

Beyond EHR Adoption: Use of EHRs for Care Delivery Reform, Quality Improvement, and Care Coordination

**National Conference on Health Statistics
August 25, 2015 1:30-3pm**



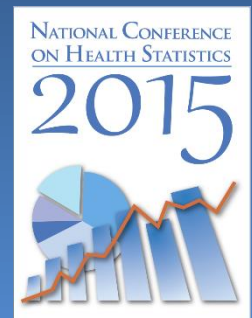
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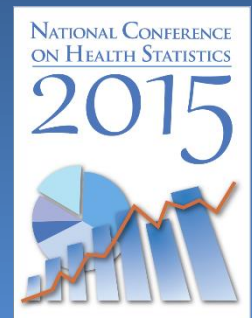
How do physicians with certified systems use their EHRs?

Findings from the 2013 National Electronic Health Records Survey.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the Office of the National Coordinator for health information technology.



Research Objective

- To examine the extent to which physicians with a certified EHR system in 2012 were using their EHRs in 2013 by using survey information about EHR use and linking it to CMS' EHR Incentive Program information .

Background

- **HITECH Act**
 - Provides funds to eligible professionals to perform various tasks related to using and sharing patient health information.
 - Participants must have a certified EHR system.
 - More information is needed about how physicians with certified systems use their EHRs.

NEHRS data

- Limit analytical population to physicians that are eligible for the EHR Incentive Program.
 - Use of select advanced care processes (comparable to EHR Incentive Program MU requirements).
- Certified EHR systems in 2012
 - Defined by CMS' EHR Incentive Program data

EHR Incentive Program Eligibility

- Physicians in these analyses were classified as eligible if they met either of the following criteria:
 - **Medicare MU eligible:** if the physician treats patients insured by Medicare
 - **Medicaid MU eligible**
 - If at least 30% or more patients are insured by Medicaid
 - If pediatric specialty, at least 20% or more are insured by Medicaid

Categories of advanced care processes

SAFETY

- Computerized Provider Order Entry
 - For prescriptions
 - For lab orders
- Electronic Prescribing
- Clinical Decision Support
 - Drug interactions or contraindications warnings
 - Reminders for guideline-based interventions or screening tests

PATIENT ENGAGEMENT

- Patient Electronic Access
 - Patients receive an electronic copy of their health information
 - Patients can view download or transmit information from their medical record
- Secure Messaging

CARE COORDINATION/ ELECTRONIC INFO EXCHANGE

- Medication Reconciliation
- Sharing patient information electronically with other providers
- Electronic report to immunization registry

Analysis

Population Studied: EHR Incentive Program eligible, office-based physicians that use any EHR system on the 2013 NEHRS (n=3,483).

- Data were linked to the CMS EHR Incentive Program *to ascertain whether physicians had certified EHR technology (CEHRT) in 2012.*
- Differences were examined across several EHR-related use categories: Safety, patient engagement, and care coordination/electronic information exchange.
- Marginal effects were calculated using multinomial logistic modeling to predict whether or not having a certified EHR in 2012 was associated with use of these specific functions and categories of EHR use.

Analysis

Control Variables:

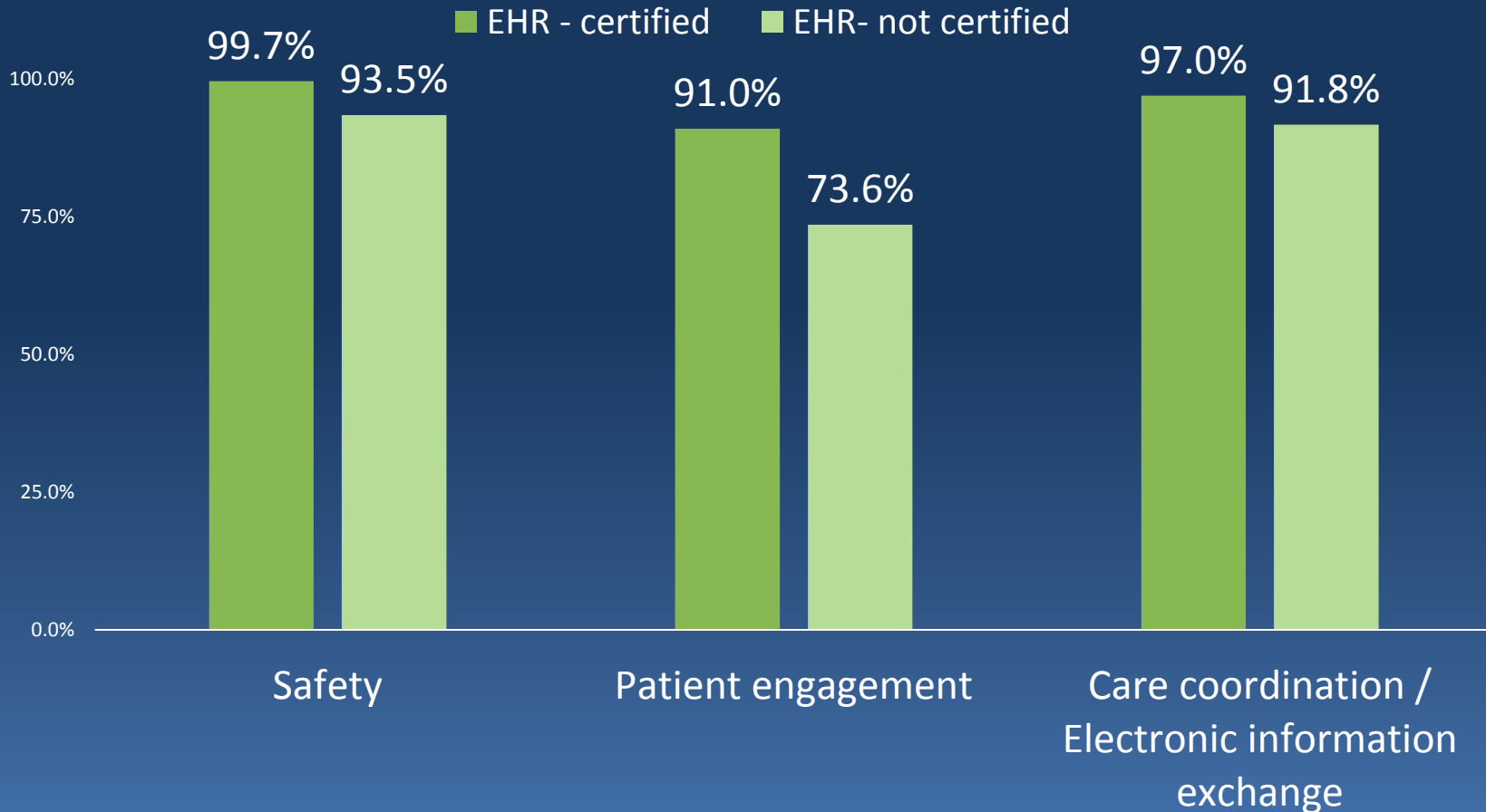
- medical specialty: (primary care vs. not primary care)
- age: under 50 vs. 50 years or older
- physician size: 1, 2-5, 6-10, 11+
- ownership: physician, group owned, other
- region: Northeast, Midwest, South, West
- located in a MSA: Yes, No

Match rate of the 2013 NEHRS to the 2012 CMS Attestation

	Matched to CMS*	Not Matched to CMS	Overall
MU Eligible	45.0	55.0	96.3
Not MU Eligible	1.9	98.1	3.7
Total	42.2	47.8	100.0

* 2013 NEHRS Survey respondents that were matched to 2012 Centers for Medicare & Medicaid Services EHR Incentive Program data in 2012. (n=4,307)

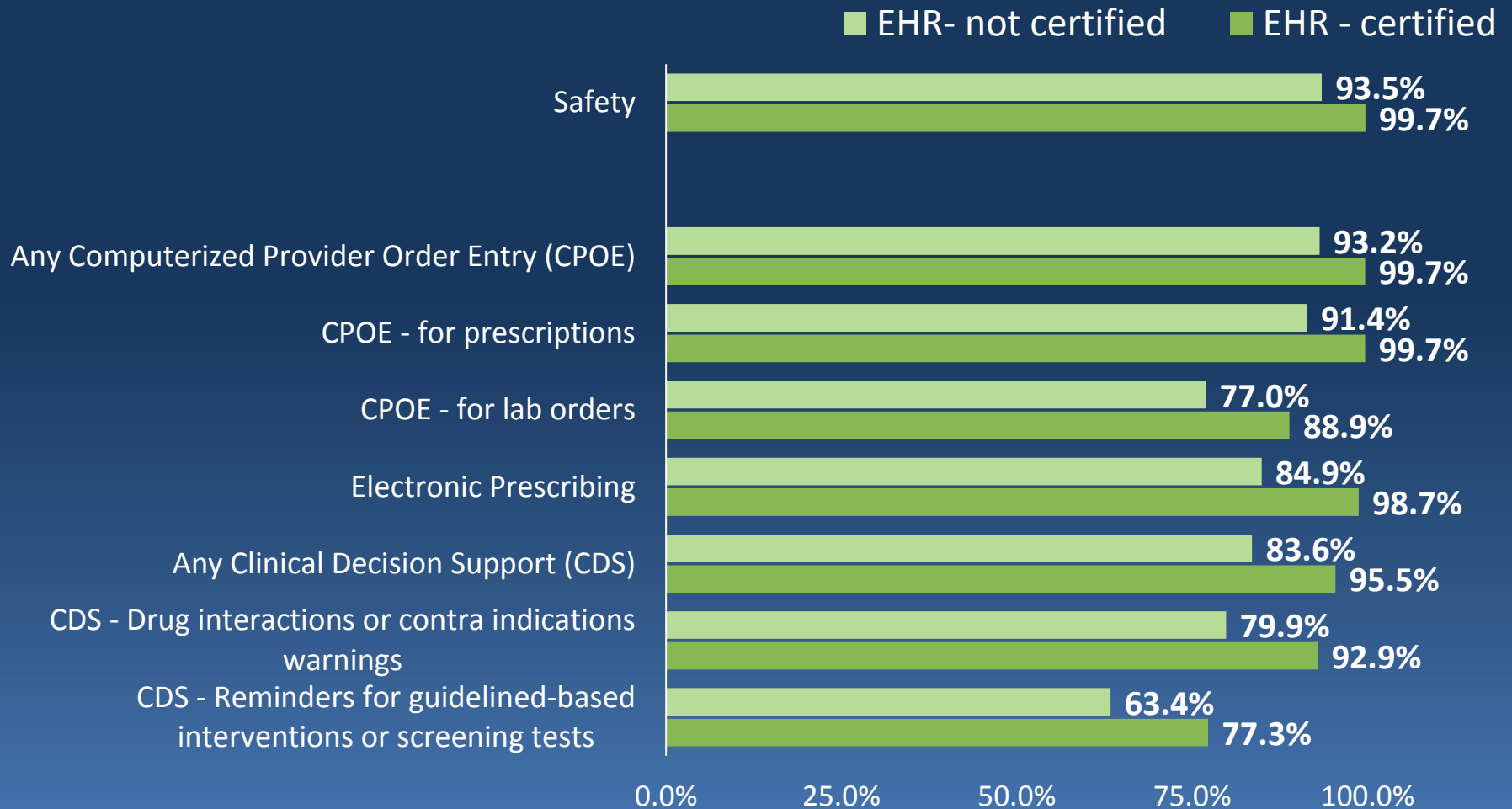
Proportion of MU-eligible physicians with an EHR using at least one computerized function in the category, by having a certified EHR in 2012, United States 2013



Note: All differences are significant ($p < 0.0001$). Estimates are adjusted for age, primary care specialty, practice size, ownership, MSA status, and region

Source: National Electronic Health Records Survey, 2013 and Centers for Medicare & Medicaid Services EHR Incentive Program, 2012

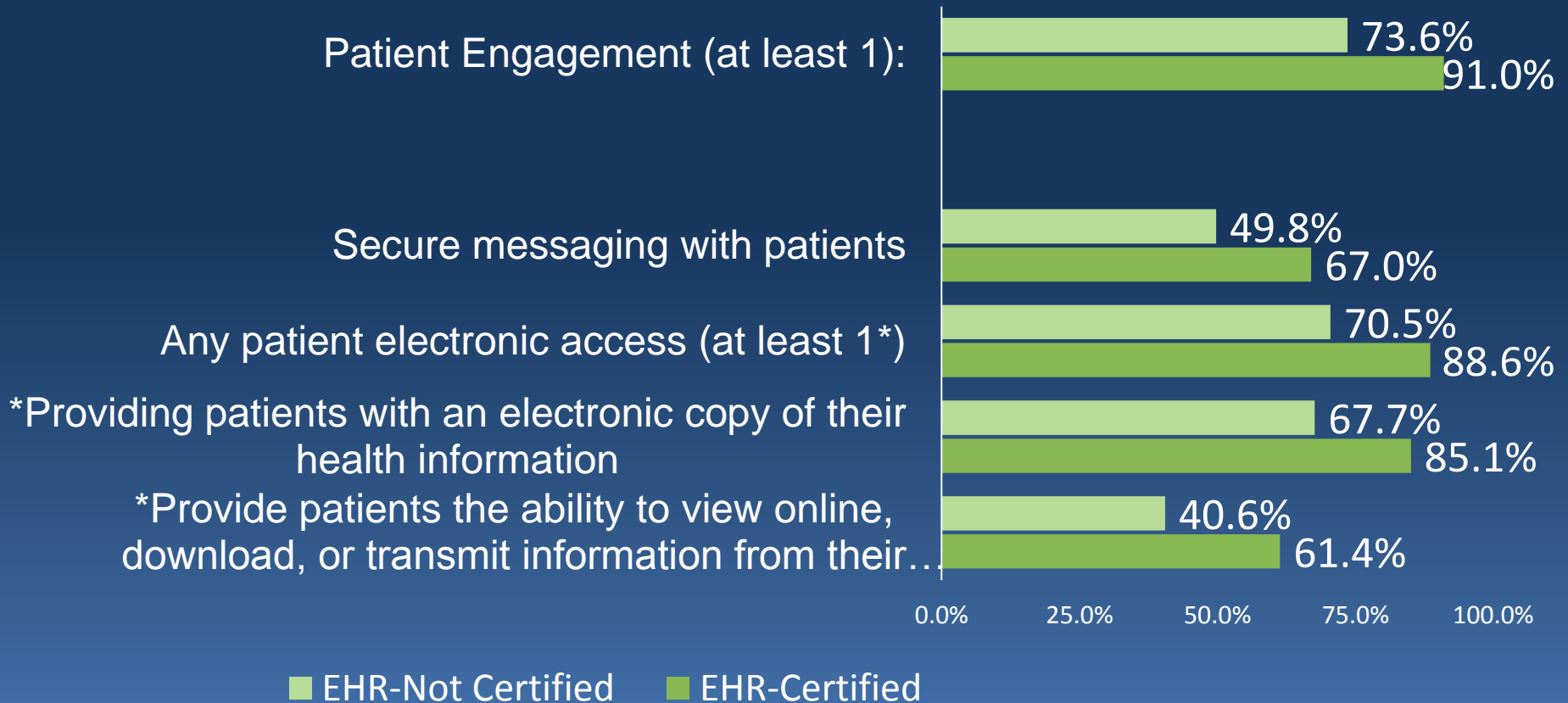
Safety-related EHR use by having a certified system in 2012, United States 2013



Note: All differences are significant ($p < 0.0001$). Estimates are adjusted for age, primary care specialty, practice size, ownership, MSA status, and region

Source: National Electronic Health Records Survey, 2013 and Centers for Medicare & Medicaid Services EHR Incentive Program, 2012

Patient engagement-related EHR use by having a certified system in 2012, United States 2013



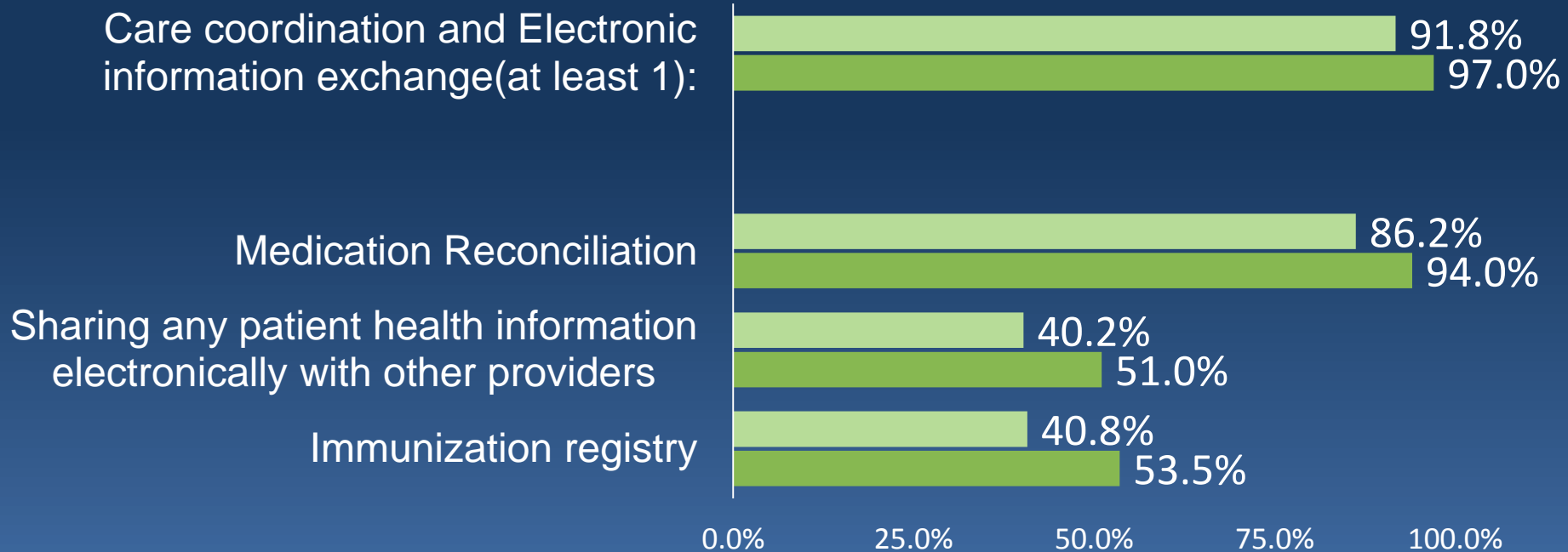
Note: All differences are significant ($p < 0.0001$). Estimates are adjusted for age, primary care specialty, practice size, ownership, MSA status, and region. Any patient electronic access includes the categories with (*)

Source: National Electronic Health Records Survey, 2013 and Centers for Medicare & Medicaid Services EHR Incentive Program, 2012

Care coordination/Electronic information exchange-related EHR use by having a certified system in 2012

■ EHR-Not Certified

■ EHR-Certified



Note: All differences are significant ($p < 0.0001$). Estimates are adjusted for age, primary care specialty, practice size, ownership, MSA status, and region
Source: National Electronic Health Records Survey, 2013 and Centers for Medicare & Medicaid Services EHR Incentive Program, 2012

Results

- In 2013, 96% of physicians were eligible for CMS' EHR Incentive program.
- 45% of these eligible physicians had certified EHR systems in 2012.
 - Most eligible physicians with a certified EHR in 2012 reported greater routine use of EHR functionalities related to safety, patient engagement, or care coordination in 2013 compared to physicians that did not have a certified EHR system in 2012 ($p < 0.01$).

Discussion

- Physicians with CEHRT in 2012 had used more of the EHR functionalities associated with Safety, Patient Engagement, and Care Coordination.
- The biggest difference was appreciated in patient engagement activities (some not Incentive Program requirements until 2014).
- Many functionalities are tools of primary care physicians.
 - May not be relevant to all specialists (e.g., immunization registry reporting, e-Rx).
- Differences may also be related to the survey respondent and their interpretation of EHR functionalities.

Limitations

Temporal limitations:

- May have a CEHRT but did not attest in 2012, leading to misclassification.
 - Underreport having CEHRT
 - Underestimate the association between use of advanced processes and certified health IT.
- Eligibility information was determined in 2013
 - Changes in eligibility before survey response are not accounted.

Self report:

- Data from the NEHRS are self-report and proxy responses for physicians are accepted.

Implications for Policy Delivery, and Practice

- First study to link survey data to CMS' EHR Incentive Program data.
- The certification program requires that certified health IT products have certain functionalities designed to promote better care, smarter spending, and healthier people.
- Physicians with certified systems are more likely to perform tasks that moves health care delivery toward this triple aim.

Acknowledgements

- The National Electronic Health Records Survey was sponsored by the Office of the National Coordinator for Health Information Technology (ONC) and conducted by the National Center for Health Statistics.
- For any questions about this study please contact:
 - Eric Jamoom – ejamoom@cdc.gov

2016 Call for Applications

National Center for Health Statistics (NCHS)
and AcademyHealth Health Policy Fellowship

Conduct Research at the National Center for Health Statistics

PURPOSE

This Fellowship fosters collaboration between the National Center for Health Statistics (NCHS) staff and visiting scholars on a wide range of health services research topics of mutual concern. The program also offers collective opportunities with AcademyHealth and NCHS.

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- Present research at an NCHS seminar;
- Learn the fundamentals of health policy development and implementation at AcademyHealth's Health Policy Orientation; and
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Applications due: **Monday, November 9, 2015**
Information: <http://www.academyhealth.org/nchs>
Questions: nchs@academyhealth.org

Timeline

ASAP

Intent to Apply
Online Form

11/9/2015

Application
Deadline

By 1/ 2016

Announcement of
selected fellow(s)

9/ 2016

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**NCHS Health Policy
Fellowship program officer is
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**GOQ9@cdc.gov (301) 458-
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