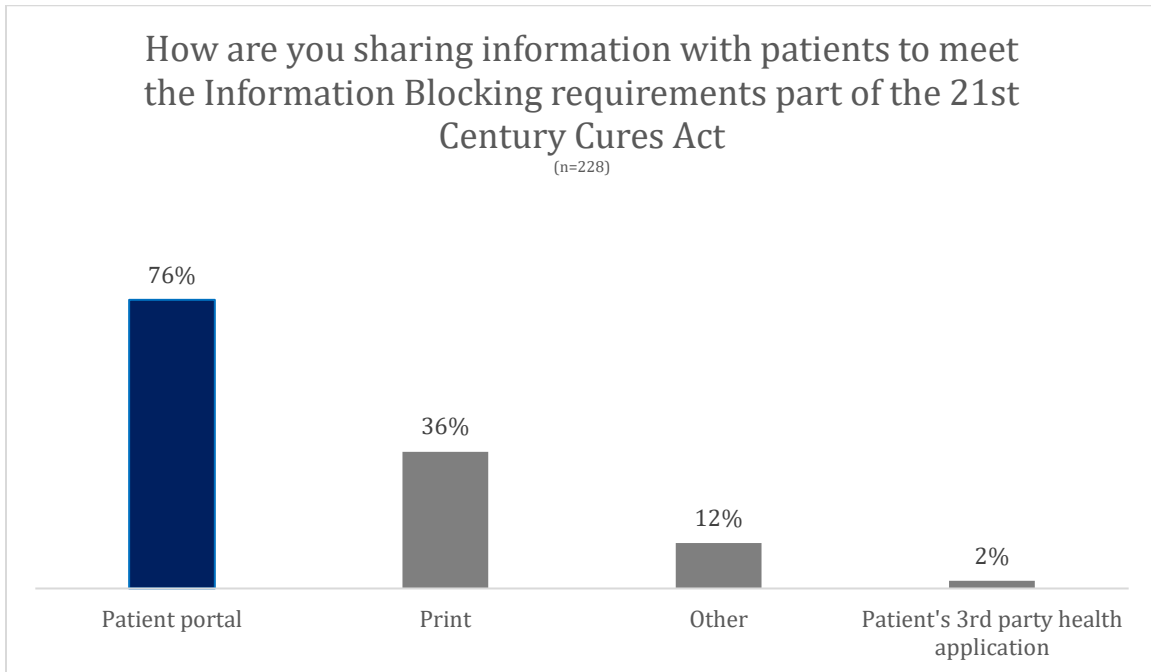
Telemedicine

75% of physicians used telemedicine and, on average 10% of their annual visits are conducted via telemedicine.

Health Information Exchanges

Health Information Exchanges (HIEs) allow secure electronic access and sharing of patient information. When this question was asked in 2018, a quarter of Texas physicians were connected to an HIE. Today 60% of physicians reported they were connected to one.
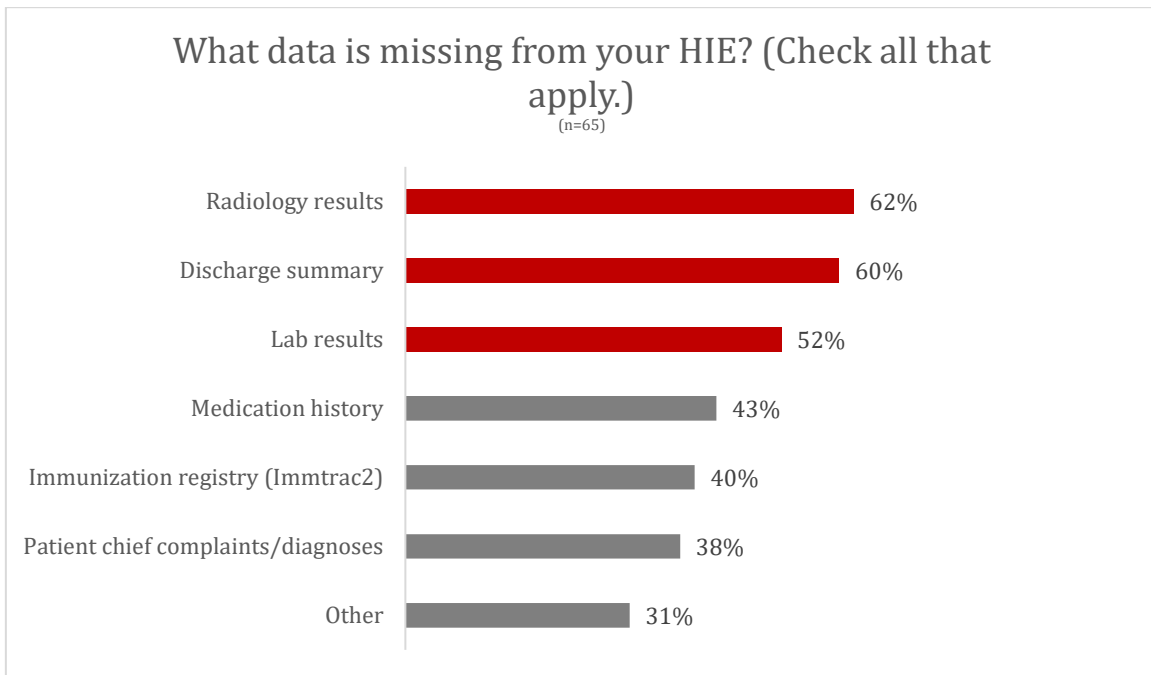
Health Information Exchanges (HIEs) allow secure electronic access and sharing of patient information. Are you connected to an HIE?

26%   2018

60%   2023
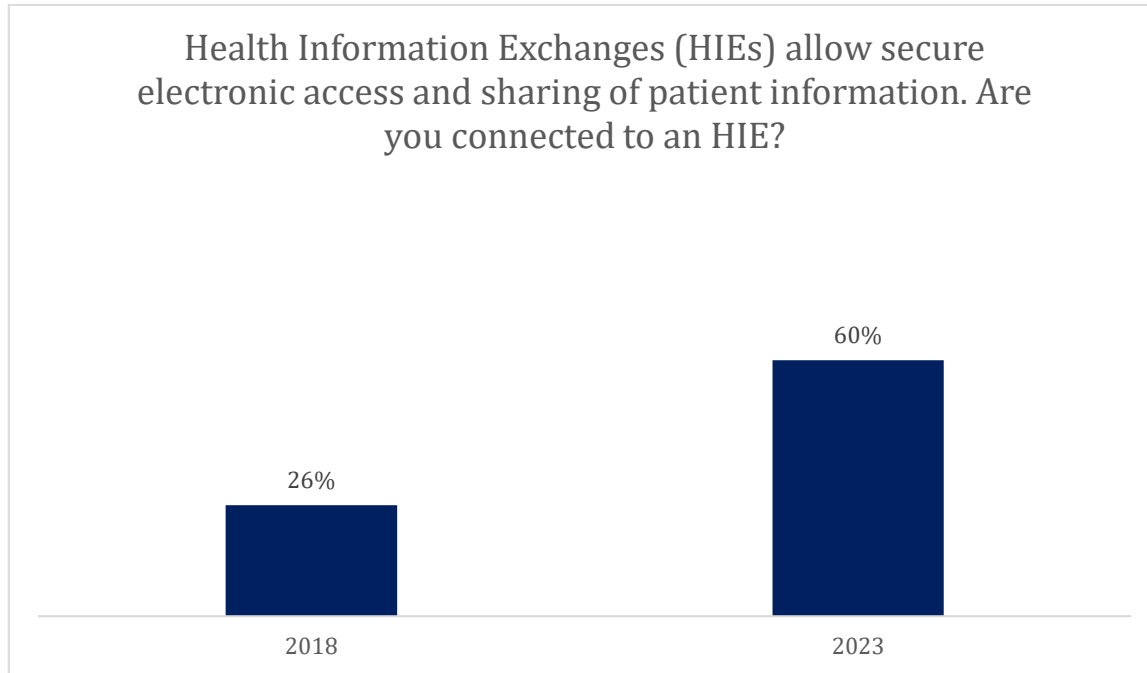
Among physicians not connected to an HIE, the costs were most frequently cited as the reasons. Costs of the HIE subscription fees and costs of EHR vendor fees were reported by 36% and 30% of physicians respectively.

Why are you not connected to an Health Information Exchange? (Check all that apply.)
(n=67)

Reason	Percentage
Cost-prohibitive HIE subscription fees	36%
Don't know enough about HIEs	34%
Cost-prohibitive Electronic Health Record vendor interface fees	30%
Security, privacy, liability concerns	24%
Not my decision	22%
Didn't know it was an option	16%
Get needed data from other sources	12%
None in my region	10%
HIE data not valuable	6%
Other	7%

Physicians who reported HIEs as cost-prohibitive likely don't see the value in connecting to an HIE. Additionally, 24% of physicians had security, privacy, and liability concerns.

Most physicians (69%) reported were not able to access all the data they needed through the HIE when treating patients. Physicians reported missing radiology results (62%), discharge summaries (60%), and lab results (52%).

What data is missing from your HIE? (Check all that apply.)
(n=65)

Category	Percentage
Radiology results	62%
Discharge summary	60%
Lab results	52%
Medication history	43%
Immunization registry (Immtrac2)	40%
Patient chief complaints/diagnoses	38%
Other	31%

Data Security

In the past two years, 6% of physicians reported their practice experienced a data breach and 5% of physicians reported a ransomware attack (data encrypted until the ransom was paid), which was consistent with previous surveys. Physicians whose practice experienced a ransomware attack did not know (69%) or did not pay (31%) the ransom.

Discussion

EHRs are here to stay, and most Texas physicians have adopted them and were satisfied with them. They appreciated the improved flexibility and legibility of records have had on patient care. However, there remain opportunities to improve EHRs, including improving the functionality and simplifying to reduce clicks, redundancies, and the amount of data that distracts from patient care. Efforts should shift from increasing adoption to improving EHR functionality and simplifying interfaces so technology's promise of efficiency can be realized.

Survey Questionnaire

2023 HIT Survey

Q1. Which statement best describes the status of your practice? * (Required)

○ We use an EHR.

○ We want to implement or plan to implement an EHR.

○ We do not plan to implement an EHR.

Q2. Which EHR system are you using in your primary place of practice?

○ Allscripts

○ Athenahealth

○ Centricity

○ Cerner

○ e-MDs

○ eClinicalWorks

○ EPIC

○ Greenway

○ NextGen

○ Practice Fusion

○ Other (please specify vendor):

_____

Q3. How satisfied are you with your EHR system in your primary place of practice? [FLIP ORDER 50%]

○ Very dissatisfied

○ Somewhat dissatisfied

○ Neither dissatisfied nor satisfied

○ Somewhat satisfied

○ Very satisfied

[IF DISSATISFIED] Q4. Why are you dissatisfied with your EHR? (Check all that apply.) [RANDOMIZED]

☐ **Too slow**

☐ **Lacks needed functions.**

☐ **Doesn't work for my specialty.**

☐ **Too hard to share data** with others.

☐ **Data-sharing interfaces are too expensive.**

☐ Other (please specify):

_____

Q5. Which EHR applications do you use? (Check all that apply.)
[RANDOMIZED]

- ☐ Practice management

- ☐ Electronic Prescribing for Controlled Substances (EPCS)

- ☐ Prescription Monitoring Program (PMP)

- ☐ Interoperability tools used for data exchange (e.g., Direct Messaging)

- ☐ Patient portals

- ☐ Public health reporting tools (e.g., ImmTrac2, COVID results reporting)

- ☐ Clinical decision support

- ☐ Telemedicine (EHR vendor's platform)

- ☐ Other (please specify):

_____

Q6. Have you experienced any of the following issues with e-prescribing? (Check all that apply.)
[RANDOMIZED]

☐   The pharmacist denied a prescription without transmitting the reason to the physician.

☐   The pharmacist incorrectly told the patient refill was not authorized by the physician.

☐   The pharmacist denied a refill for a new prescription of the same medicine with the same signature on file for the patient.

☐   The pharmacist substituted generic medication when the order stated dispense as written.

☐   Comments don't go through to the pharmacy, resulting in clarification calls.

☐   Cumbersome to find desired drug, formulation, or dosage.

☐   Don't support weight-based dosing.

☐   Difficulty entering Sig instructions.

☐   Too many/unhelpful alerts

☐   Technical issues (e.g., internet connectivity)

☐   Other (please specify):

_____

☐   None of the above [EXCLUSIVE]

☐   Don't know or N/A [EXCLUSIVE]

Q7. How are you sharing information with patients to meet the Information Blocking requirements part of the 21st Century Cures Act?

☐   Patient Portal

☐   Patient's 3rd party health application

☐   Print

☐   Other (please specify):

_____

Q8. Do you have staff in your practice designated to troubleshoot EHR issues?

○ Yes

○ No

Q9. Switching In the past two years, has your primary place of practice changed EHR systems?

○ Yes

○ No

○ Don't know.

[IF YES] Q10. Was the decision to switch EHRs made by you?

○ Yes

○ No

In the past two years, have you seen specific cases in which:

Q11. The safety or quality of patient care was **<u>adversely impacted</u>** by using an EHR?

○ Yes

○ No

Q12. The safety or quality of patient care was **<u>improved</u>** by using an EHR?

○ Yes

○ No

Q13. Do the patient safety and care quality benefits **outweigh the risks** to patient safety and care quality?

○ Yes

○ No

[IF Q11 IS YES] Q14. What were the causes of adverse impacts on patient care from using an EHR? (Check all that apply.)
[RANDOMIZED]

☐ Missing data

☐ Inaccurate data

☐ Too much data obscured important, relevant information.

☐ Interfered in the patient-physician relationship.

☐ Care delays/unreliable EHR

☐ Security/Privacy issues

☐ Other (please specify): _____

[IF Q12 IS YES] Q15. What were the causes of improved patient safety or care from using an EHR? (Check all that apply.)
[RANDOMIZED]

☐ The medical record was more thorough.

☐ Medical record was more legible.

☐ Medical record was accessible.

☐ Care was better coordinated.

☐ An alert or reminder

☐ Improved prescription management

☐ Other (please specify): _____

Q16. How do you document information in your EHR in your primary place of practice? (Check all that apply.)
[RANDOMIZED]

☐ Scribe

☐ Voice recognition

☐ Macros

☐ Templates

☐ Checkboxes

☐ I do my own typing.

☐ Other (please specify):
_____

Page Break ———————————————————————————————

Q17. Please indicate your level of agreement with the following:
[RANDOMIZED]

	Strongly disagree	Somewhat disagree	Neither disagree nor agree	Somewhat agree	Strongly agree
Data entry at the point of care interferes with a physician's diagnostic thought process.	○	○	○	○	○
The data entry process interferes with the formation of a diagnosis.	○	○	○	○	○
The use of an EHR interferes with patient communication.	○	○	○	○	○
The use of an EHR interferes with attentiveness to the patient.	○	○	○	○	○
The use of an EHR creates data retrieval problems in reviewing a patient's history.	○	○	○	○	○

Q18. Health Information Exchanges (HIEs) allow secure electronic access and sharing of patient information. Are you connected to a Health Information Exchange?

○ Yes

○ No

○ Don't know.

[IF YES] Q19. Are you able to access all the data you need through the HIE when treating patients?

○ Yes

○ No

○ Don't know.

[IF NO] Q20. What data is missing from your HIE? (Check all that apply.)

☐　　Discharge summary

☐　　Lab results

☐　　Radiology results

☐　　Medication history

☐　　Immunization registry (IMMTRAC2)

☐　　Patient chief complaints/diagnoses

☐　　Other (please specify):

_____

[If Q18 IS NO] Q21. Why are you not connected to a Health Information Exchange? (Check all that apply.)
[RANDOM]

- ☐ Don't know enough about HIEs.

- ☐ Didn't know it was an option.

- ☐ Security, privacy, and liability concerns

- ☐ None in my region

- ☐ Get needed data from other sources.

- ☐ HIE data not valuable

- ☐ Cost-prohibitive HIE subscription fees

- ☐ Cost-prohibitive EHR vendor interface fees

- ☐ Not my decision

- ☐ Other (please specify): _____

End of Block: HIEs

Start of Block: Security

Q22. In the past two years, has your practice experienced a data breach or ransomware attack (data encrypted until ransom paid)?

	Yes	No	Don't know
Data breach	○	○	○
Ransomware	○	○	○

[IF RANSOMWARE IS YES] Q23. How much was the ransom to have your data unencrypted? (If your practice experienced more than one, please answer for the most recent one.)

☐ $ _____

☐   Did not pay.

☐   ⊗Don't know.

Q24. Do you use telemedicine in your practice?

○ Yes

○ No

[If YES] Q25. What percentage of your annual visits are conducted via telemedicine?

_____

Contact May TMA staff contact you if we have additional questions regarding EHRs?

○ Yes

○ No