# Survey of Texas Physicians 2018

# Electronic Health Records Research Findings



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#### TMA 2018 Physician Survey - Electronic Health Records

# **Executive Summary**

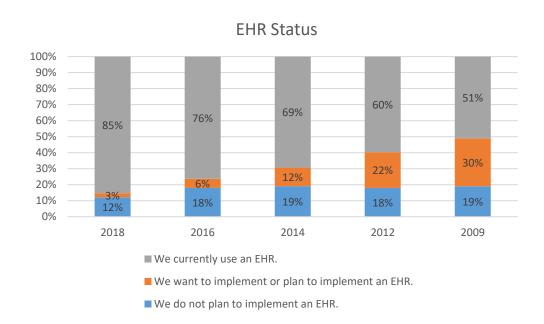
Every two years, the Texas Medical Association conducts a survey of Texas physicians to identify emerging issues, track the impact of practice and economic changes, assess physician priorities, and develop data to support TMA advocacy efforts.

Health information technology, such as electronic health records, e-prescribing, and health information exchange, has the potential to improve patient quality of care. TMA's goal is to help ensure HIT has a positive impact on physicians, patients, and practices by enhancing quality of care, patient safety, and practice viability. The current questions served as a benchmark of physician needs and experiences with EHRs. They are especially important as TMA tailors services and resources to help physicians use EHRs safely and in a way that improves patient outcomes and physician workflow.

The following results are based on an email survey conducted in June of 2018. Not all questions were answered by all respondents due to the survey design and skip patterns. The survey included a mix of closed-ended response items, Likert Scale, and open-ended response items. Many of the questions were structured for multiple choice or nominal scale responses. Approximately 44,364 Texas physicians and residents with email addresses in the TMA database were emailed a personalized link to the survey. By the end of the full survey period, responses were received from 1,274 Texas physicians and residents regarding their use of and experience with electronic health records.

#### EHR Status (June Question 1)

2018 saw an increase in the percentage of physicians using an EHR (85 percent). This has offset the decrease in physicians who reported they want to implement an EHR (3 percent) or those who do not plan to implement an EHR (12 percent).

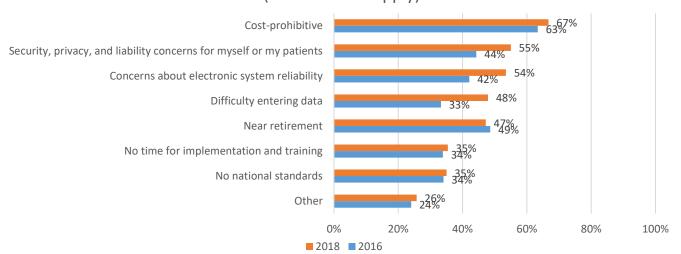


## Physicians With No Plans for Implementing an EHR

### Reasons for Not Implementing an EHR (June Question 2)

Within the 12 percent of Texas physicians who do not use EHR, 67 percent were most likely to report implementation is cost-prohibitive.

# Reasons Physicians Are Not Planning to Implement an EHR (check all that apply)

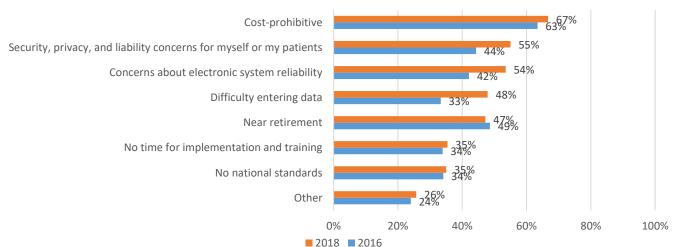


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# Reasons Physicians Are Not Planning to Implement an EHR (check all that apply)

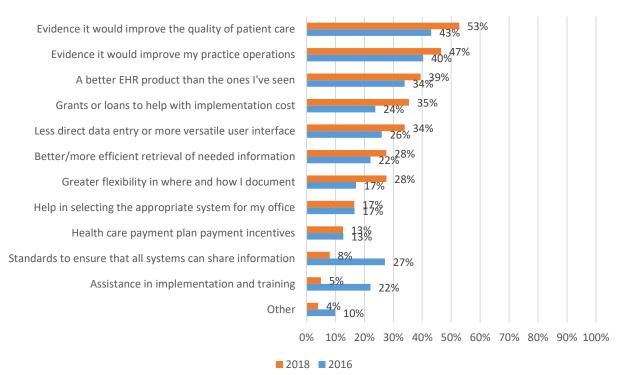


Twenty-six percent of physicians listed "other" as the reason why they were not planning to implement an EHR. Those selecting this option primarily stated it interfered with the patient-physician relationship and took too much time.

#### Incentives to Implement an EHR (June Question 3)

Physicians reported they would be more likely to implement an EHR if they saw evidence it improved the quality of patient care (53 percent) or improved practice operations (47 percent). This is an increase over 2016.

# Incentives to Implement an EHR (check all that apply)

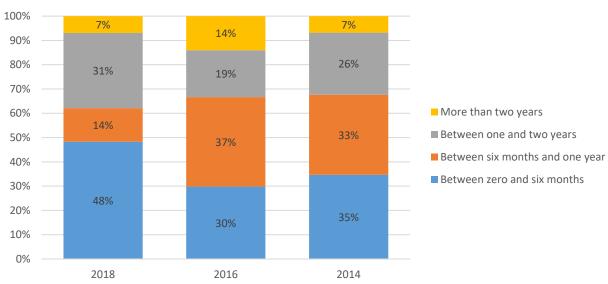


# Physicians Who Want to Implement or Plan to Implement an EHR

#### Time Until EHR Implementation (June Questions 5-6)

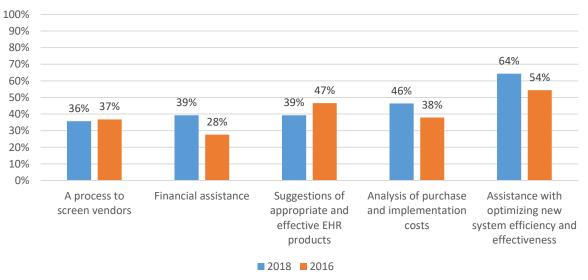
Within the 3 percent of practices that want to or plan to implement an EHR, almost half anticipate doing so within six months.





A majority of physicians continue to report assistance with optimizing new system efficiency and effectiveness would be a helpful service for those planning to implement EHR (64 percent).

# Helpful Service for Practices Who Want to or Plan to Implement an EHR (check all that apply)

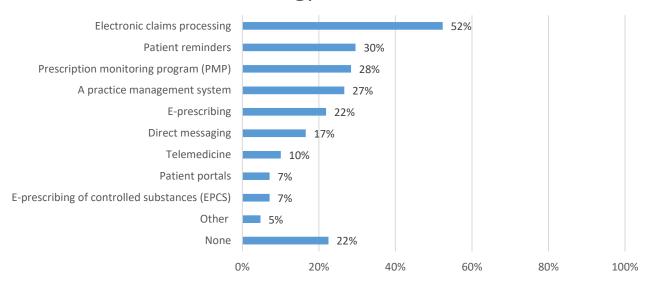


### Non-EHR Users – Other Technology Used

#### Other Technology in Practice (June Questions 4 and 7)

The minority of physicians who either have no plans to implement EHR in their practice or plan to implement in the future were asked if they use other technology in their practice. A majority of these physicians (52 percent) reported they use electronic claims processing.

# Other Technology in Practice Use\*



<sup>\*</sup>Physicians with no plans to implement EHR and those who plan to implement EHR in the future.

## Practices Who Currently Use an EHR

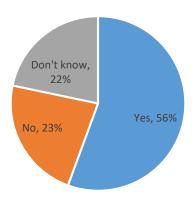
#### Use of More Than One EHR (June Questions 8-9)

When asked how many times they changed EHRs in the past two years, 12 percent of physicians stated they changed EHRs one time. Less than 2 percent have changed their EHR two times or more in the last two years. Reasons for changing included lack of interoperability, high maintenance costs/fees, and ineffective product.

#### EHR Performance (June Questions 10-11)

A majority of physicians state their EHR performs as promised by the vendor (56 percent).

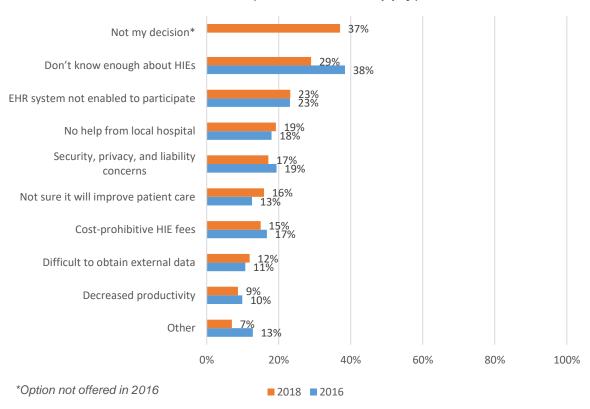
# Percentage of Physicians Reporting EHRs Performing as Promised



#### HIE Participation (June Questions 12-14)

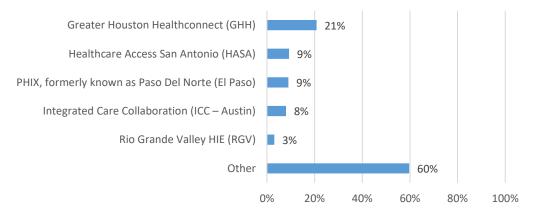
Twenty-six percent of physicians reported participating in a local health information exchange (HIE) to share EHR data among other physicians and providers. This is a decrease from 2016. Of the physicians not participating, 37 percent stated it was not their decision, while 29 percent said they don't know enough about HIEs.

# Reasons Physicians Are Not Participating in HIEs (check all that apply)



Twenty-one percent of physicians who are participating state they participate in Greater Houston Healthconnect.

# Physician Participation in Local HIEs (check all that apply)

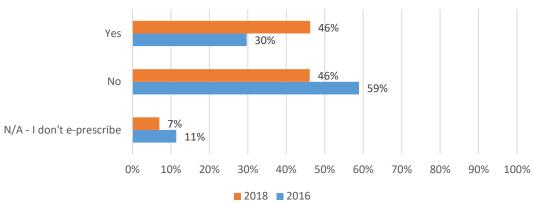


### **E-Prescribing of Controlled Substances**

#### Usage of EPCS (June Question 15)

Since 2016, there has been a significant increase in physicians who use e-prescribing of controlled substances (EPCS) (46 percent in 2018).

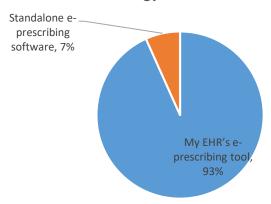




#### **EPCS** Technology (June Question 16)

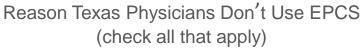
An overwhelming majority of physicians (93 percent) use their EHR for e-prescribing.

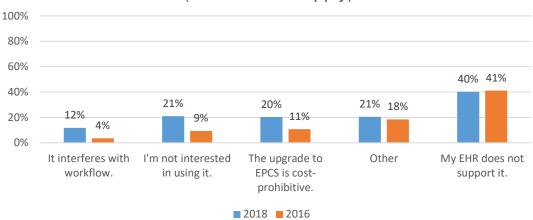
# Technology Used for EPCS



#### Reasons for Not Using EPCS (June Question 17)

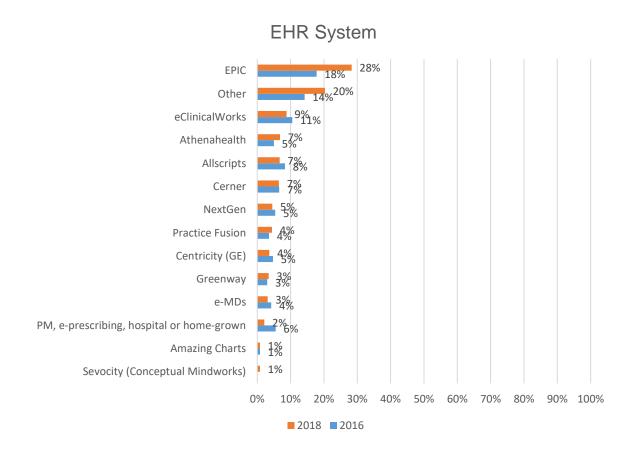
While 93 percent of physicians using EPCS use their EHR for e-prescribing, 40 percent of those who do not use EPCS say it is because their EHR does not support this.





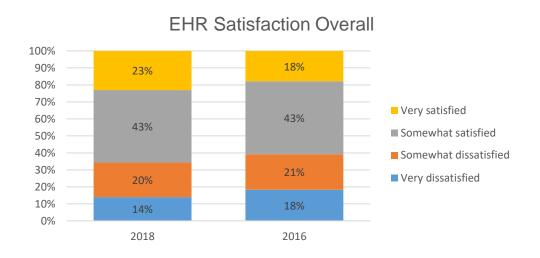
#### EHR System (June Question 18)

As in past years, "other" was one of the largest categories regarding which EHR system a practice uses. "Other" continues to be too numerous to quantify. While there is an increase in the "other" category (20 percent in 2018), there is also an increase in physicians reporting they use EPIC as their EHR (28 percent).

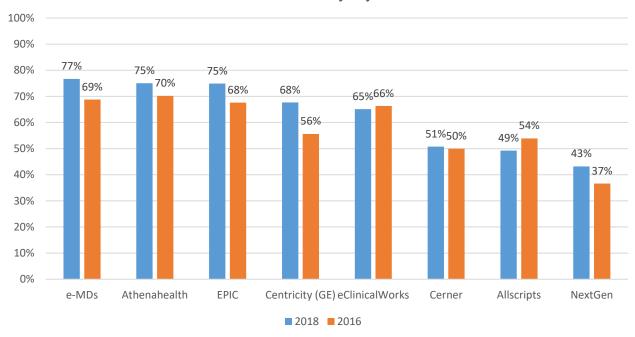


#### EHR Satisfaction (June Question 19)

Overall, physicians reported an increase in EHR satisfaction over 2016 (66 percent in 2018). Centricity, e-MDs and EPIC saw significant increases in satisfaction to 12 percent, 8 percent, and 7 percent, respectively.



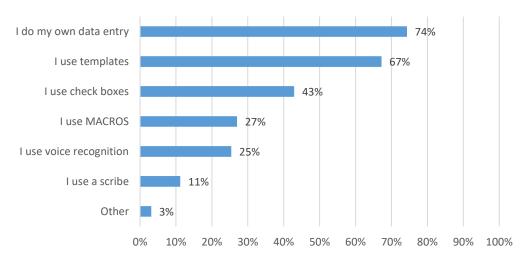
### Satisfaction by System



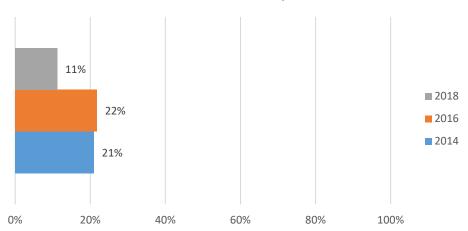
#### EHR Data Entry (June Question 20)

In the 2018 survey, physicians were asked about their method of EHR data entry. Most physicians reported they either do their own data entry or use templates (74 percent or 67 percent, respectively). In 2016, physicians were asked if they use a scribe for data entry; there was a significant decline in usage in 2018 (11 percent).

### EHR Data Entry (check all that apply)





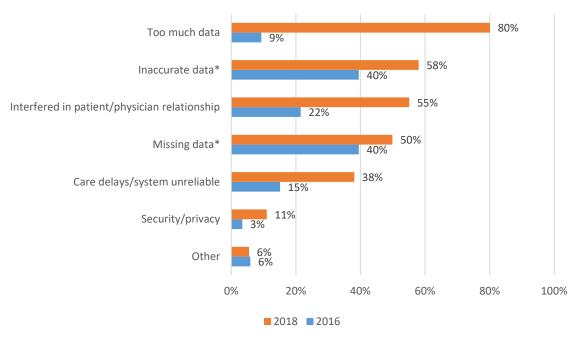


#### EHR Impact on Care Quality (June Questions 21-24)

EHRs have the potential to improve patient safety and care, but they can introduce new types of errors or escalate small errors into larger ones. In 2016, 49 percent of physicians reported they saw patient care safety and quality improved with EHR use. This increased to 55 percent in 2018. At the same time, the 2018 survey showed an increase in physicians reporting they saw damage to patient care safety or quality with the use of EHRs (34 percent in 2016; 40 percent in 2018).

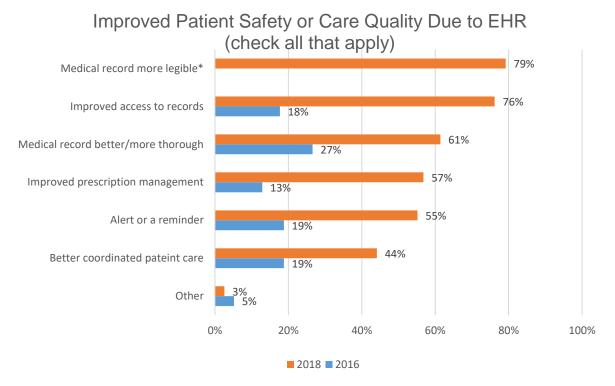
Eighty percent of physicians who reported seeing damage to patient care safety or quality said they receive too much data from an EHR – a dramatic increase over 2016. There is a spike in the percentage of physicians reporting in the other categories also.

# Types of Damage to Patient Safety or Care Quality Due to EHR (check all that apply)



<sup>\*</sup>The 2016 survey combined missing and inaccurate data as one option (40 percent). The 2018 survey separated these into two categories. 2016 data was listed in both categories for comparison purposes.

Just like for the increase in the percentage of physicians reporting specific damages, there is a significant increase in the percentage of physicians who reported specific types of improvement. Although not asked in the prior survey period, 79 percent of the physicians agreed patient safety or quality was improved because the EHR made medical records more legible. Additionally, 76 percent of these physicians reported improved access to records.



\*This improvement option was not included in the 2016 survey.

Over the past two years, physicians have changed their mind about whether they believe the improvements in patient safety and care quality due to EHRs outweigh the risks. The 2018 survey results show 61 percent of physicians believe the improvements from EHRs outweigh the risks. This is an increase over the prior survey period, which reported 48 percent agreed improvements outweighed the risks.

#### Cyber Security (June Questions 25-27)

Six percent of physicians reported they had experienced a ransomware attack (data encrypted until ransom paid), which cost a median of \$1,000 for data unencryption. In 2016, 4 percent of physicians reported experiencing a ransomware attack. Five percent of physicians reported a data breach; this is up only slightly from 2016. Most physicians did not know the cost of recovering from the data breach.

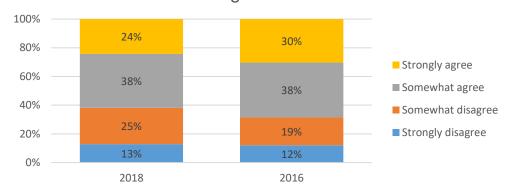
#### Cyber Liability Coverage (June Question 28)

Twenty-eight percent of physicians reported their liability insurance carrier offered cyber liability coverage. This is the same as for the previous survey period.

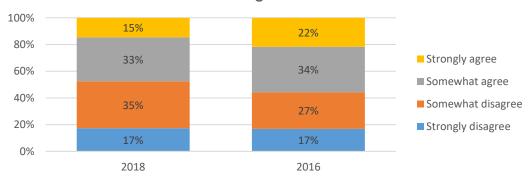
#### EHR Disruption to Patient Care (June Question 29)

The 2018 survey showed physicians agreed EHR use decreases attentiveness to the patient's presentation of signs and symptoms (68 percent), and data entry at the point of care disrupts a physician's diagnostic thought process (62 percent). However, the agreement with both of these statements has decreased since the 2016 survey.

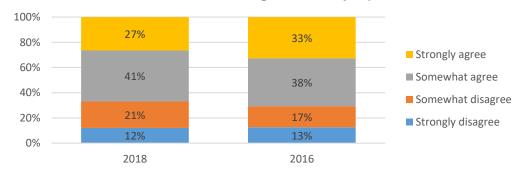
# Percentage of Physicians Who Agree Data Entry at the Point of Care Disrupts Diagnostic Thought Process



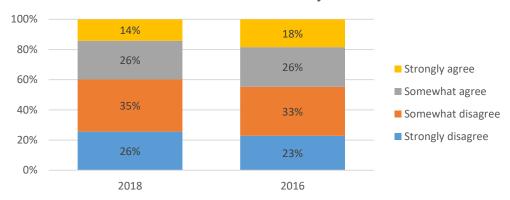
# Percentage of Physicians Who Agree Data Entry Process Disrupts Formation of the Differential Diagnosis



# Percentage of Physicians Who Agree EHR Use Decreases Attentiveness to the Patient's Presentation of Signs and Symptoms



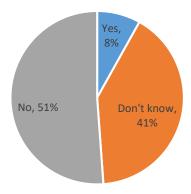
## Percentage of Physicians Who Agree EHR Use Creates Data Retrieval Problems in Reviewing Patients' History



#### Population Health Tools (June Questions 30-31)

Sixty percent of physicians do not use tools built into their EHR to analyze data about their patient population. Only 8 percent of the physicians who do not use their EHR tools use a third-party product to analyze data about their patient population.

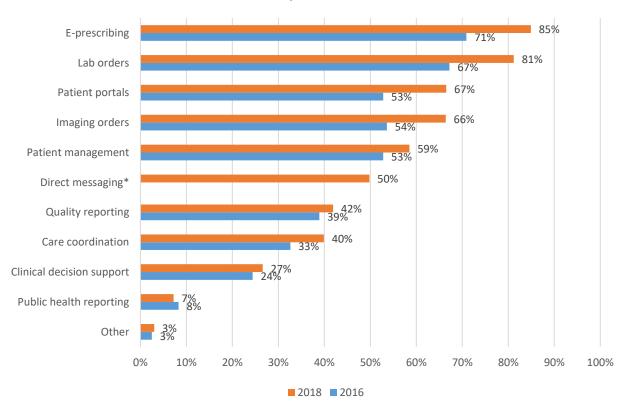
# Physicians Not Using Their EHR Tools, But Use a Third-Party Product to Analyze Data About Patient Population



#### EHR Functions (June Question 32)

As with the prior survey period, a large majority of Texas physicians use the e-prescribing (85 percent) and lab order (81 percent) tools in their EHR. Additionally, the use of patient portals (67 percent), imaging orders (66 percent), and patient management capabilities (59 percent) has increased.

### Functions Texas Physicians Use in Their EHR

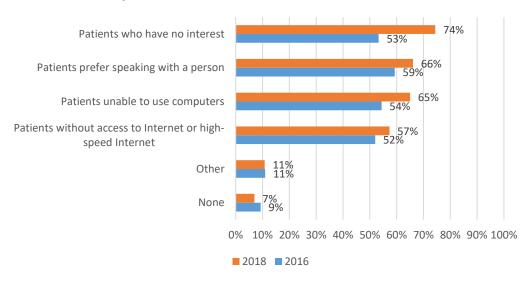


<sup>\*</sup>Direct messaging was not included in the 2016 survey.

#### Patient Portals (June Question 33)

Patient portals are online websites that give patients access to their personal health information. They are also the primary way in which practices demonstrated patient engagement in the Centers for Medicare & Medicaid Services' Quality Payment Program (QPP). Sixty-seven percent of physicians have a patient portal. A majority of physicians who have portals experience challenges using them, including low patient adoption rates because patients have no interest in using a portal (74 percent), patients prefer speaking with a person (66 percent), and patients unable to use computers (65 percent). Given that these factors are beyond a physician's or practice's control, basing payment on patient use of portals may discourage practices from seeing older patients or patients with limited resources and may not be best from a policy or patient care standpoint.

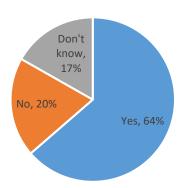
### Physician Difficulties With Patient Portals



#### EHR and Billing (June Question 34)

The 2018 survey results show more than half of physicians reported using an EHR for billing purposes.

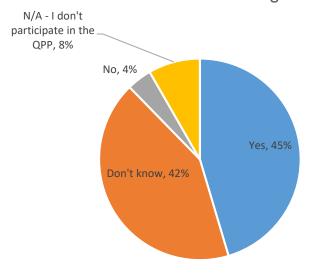
Percentage of Physicians Who Bill Through Their EHR



#### EHR and Tracking Quality Program Data (June Question 35)

The government has moved from multiple quality programs to the Quality Payment Program. Some physicians (45 percent) use their EHR to track the data they need for reporting purposes. The next largest category is of physicians who don't know if their EHR is used for tracking QPP data (42 percent).

# Percentage of Physicians Who Use EHR for QPP Data Tracking



# Physician Demographics

0 1					
Gender	<u>2010</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>
	%	%	%	%	%
Male	75	73	70	67	66
Female	25	27	30	33	34
Age	<u>2010</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>
	%	%	%	%	%
40 and younger	21	19	18	19	18
41 to 50	27	23	22	22	23
51 to 60	33	32	27	27	26
61 and older	19	25	33	32	33
Specialty	<u>2010</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>
	%	%	%	%	%
Obstetrics-Gynecology	7	7	7	6	7
Pediatrics	7	8	10	9	9
Surgical Specialty	13	13	13	11	11
Indirect Access	14	15	16	18	16
Nonsurgical Specialty	33	32	24	29	30
Primary Care	25	26	30	27	28

County	<u>2010</u>	<u>2012</u>	2014	<u>2016</u>	<u>2018</u>
	%	%	%	%	%
Bexar	9	8	9	9	9
Dallas	13	12	13	14	13
Harris	19	17	18	20	21
Tarrant	8	6	6	7	6
Travis	9	8	9	9	9
Smaller metro	34	41	37	35	36
Rural	6	6	6	6	6
Rio Grande Valley	3	3	2		
TMA Membership Status	<u>2010</u>	<u>2012</u>	<u>2014</u>	<u>2016</u>	<u>2018</u>
	%	%	%	%	%
Former				7	18
Nonmember	13	14	17	12	7
Member	87	86	83	81	75

# APPENDIX — Survey Instrument

# June Health IT

Q1 Which statement best describes the current status of your practice?
We do not plan to implement an EHR.
We want to implement or plan to implement an EHR.
We currently use an EHR.
Q2 Why are you not planning to implement an EHR? (Check all that apply.)
Near retirement
Cost-prohibitive
No time for implementation and training
Concerns about electronic system reliability
Difficulty entering data
No national standards
Security, privacy, and liability concerns for myself or my patients
Other (please specify):sle

Q3 Would any of the following convince you to implement an EHR? (Check all that apply.)
Less direct data entry or more versatile user interface (i.e., voice recognition or PDA entry)
Greater flexibility in where and how I document
Better/more efficient retrieval of needed information
Grants or loans to help with implementation cost
Health care payment plan payment incentives (i.e., stimulus package, pay for performance)
Help in selecting the appropriate system for my office
Assistance in implementation and training
Evidence it would improve the quality of patient care
Evidence it would improve my practice operations
A better EHR product than the ones I've seen
Standards to ensure that all systems can share information
Other (please specify):

Q4 What technologies do you use in practice? (Check all that apply.)
A practice management system
Electronic claims processing
E-prescribing
E-prescribing of controlled substances (EPCS)
Prescription Monitoring Program (PMP)
Direct messaging
Patient reminders
Patient portals
Telemedicine
Other (please specify):
None
Q5 If you want to implement an EHR, how soon do you anticipate doing so?
Between zero and six months
Between six months and one year
Between one and two years
O More than two years

Q6 Which of the following services would you find helpful? (Check all that apply.)
Suggestions of appropriate and effective EHR products
Analysis of purchase and implementation costs
A process to screen vendors
Assistance with optimizing new system efficiency and effectiveness
Financial assistance
Other (please specify):
Q7 What technologies do you use in practice? (Check all that apply.)
A practice management system
Electronic claims processing
E-prescribing
E-prescribing of controlled substances (EPCS)
Prescription Monitoring Program (PMP)
Direct messaging
Patient reminders
Patient portals
Telemedicine
Other (please specify):
None

Q8 In the past two years, have you switched EHRs in your current, primary place of practice because your former one:

	No	Yes
Was ineffective?	0	$\circ$
Had poor customer service?	0	$\circ$
Went out of business?	0	$\circ$
Was acquired by another company and no longer supported?	0	$\circ$
Had certification that expired or was revoked?	$\circ$	$\circ$
Had high maintenance costs and/or other fees?	$\circ$	$\circ$
Lacked interoperability?	0	$\circ$
Other (please specify):	$\circ$	$\circ$
Display This Question:		
If In the past two years, have you switched EHRs in your	current, primary place	of practice because = Yes
Q9 How many times has your practice had to switch EH	Rs in the past two ye	ears?
O10 le veux EUD monfermaine de marcine de la the veux de m	wan wasan tatii ya a alliw	and the amount of the state of
Q10 Is your EHR performing as promised by the vendor	representative seiiir	ig the product?
○ Yes		
○ No		
O Don't know		

Display This Question:

If Is your EHR performing as promised by the vendor representative selling the product? = No

Q11 Why not?
Q12 Are you participating in a local health information exchange (HIE) to share EHR data among physicians and health care providers?
○ Yes
○ No
O Don't know
Display This Question:
If Are you participating in a local health information exchange (HIE) to share EHR data among physic = Yes
Q13 Which local HIE do you participate? (Check all that apply.)
Greater Houston Healthconnect (GHH)
Healthcare Access San Antonio (HASA)
Integrated Care Collaboration (ICC – Austin)
PHIX, formerly known as Paso Del Norte (El Paso)
Rio Grande Valley HIE (RGV)
Other (please specify):
Display This Question:
If Are you participating in a local health information exchange (HIE) to share EHR data among physic = No

Q14 If not, why not? (Check all that apply.)
Don't know enough about HIEs
Security, privacy, and liability concerns
EHR system not enabled to participate
Decreased productivity
No help from local hospital
Difficult to obtain external data
Not sure it will improve patient care
Cost-prohibitive HIE fees
Cost-prohibitive EHR vendor interface fees
Not my decision
Other (please specify):
Q15 Do you use e-prescribing for controlled substances (EPCS)?
○ Yes
○ No
O Not applicable – I don't prescribe controlled substances.
Display This Question:
If Do you use e-prescribing for controlled substances (EPCS)? = Yes
Q16 What technology do you use for EPCS?
My EHR's e-prescribing tool
O Standalone e-prescribing software

Q17 If you don't use EPCS, why not? (Check all that apply.)
I'm not interested in using it.
The upgrade to EPCS is cost-prohibitive.
My EHR does not support it.
It interferes with workflow.
Other (please specify):
Q18 Which EHR system are you using in your primary place of practice?
Allscripts
Amazing Charts
O Athenahealth
Centricity (GE)
○ Cerner
O e-MDs
○ eClinicalWorks
○ EPIC
○ Greenway
○ NextGen
O Practice Fusion
O Sevocity (Conceptual Mindworks)
O I only use a practice management system, e-prescribing system, hospital system, or home-grown system.
Other (please specify vendor):

Q19 How satisfied are you with your EHR system?		
O Very dissatisfied		
O Somewhat dissatisfied		
O Somewhat satisfied		
O Very satisfied		
Q20 How do you document in your EHR? (Check all that apply.)		
do my own data entry.		
use a scribe.		
use voice recognition.		
use MACROS.		
use templates.		
use check boxes.		
Other (please specify):		
Q21 In the past two years, have you seen specific cases in which:		
	No	Yes
The safety or quality of patient care was adversely affected by the use of an EHR?	$\circ$	$\bigcirc$
The safety or quality of patient care was improved by the use of an EHR?	$\bigcirc$	$\bigcirc$

Display This Question:

If In the past two years, have you seen specific cases in which: = The safety or quality of patient care was adversely affected by the use of an EHR? [ Yes ]

Q22 If you saw specific cases in which the safety or quality of patient care was adversely affected, what were the causes? (Check all that apply.)
There were missing data.
There were inaccurate data.
Too much data obscured important or relevant information.
It interfered in the patient-physician relationship.
There were care delays/the EHR was unreliable.
There were security/privacy issues.
Other (please specify):
Display This Question:
If In the past two years, have you seen specific cases in which: = The safety or quality of patient care was improved by the use of an EHR? [ Yes ]
Q23 If you saw specific cases in which safety or the quality of patient care was improved by an EHR, what were the causes? (Check all that apply.)
The patient's medical record was more thorough.
The patient's medical record was more legible.
The patient's medical record was accessible from anywhere.
The patient's care was better coordinated.
There was an alert or a reminder.
There was improved prescription management.
Other (please specify):

Q24 Do the improvements patient safety and care qua		quality due to the EHR (	outweigh the risks to		
O Yes					
○ No					
Q25 In the past two years, ransom paid) or data bread		nced a ransomware atta	ack (data encrypted until		
	Don't know	No	Yes		
Ransomware	$\circ$	$\circ$	$\circ$		
Data breach	$\bigcirc$	$\circ$	0		
Display This Question:	h	d			
Ransomware [ Yes ]	has your practice experience	a a ransomware attack (at	nta encryptea untii r =		
Q26 How much was the ransom to have your data unencrypted? (If your practice experienced more than one ransomware attack, answer for the most recent one.)					
Display This Question:  If In the past two years, has your practice experienced a ransomware attack (data encrypted until r = Data					
breach [ Yes ]	nus your pructice experience	a a ransoniware attack (at	nta encryptea antii 1 – Data		
Q27 How much did it cost technology support, notify more than one data breach	ing patients, updating pol	icies, and the like? (If you	_		

Q28 Does your liability insurance carrier offer cyber liability	coverage?				
○ Yes					
○ No					
O Don't know					
Q29 Indicate your agreement with each of the following:					
	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	
Data entry at the point of care disrupts a physician's diagnostic thought process.	0	$\circ$	0	0	
Data entry process disrupts formation of the differential diagnosis.	0	$\circ$	$\bigcirc$	$\bigcirc$	
Use of the EHR decreases attentiveness to the patient's presentation of signs and symptoms.	0	$\bigcirc$	$\bigcirc$	$\bigcirc$	
Using an EHR creates data retrieval problems in reviewing patients' history.	0	$\bigcirc$	$\circ$	$\bigcirc$	
Q30 Are you using tools built in to your EHR to analyze data	about you	r patient po	pulation?		
○ Yes					
○ No					
Display This Question:  If Are you using tools built in to your EHR to analyze data abo	ut vour nat	ient nonulatie	an2 – No		
ij Are you asing toois bant in to your Erin to analyze auta abo	at your put	επι ροραίατι	m: – NO		
Q31 Do you use a third-party product to analyze data about your patient population?					
○ Yes					
○ No					
O Don't know					

Q32 Which EHR functions do you use? (Check all that apply.)
Quality reporting
Patient management
E-prescribing
Direct messaging
Patient portals
Care coordination
Public health reporting
Clinical decision support
Imaging orders
Lab orders
Other (please specify):
Display This Question:
If Which EHR functions do you use? (Check all that apply.) = Patient portals
Q33 Which problems, if any, have you or your practice experienced with patient portals? (Check all that apply.)
Patients without access to Internet or high-speed Internet
Patients unable to use computers
Patients who prefer speaking with physician or practice staff
Patients who have no interest
Other (please specify):
None

Q34 Do you do your billing through your EHR?
○ Yes
○ No
O Don't know
Q35 Is your EHR capable of tracking data for the Centers for Medicare & Medicaid Services Quality Payment Program?
○ Yes
○ No
O Don't know
O Not applicable — I don't participate in the Quality Payment Program.
Q36 May TMA staff contact you regarding any of your answers to the previous questions?
○ Yes
○ No