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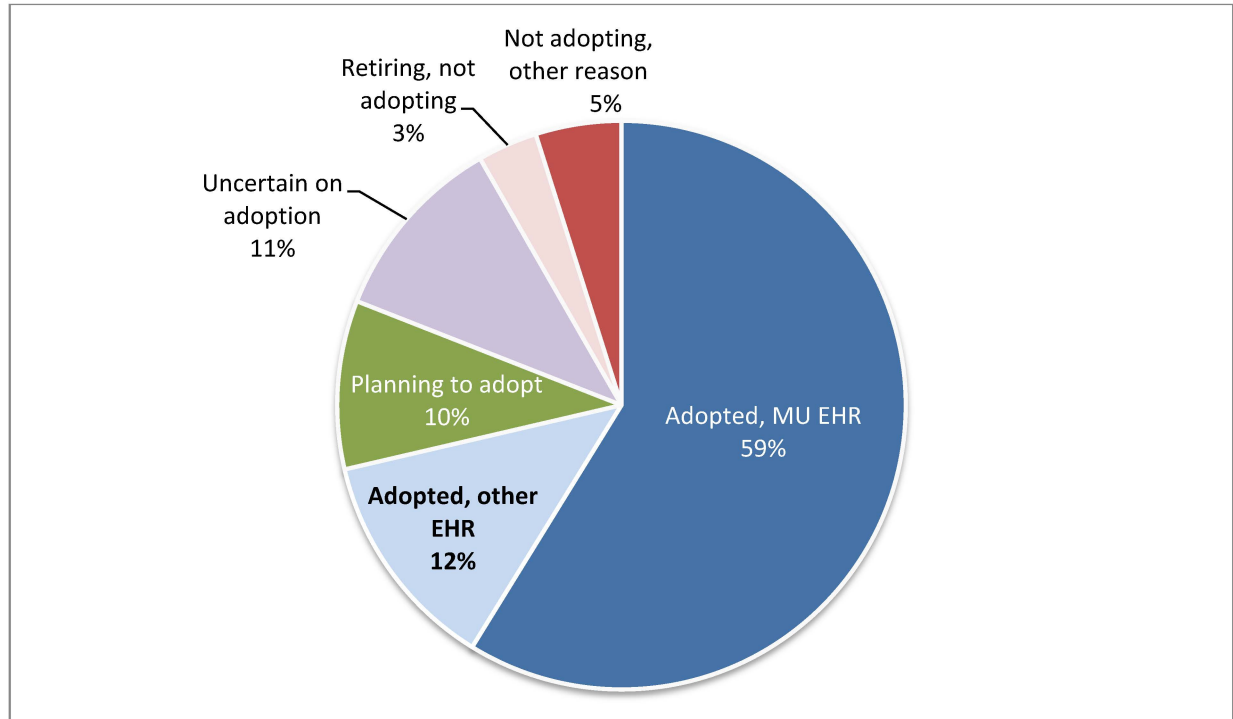
### Physician Motivations for Adoption of Electronic Health Records

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In 2009, Congress committed to supporting the adoption and meaningful use of electronic health records (EHRs) through financial incentives authorized under the Health Information Technology for Economic and Clinical Health (HITECH) Act (1). Since that time, the adoption of EHRs has accelerated rapidly (2), but research has repeatedly demonstrated that adoption has not been consistent across all physicians (3,4,5). Identifying the characteristics of physicians who have not yet adopted an EHR and factors that might influence their decision to adopt an EHR may help efforts to address gaps in adoption. Additionally, recognizing the drivers of EHR adoption among those that have already adopted may help in understanding the influence of existing policies. This data brief describes the characteristics of physicians along the adoption spectrum and examines the motivators for EHR adoption by adoption status.

#### Eight in ten physicians were using an EHR or planned to adopt one.

Figure 1: Physician adoption status, 2013.

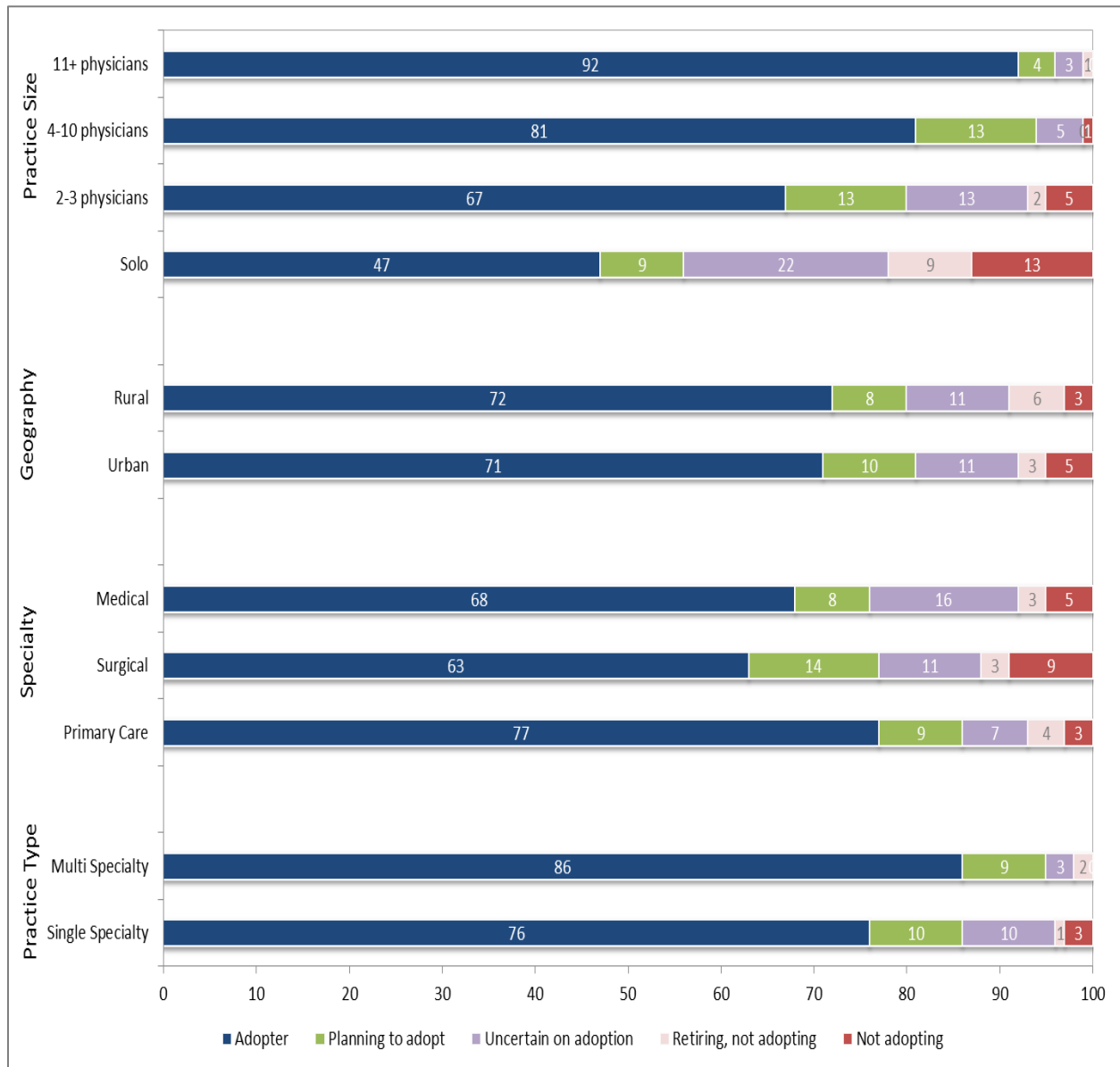


SOURCE: 2013 National Ambulatory Medical Care Survey Physician Workflow Survey. N=2,399.

- ★ Fewer than 1 in 10 physicians did not plan to adopt an EHR.
- ★ Among physicians not planning to adopt an EHR, 4 in 10 (41%) cited retirement as the reason for non-adoption.
- ★ 82% of EHR adopters were using a meaningful use-enabled EHR.

## Solo practice physicians had the highest percentage of providers who were uncertain on adoption or who never planned to adopt.

Figure 2: Characteristics of physicians by EHR adoption status, 2013.



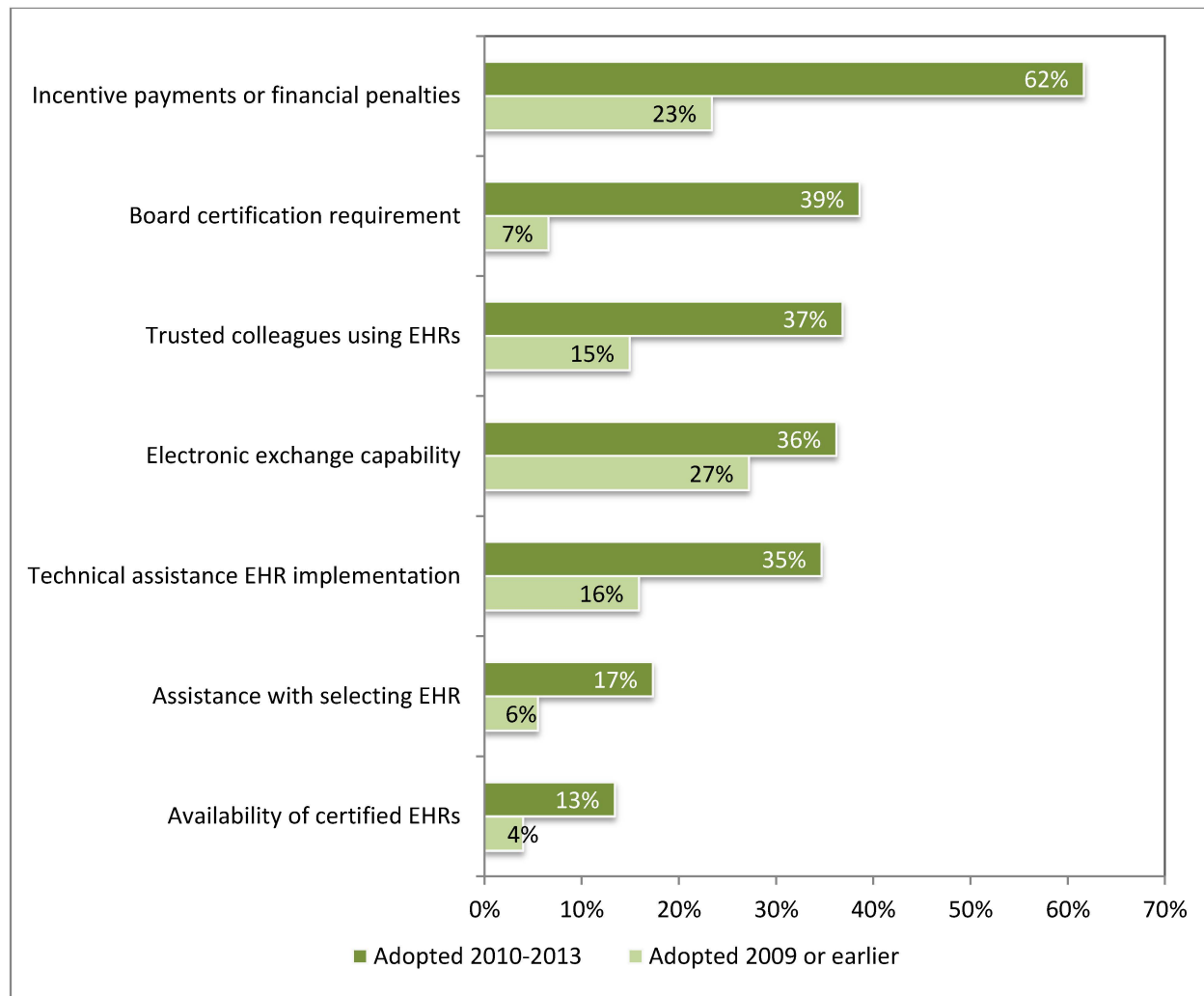
SOURCE: 2013 National Ambulatory Medical Care Survey Physician Workflow Survey. N=2,399.

- ★ Physicians in large and multi-specialty practices had the lowest rates of physicians reporting they would never adopt an EHR.
- ★ Solo practice physicians had the highest percentage of physicians who were uncertain about their EHR adoption plans and physicians who did not plan to adopt an EHR.
- ★ Among specialty types, surgical specialists had the highest rate of physicians who never planned to adopt an EHR (9%).
- ★ No differences were observed between physicians in rural and urban areas.



## A majority of physicians who adopted an EHR between 2010 and 2013 reported that financial incentives or penalties had a major influence in their decision to adopt EHRs.

Figure 3: Major influences in the decision to adopt an EHR among physicians who had adopted EHRs by whether they adopted EHR pre or post-HITECH (2009), 2011-2013.

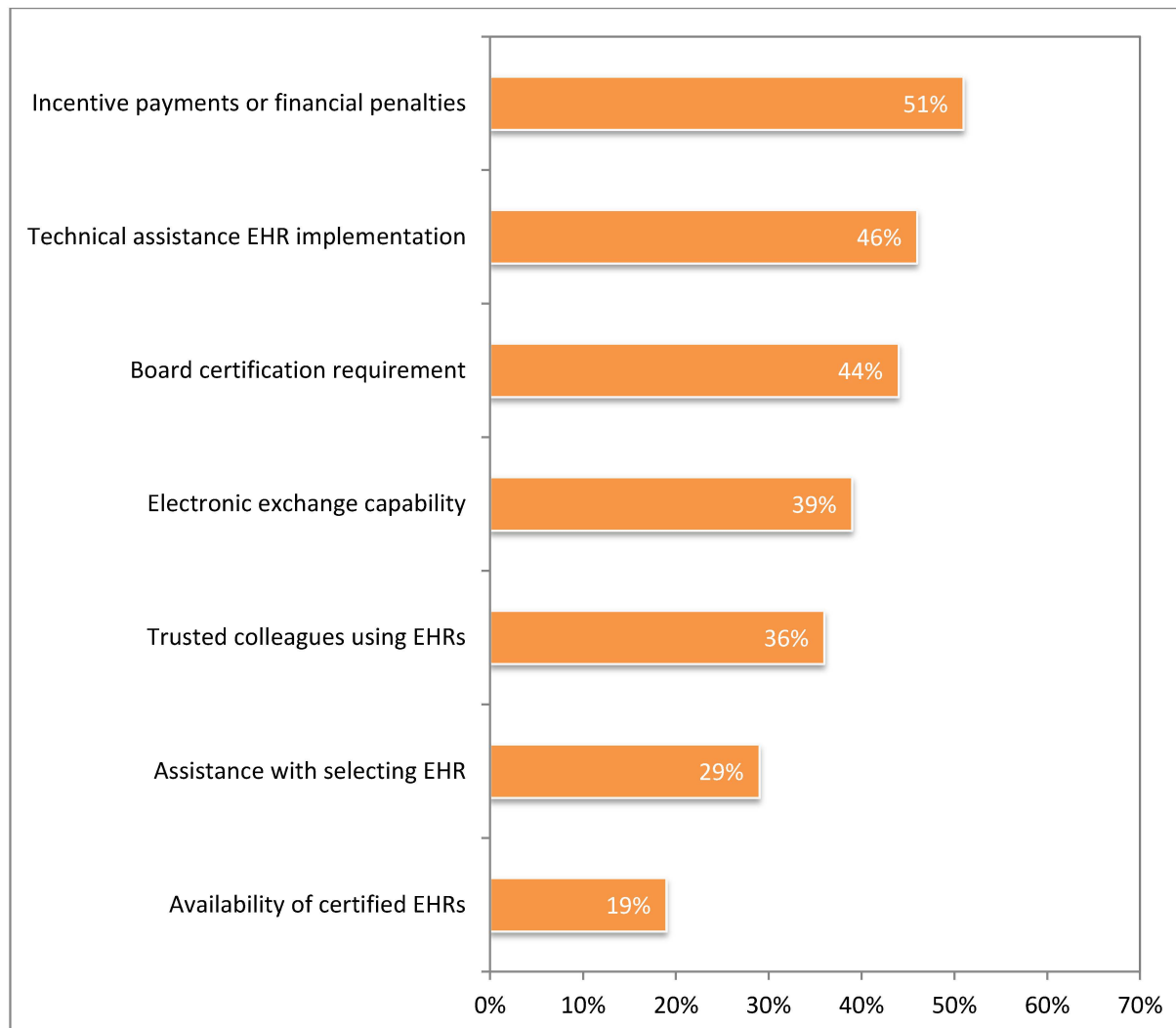


SOURCE: 2013 National Ambulatory Medical Care Survey Physician Workflow Survey. N=1,517.

- ★ A larger proportion (62%) of physicians who adopted post-HITECH reported that financial incentives or penalties were major influences on their decision to adopt an EHR compared to those who adopted prior to 2009.
- ★ Physicians in both groups identified the ability to electronically exchange health information with other providers as a major motivation for adoption: this was the leading reason for physicians who adopted before HITECH, and 36% of physicians who adopted after HITECH passage.
- ★ The second most common motivation for EHR adoption among physicians who adopted after HITECH implementation was requirements for board certification.

## Incentive payments, financial penalties, and technical assistance would be potential drivers for EHR adoption among physicians not using EHRs.

Figure 4: Major drivers for adoption among physicians who had not adopted EHRs, 2013.



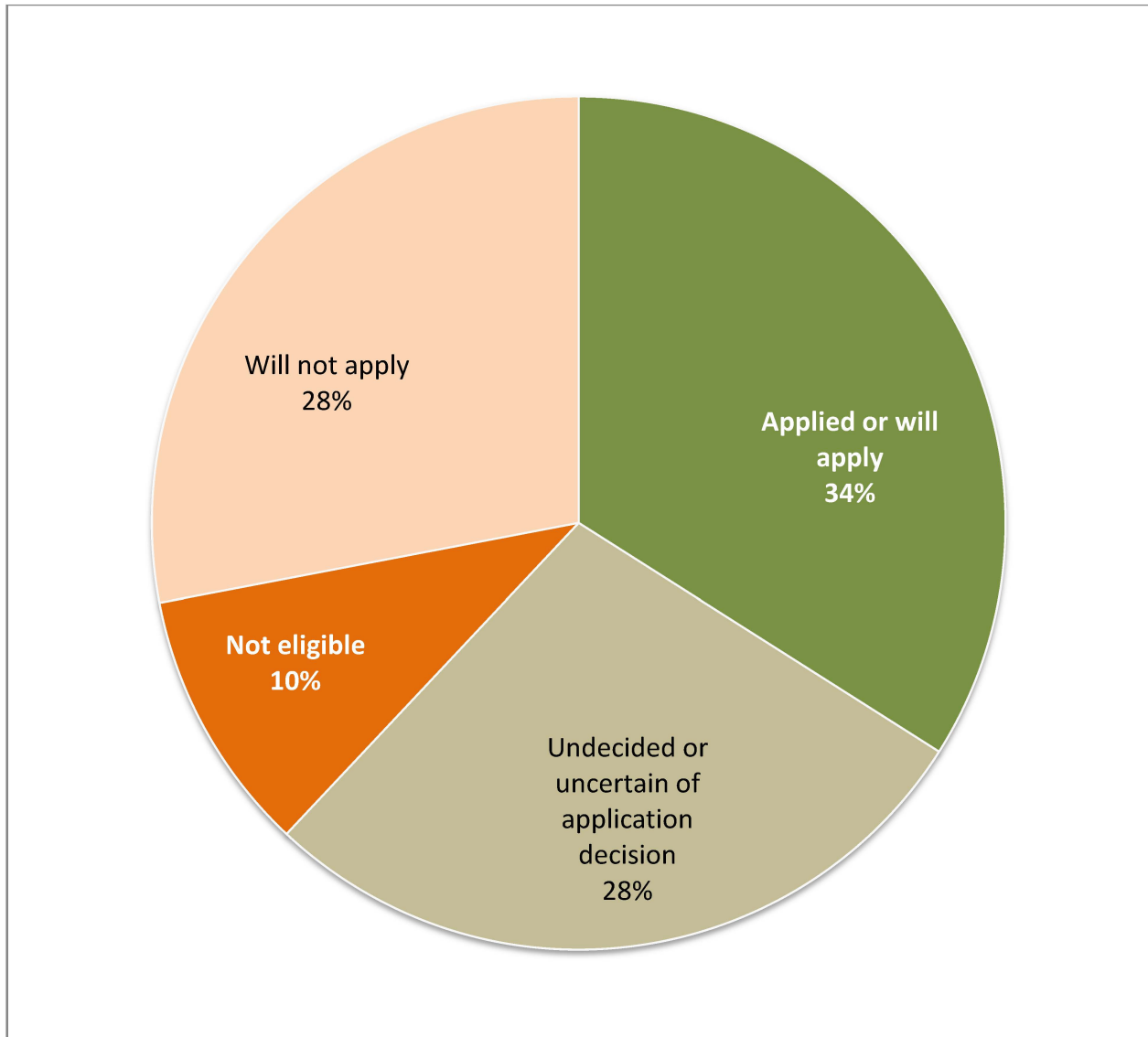
NOTES: Excludes physicians who cited retirement as their reason for not adopting an EHR  
SOURCE: 2013 National Ambulatory Medical Care Survey Physician Workflow Survey. N=454.

- ★ Availability of incentive payments or financial penalties would be major influences on the decision to adopt an EHR for more than half of physicians not using an EHR.
- ★ More than 4 in 10 physicians who had not adopted an EHR reported that access to technical assistance around EHR implementation would be a major influence in their decision to adopt.
- ★ Forty-four percent of physicians who had not adopted an EHR reported that a board certification requirement would be a major influence to adopt an EHR.
- ★ Almost 4 in 10 physicians not using an EHR said that the ability to electronically exchange health information with other providers would majorly influence their decision to adopt an EHR.



## One in three physicians who had not adopted indicated they had applied, or planned to apply, for incentive funds.

Figure 5: EHR Incentive Program application status among physicians who had not adopted an EHR, 2013.



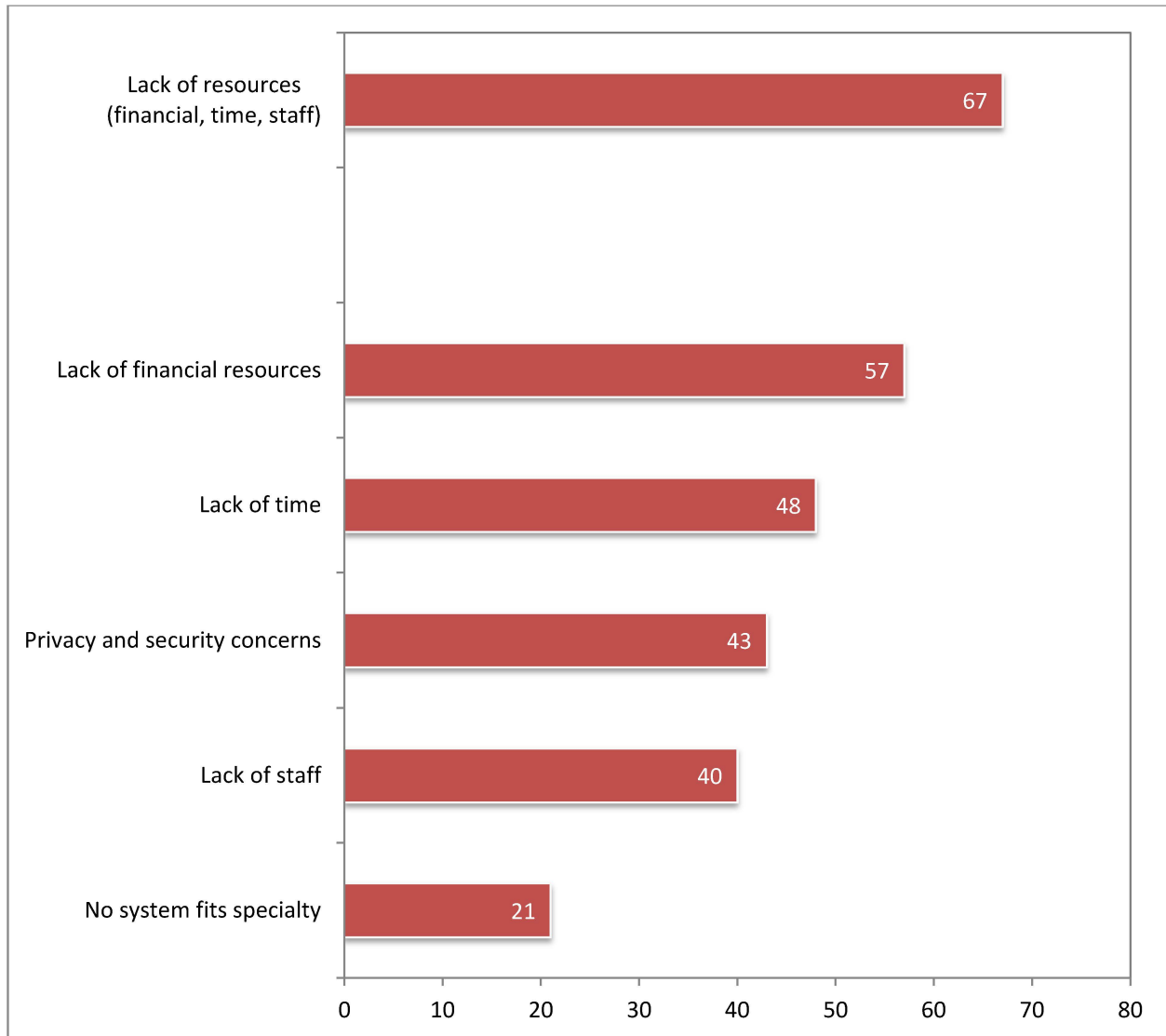
NOTES Excludes physicians who cited retirement as their reason for not adopting an EHR, and physicians who did not respond to the question.

SOURCE: 2013 National Ambulatory Medical Care Survey Physician Workflow Survey. N=451.

- ★ One-third of physicians who had not adopted an EHR had applied or planned to apply for incentive funds.
- ★ Almost 3 in 10 non-adopter physicians had no plans to apply for incentive payments.
- ★ Ten percent of physicians who had not adopted an EHR were not eligible for the EHR Incentive Program.

## More than 6 in 10 physicians who reported they would not adopt an EHR cited lack of resources as the reason.

Figure 6: Reasons cited by physicians who did not plan to adopt an EHR, 2013.



NOTES Excludes physicians who cited retirement as their reason for not adopting an EHR.

SOURCE: 2013 National Ambulatory Medical Care Survey Physician Workflow Survey. N=111.

- ★ More than half of all physicians who planned to never adopt an EHR cited a lack of financial resources as a reason for the decision.
- ★ Physicians who planned never to adopt also cited other resource-based reasons for that decision: 48% cited a lack of time and 40% cited a lack of staff.
- ★ Four in ten physicians who planned to never adopt an EHR indicated that privacy and security concerns contributed to the decision to not adopt.
- ★ Two in ten physicians reported that they would not adopt an EHR because no EHR system fit the needs of their specialty.



## Summary

Most physicians—8 in 10 — either planned to adopt, or have already adopted, an EHR. Consistent with prior studies, however, the data presented here show variation in EHR adoption rates across different physician groups. We found high adoption rates among large and multi-specialty practice physicians and much lower adoption rates among solo and small practice physicians. More significantly, we found that physicians working as solo practitioners or in small practices had the largest percentages of physicians who reported they were either uncertain or did not plan to adopt an EHR. Therefore, narrowing the EHR adoption gap overall will involve continuing to focus efforts on these physicians.

Comparing drivers for EHR adoption among physicians who had not adopted to physicians who adopted at different adoption policy stages shows the important role that financial incentives has played among EHR adopters post-HITECH and could play among those who have yet to adopt an EHR. There was a clear difference in the influence of financial incentives and payments among physicians who adopted prior to HITECH passage and after: a majority (62%) of physicians who adopted between 2010 and 2013 reported that financial incentives and penalties played a significant role in their decision to adopt an EHR, compared with 23% of physicians who adopted an EHR before HITECH. In addition, more than a third of physicians who had not adopted an EHR had, or planned to apply for incentive funds, indicating a clear plan to adopt an EHR. Such incentives and penalties would be a major influence in a decision to adopt an EHR among physicians who were not using one, yet 10% of physicians not using an EHR were not eligible for an incentive payment through CMS' EHR Incentive Program. Moreover, a majority of physicians who did not plan to adopt an EHR also cited a lack of financial resources as the reason for that decision. These findings are consistent with prior analyses that indicate financial incentives or penalties are more influential among non-adopters and recent adopters compared to early adopters of EHRs (6).

Another major influence in the decision to adopt was the availability of technical assistance with EHR implementation. More than a third of physicians who adopted between 2010 and 2013 reported that the availability of technical assistance was a major influence in their decision to adopt an EHR. Among non-adopters, however, the need for technical assistance was higher: 46% of physicians who had not adopted an EHR said that technical assistance would be a major influence in any decision to adopt the technology. Furthermore, at least 40% of physicians who reported they did not plan to adopt an EHR cited reasons that could be mitigated through the availability of technical assistance: lack of staffing and the time needed to implement.

Of note, more than a third of both adopters and non-adopters reported that the ability to electronically exchange patient health information with other providers was, or would be, a major influence in any decision regarding EHR adoption. To ensure that physicians have enough trading partners with whom to safely and securely exchange information, adoption must be high across all provider groups. These data demonstrate, however, that although there were high adoption rates among primary care physicians, similar rates were not observed across other specialty groups. Almost 10% of surgical specialists reported they would never adopt an EHR. To ensure improved patient care, reduced health care costs, and improved continuity of care across the health care continuum, physicians across the spectrum must adopt EHRs and use them to safely and securely share patient health information electronically.



## Definitions

Adopted MU EHR (“meaningful use enabled EHR”): Physician indicated in the survey that s/he had adopted EHR technology, and in response to the question, “Does your current system meet meaningful use criteria as defined by the Department of Health and Human Services (HHS)?”, selected “Yes”. (referring to the CMS EHR Incentive Program) (7).

Adopted, other EHR: Physician indicated in the survey that s/he had adopted EHR technology, and in response to the question, “Does your current system meet meaningful use criteria as defined by the Department of Health and Human Services (HHS)?”, did not select “Yes”.

Planning to adopt: Physician indicated in the survey that s/he did not adopt an EHR and in response to the question, “Do you ever plan to implement an EHR system?”, responded with “Yes”.

Uncertain on adopting: Physician indicated in the survey that s/he did not adopt an EHR and in response to the question, “Do you ever plan to implement an EHR system?”, responded with either “Uncertain because not involved in the decision making process”, “Uncertain because undecided”, or left the question blank.

Not adopting, retiring: Physician indicated in the survey that s/he did not adopt an EHR and in response to the question, “Why do you not plan on implementing an EHR system”, selected “Plan to retire soon”.

Not eligible: Physician indicated in the survey that s/he did not adopt an EHR, and would not apply for the Incentive Program, citing “Not qualified as an “eligible provider”” as the reason.

## Data Source and Methods

The Centers for Disease Control and Prevention conducts the NAMCS survey on an annual basis. The 2011-2013 Physician Workflow Surveys, which is the basis of the data presented here, are supplements to the 2011 NAMCS survey. The survey examines the attitudes and experiences with EHRs among a longitudinal cohort survey of a subsample of physicians eligible for the 2011 NAMCS survey. Physicians included in this survey provide direct patient care in office-based practices and community health centers; excluded are those without direct patient care (radiologists, anesthesiologists, and pathologists). Additional documentation regarding the survey is available here: [http://www.cdc.gov/nchs/ahcd/ahcd\\_survey\\_instruments.htm](http://www.cdc.gov/nchs/ahcd/ahcd_survey_instruments.htm)

Findings are based upon univariate and bivariate analyses performed in SAS v9 using proc surveyfreq, and estimates reflected weighted national estimates. Questions used from the survey to assess are listed in Table A1.





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## About the Authors

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## Appendix

Table A1: Selected questions used from the 2011-2013 National Ambulatory Medical Care Survey, Physician Workflow Survey

Survey Question	Available Responses	Analytic Classification
<b>Which of the following best describes the reporting location's current EHR adoption status?</b>	We are actively using an EHR system that was installed more than 12 months ago.	Adopted
	We are actively using an EHR system that was installed within the past 12 months	Adopted
	We are not actively using an EHR system but have one installed	Not Adopted
	We do not have an EHR System	Not Adopted
<b>For adopter influences: How much of an influence did the following have on your decision to adopt an EHR system?</b>	Major Influence to Adopt	Major influence
	Minor Influence to Adopt	n/a
	Minor Influence to Adopt	n/a
<b>For Non-adopter influences: How much of an influence do you think the following would have on your decision to adopt an EHR system?</b>	Major Influence to Adopt	Major influence
	Minor Influence to Adopt	n/a
	Not an Influence	n/a
<b>Why do you not plan on implementing an EHR system? CHECK ALL THAT APPLY.</b>	No systems fit with my specialty	n/a
	Plan to retire	Retiring
	Lack of time	n/a
	Lack of staff	n/a
	Lack of financial resources	n/a
	Privacy/security concerns	n/a
	Other	n/a
<b>Medicare and Medicaid offer incentives to practices that demonstrate "meaningful use of health IT." At the reporting location, are there plans to apply for these incentive payments?</b>	Yes, we already applied	Applied or will apply
	Yes, we intend to apply	Applied or will apply
	No, we will not apply	Will not apply
	Uncertain if we will apply because I'm not involved in the decision process	Undecided or uncertain of application decision
	Uncertain if we will apply because I'm undecided	Undecided or uncertain of application decision

SOURCE: 2011-2013 National Ambulatory Medical Care Survey Physician Workflow Survey.