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# Hospitals Ineligible For Federal Meaningful-Use Incentives Have Dismally Low Rates Of Adoption Of Electronic Health Records

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**ABSTRACT** The US government has dedicated substantial resources to help certain providers, such as short-term acute care hospitals and physicians, adopt and meaningfully use electronic health record (EHR) systems. We used national data to determine adoption rates of EHR systems among all types of inpatient providers that were ineligible for these same federal meaningful-use incentives: long-term acute care hospitals, rehabilitation hospitals, and psychiatric hospitals. Adoption rates for these institutions were dismally low: less than half of the rate among short-term acute care hospitals. Specifically, 12 percent of short-term acute care hospitals have at least a basic EHR system, compared with 6 percent of long-term acute care hospitals, 4 percent of rehabilitation hospitals, and 2 percent of psychiatric hospitals. To advance the creation of a nationwide health information technology infrastructure, federal and state policy makers should consider additional measures, such as adopting health information technology standards and EHR system certification criteria appropriate for these ineligible hospitals; including such hospitals in state health information exchange programs; and establishing low-interest loan programs for the acquisition and use of certified EHR systems by ineligible providers.

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**T**he Health Information Technology for Economic and Clinical Health (HITECH) provisions of the American Recovery and Reinvestment Act were enacted into law in 2009 to develop a nationwide health information technology (IT) infrastructure. The legislation promotes the electronic exchange of clinical data through the widespread use of certified electronic health records (EHRs) as a means of fostering health care quality and efficiency. This foundation is critical to broader health care reform efforts, such as patient-centered medical homes and accountable care organizations as articulated in the Affordable Care Act of 2010.

The HITECH provisions make Medicare and Medicaid incentives available to certain types of

providers, such as short-term acute care hospitals and physicians able to meet specific “meaningful use” criteria. However, the law leaves important health care providers out of the incentive program, including nursing homes, home health agencies, long-term acute care hospitals, inpatient rehabilitation hospitals, and inpatient psychiatric hospitals. These providers were excluded from the incentive program primarily because of funding constraints and uncertainty about their readiness to adopt EHR systems.<sup>1</sup>

Excluding key providers—such as hospitals that care for patients with complex medical conditions who are often chronically ill and functionally impaired—from broad national efforts to promote the adoption of EHR systems and exchange of clinical data has important implica-

tions. Assuming that these ineligible hospital providers adopt EHR systems at a slower rate as a consequence of their exclusion from financial incentives, the patients who receive care at these hospitals will be less likely to benefit from the improved care associated with access to an EHR. There will be spillover effects as well: If large segments of the health care system remain paper based, then investments to support EHR adoption and use by eligible hospitals and physicians might not produce the expected quality and efficiency gains.

Nearly one-third of all Medicare patients discharged from short-term acute care hospitals are discharged to postacute care settings such as rehabilitation hospitals.<sup>2,3</sup> This proportion of patients is likely to increase over time. As a result, it is critical to ensure the flow of clinical data among providers to reduce waste and promote high-quality care. Case studies of some postacute care providers have identified benefits of implementing EHR systems similar to those reported for acute care hospitals and physicians.<sup>4,5</sup> It is generally believed that the use of EHR systems would produce the same quality and efficiency gains for the ineligible hospitals as are anticipated for eligible, short-term acute care hospitals. Adoption rates for EHR systems have been previously examined, using national data, for nursing homes, home health, and hospice providers.<sup>6,7</sup>

This study is the first to use nationally available hospital data to provide a baseline of EHR system adoption rates for hospitals that are ineligible for federal incentives. It compares the use of this technology at ineligible hospitals with that at short-term acute care hospitals. We examined data for all ineligible hospital providers: long-term acute care hospitals, rehabilitation hospitals, and psychiatric hospitals. First, we determined EHR system adoption rates and compared these rates to those at eligible short-term acute care hospitals to assess whether a gap already exists. Second, we examined how engaged these ineligible hospitals are in electronically exchanging clinical data. Finally, we assessed whether ineligible hospitals could meet the meaningful-use criteria incorporated in stage 1 of existing federal regulations. These stage 1 criteria spell out EHR data capture and information-sharing requirements that hospitals must meet to qualify for federal incentives.

Information from this analysis will provide critical insights for policy makers about how these providers are faring on adopting EHR technology and what the implications are for efforts to develop a nationwide health IT infrastructure to improve the quality and efficiency of the health care system.

## Study Data And Methods

**DATA ON THE HOSPITAL SURVEY** We used data from the 2009 health IT supplement to the American Hospital Association survey. We focused on responses from the three types of ineligible hospitals (long-term acute care, rehabilitation, and psychiatric) and compared their responses to those from short-term acute care hospitals, which have been previously published.<sup>8</sup> The 2009 survey was conducted from March through September 2009, and its approach has been described elsewhere.<sup>9</sup> The health IT supplement was developed by an expert panel under the auspices of the Office of the National Coordinator for Health Information Technology. The survey was sent by the American Hospital Association to each hospital's CEO.

Each hospital reported on the presence or absence of thirty-two clinical functions of an EHR system and on whether these had been fully implemented in every unit of the hospital, fully implemented in at least one unit of the hospital, partly implemented, or not yet begun to be implemented.<sup>9</sup> The survey results also identify key hospital characteristics, including hospital type, size, ownership, location, and available services (such as a coronary care unit).

**DEFINING EHR SYSTEMS AND MEANINGFUL-USE REQUIREMENTS** The functions included in basic and comprehensive EHR systems were derived by the expert panel described above and have been used in previous reports of the adoption and use of EHR systems.<sup>8,9</sup> A hospital was designated as having a basic EHR system if it had ten specific electronic clinical functions deployed in at least one hospital unit. A hospital was categorized as having a comprehensive EHR system if it had a set of twenty-four electronic clinical functions deployed in all clinical units of the hospital.<sup>9</sup> The functions required to meet the definition of a basic or comprehensive EHR system are included in Appendix Exhibit 1.<sup>10</sup>

We identified questions from the American Hospital Association survey that had clear analogues to the stage 1 meaningful-use criteria. The ones meeting this test were nine of the fourteen core objectives and three of the ten menu objectives in the final rule for the Medicare and Medicaid Electronic Health Record Incentive Program (Appendix Exhibit 2).<sup>8,10,11</sup>

**ANALYSIS** We used a series of statistical tests (chi-square tests for categorical variables and *t* tests for continuous variables) to compare respondents and nonrespondents to the survey and found modest but significant differences. To adjust for nonresponse bias, we used a logistic regression model to estimate the likelihood of a hospital's responding to the survey based on characteristics such as size, location, and teach-

ing status. We then weighted all responses by the inverse of that hospital's likelihood of response. This technique allowed us to create national estimates while accounting for the observable components that might produce nonresponse bias.

We computed the number of hospitals in each of our three ineligible hospital types and eligible acute care hospitals that were able to meet the definitions for basic and comprehensive EHR systems explained above.<sup>9</sup> We also calculated, using the weighting technique described above, the adoption rates of individual functions, such as computerized physician order entry for medications and the ability to exchange clinical data electronically. We used chi-square tests (for categorical variables) and analyses of variance (for continuous variables) to compare adoption rates of basic and comprehensive EHR systems as well as the twenty-four individual functions across the four groups of hospitals.

We also considered multivariable models in which we combined all four groups of hospitals and modeled the likelihood of having a basic or comprehensive EHR system across these groups, adjusting for key hospital characteristics such as size and teaching status. The results were qualitatively similar. However, given that the financial incentives under the HITECH provisions do not "adjust" or give credit for key hospital characteristics, we believe that the most policy-relevant comparison was one that was unadjusted.

Finally, we used questions identified in the American Hospital Association survey with analogues to the stage 1 meaningful-use criteria and calculated the number of hospitals in each institutional type that would be able to meet certain stage 1 meaningful-use hospital criteria, regardless of actual eligibility for incentives.<sup>11</sup> We used the same statistical approaches defined above, starting with bivariate models (using an analysis of variance) and then building multivariable models (where the results were qualitatively very similar). Again, we present only the bivariate analyses because those are the most relevant for the policy discussion.

**LIMITATIONS** There are several limitations to this study. First, although the survey attained a nearly 70 percent response rate for short-term acute care hospitals, response rates for the ineligible hospitals were decidedly lower. We attempted to statistically correct for potential nonresponse bias through weighting; however, these techniques are inherently imperfect. Nonresponse was associated with characteristics of hospitals that are less likely to have EHR systems. Therefore, we may have overestimated the degree to which these ineligible hospitals have adopted EHR systems.

Second, we used self-reported data from

health IT leaders in these institutions. Thus, the data were not independently verified.

Third, the definitions of *basic EHR system*, *comprehensive EHR system*, and *meaningful use* were largely designed for acute care hospitals. They may not comprise the optimal set of functions to facilitate high-quality, efficient care at ineligible hospitals.

Fourth, we focused on whether hospitals had adopted EHR systems rather than on how hospitals used the systems. As a result, this report may overestimate how much clinical care EHR systems support.

Finally, we did not ask directly about the meaningful-use objectives. Instead, we mapped our survey responses to the objectives and measures outlined by the Department of Health and Human Services. Our approach represents the current best estimate of how many of these hospitals might be able to meet meaningful-use criteria. However, it is conservative for the majority of individual criteria and thus may overestimate the number of hospitals that could have met these criteria at the time of the survey.

We may have understated the number of hospitals that met the meaningful-use criterion of being able to exchange clinical data electronically with other providers. The meaningful-use rule requires only that hospitals demonstrate the ability to engage in information exchange, whereas our survey asked if hospitals were actively exchanging data with other providers. As a result, we also report our findings without the health information exchange requirement.

## Study Results

**SURVEY SIZE AND RESPONSE RATE** The American Hospital Association survey of all nonfederal hospitals included 4,629 general short-term acute care hospitals, 401 long-term acute care hospitals, 237 rehabilitation hospitals, and 466 psychiatric hospitals. The response rates varied by hospital type: 36 percent for long-term acute care hospitals; 46 percent for rehabilitation hospitals; 52 percent for psychiatric hospitals; and 68 percent for short-term acute care hospitals.

**CHARACTERISTICS OF THE INELIGIBLE HOSPITALS** There were important differences in the characteristics of hospitals based on their type (Exhibit 1). For example, approximately half of the acute care and psychiatric hospitals were small; by comparison, more than 80 percent of rehabilitation and long-term acute care hospitals were small. There were modest differences among hospital types with respect to the region where they were located and their membership in a provider system. There were large

## EXHIBIT 1

## Hospital Characteristics Among Responders To The Health Information Technology Survey, 2009

Characteristic	Long-term acute care (n = 144)	Rehabilitation (n = 108)	Psychiatric (n = 240)	Short-term acute care (n = 3,161)
AHA member	70%	83%	82%	98%
<b>SIZE</b>				
Small (< 100 beds)	87	82	53	49
Medium (100–399 beds)	11	18	39	41
Large (≥ 400 beds)	2	0	8	10
<b>LOCATION</b>				
Northeast	9	18	20	13
Midwest	22	13	22	30
South	57	57	43	38
West	12	12	15	19
Urban hospital	93	92	84	56
<b>OWNERSHIP</b>				
For-profit	75	67	37	16
Private, nonprofit	20	26	17	60
Public	5	7	46	24
Teaching hospital	4	15	21	23
Member of provider system	78	68	47	54

**SOURCE** Authors' analyses of data from the 2009 American Hospital Association (AHA) annual survey and Health Information Technology Supplement of Acute Care Hospitals in the United States.

differences in terms of their ownership, teaching status, and urban versus rural location. For example, although only 16 percent of the short-term acute care hospitals were for profit, 67 percent of rehabilitation hospitals and 75 percent of long-term acute care hospitals were.

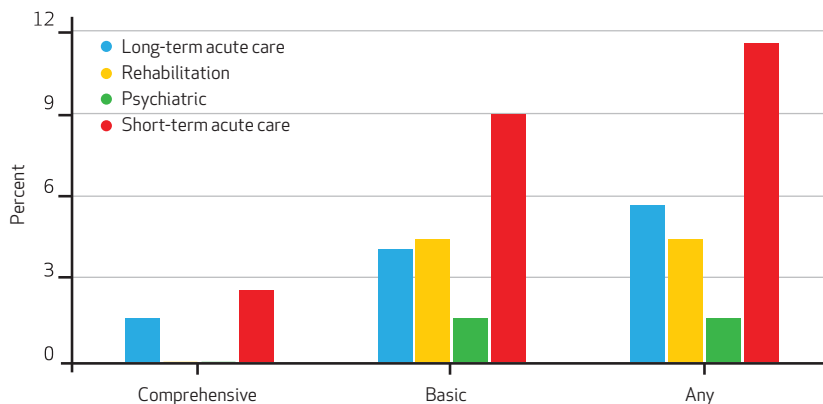
**OVERALL ADOPTION** We found a wide range in the rates of EHR system adoption by hospital type: Although 6 percent of long-term acute care

hospitals had adopted any EHR system (basic or comprehensive), only 4 percent of rehabilitation hospitals and just 2 percent of psychiatric hospitals had any system (Exhibit 2). In contrast, 12 percent of short-term acute care hospitals had any system in 2009. When we examined rates of adoption of a comprehensive EHR system (functions needed for the system to have a robust impact on quality and efficiency), we found that no psychiatric or rehabilitation hospitals met these criteria and that just 2 percent of long-term acute care hospitals had such systems. As reported, 3 percent of short-term acute care hospitals met these criteria.<sup>9</sup>

**SELECTED EHR CAPABILITIES** Overall, the adoption of specific EHR system functions also varied greatly by hospital type. However, we found one consistent pattern: Compared to short-term acute care hospitals, ineligible hospitals had lower rates of adoption for each of the twenty-four individual functions that make up a comprehensive or basic EHR (Exhibit 3). For example, 30 percent of short-term acute care hospitals reported having computerized provider order entry for medications in at least one clinical unit. However, the numbers for the ineligible hospitals ranged from 19 percent to 23 percent (for difference across the four hospital subtypes,  $p = 0.004$ ). Electronic discharge summaries—a key function of sharing data among providers—were available in 62 percent of short-term acute care hospitals but in just 29–36 percent of ineli-

## EXHIBIT 2

## Electronic Health Record (EHR) System Adoption Rate Among Hospitals, By Type Of Hospital And EHR System Capability, 2009



**SOURCE** Authors' analyses of data from the 2009 American Hospital Association annual survey and Health Information Technology Supplement of Acute Care Hospitals in the United States. **NOTE** For sample sizes, see Exhibit 1.



**EXHIBIT 3**

**Hospitals In Which Electronic Health Record Capabilities Have Been Implemented In At Least One Unit, 2009**

Capability	Ineligible hospitals (%) <sup>a</sup>			Eligible hospitals (%) <sup>b</sup>
	Long-term acute care	Rehabilitation	Psychiatric	Short-term acute care
Medication list	48	49	33	65
Computerized provider order entry	23	22	19	30
Drug allergy alerts	47	39	35	62
Radiology images	61	29	7	83
Lab reports	62	46	32	83
Advance directives	17	15	12	48
Discharge summary	33	36	29	62

**SOURCE** Authors' analyses of data from the 2009 American Hospital Association Health Information Technology Supplement of Acute Care Hospitals in the United States. **NOTE** For sample sizes, see Exhibit 1. <sup>a</sup>Ineligible hospitals do not meet meaningful-use criteria and therefore are not eligible to receive financial incentives under the Health Information Technology for Economic and Clinical Health provisions of the American Recovery and Reinvestment Act of 2009. <sup>b</sup>Eligible hospitals meet the necessary meaningful-use criteria and therefore may receive financial incentives.  $p < 0.01$  for differences among the four hospital types.

gible hospitals. For nearly every function examined, psychiatric hospitals appeared to have the lowest rates of adoption.

Finally, ineligible hospitals were also much more likely than eligible hospitals to report not having plans to implement clinical decision support and computerized provider order entry functions, which have great potential to improve quality and patient safety.<sup>12,13</sup>

**INFORMATION EXCHANGE** The rate of health information exchange with unaffiliated hospitals and physicians was also much lower for ineligible hospitals than eligible hospitals (Exhibit 4). Although 17 percent of short-term acute care hospitals reported that they were actively exchanging health information with other providers, the comparable rates were just 11 percent for long-term acute care hospitals, 5 percent for rehabilitation hospitals, and 9 percent for psychiatric hospitals.

**MEANINGFUL USE** When we mapped our survey questions to meaningful-use criteria, we found that very few hospitals would be able to meet meaningful-use requirements (Exhibit 5). None of the psychiatric or rehabilitation hospitals had all nine core and all three menu objectives required to meet meaningful-use criteria, and only 0.6 percent of long-term acute care hospitals and 2.1 percent of short-term acute care hospitals could meet them. When we eliminated the need to electronically exchange clinical data, there were still no psychiatric or rehabilitation hospitals that could meet the criteria, although the rates among long-term acute care and short-term hospitals increased to 3.5 percent and 3.3 percent, respectively. Few psychiatric and rehabilitation hospitals were able to meet even the minimal core requirements.

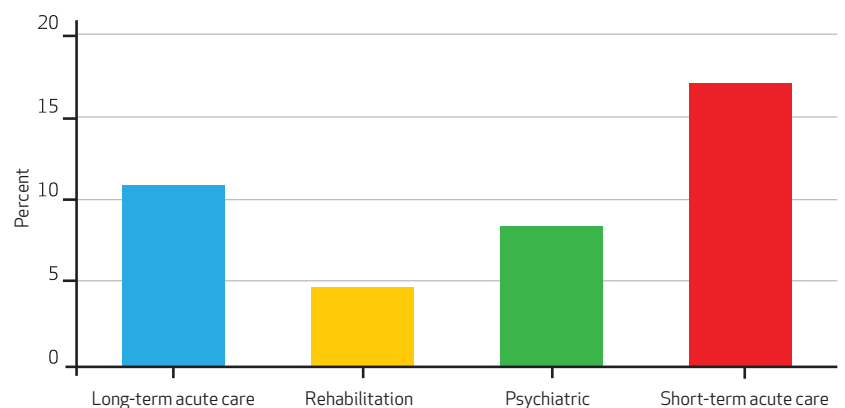
**Discussion**

We found very low EHR system adoption rates among hospitals ineligible for the incentives in the HITECH provisions. These rates were less than half of the rate among short-term acute care hospitals. Low EHR system adoption rates among short-term acute care (eligible) hospitals have received much attention from policy makers. The 2–6 percent adoption rates among ineligible providers suggest major challenges ahead. The federal meaningful-use incentives will almost surely widen this gap.

We posit several important reasons why EHR

**EXHIBIT 4**

**Percentage Of Hospitals That Actively Exchange Data Electronically, By Type Of Hospital, 2009**



**SOURCE** Authors' analyses of data from the 2009 American Hospital Association annual survey and the Health Information Technology Supplement of Acute Care Hospitals in the United States. **NOTES** For sample sizes, see Exhibit 1. Hospitals are included that responded: "Participate, we actively exchange data" when asked, "Does your hospital participate in any regional arrangements to share electronic patient level clinical data through an electronic health information exchange, such as an RHIO (Regional Health Information Organization)?"

## EXHIBIT 5

## Hospitals' Ability To Meet Meaningful-Use Criteria

Criterion	Ineligible hospitals (%) <sup>a</sup>			Eligible hospitals (%) <sup>b</sup>		p value
	Long-term acute care	Rehabilitation	Psychiatric	Short-term acute care		
<b>MEANINGFUL-USE CORE FUNCTIONS</b>						
Use computerized provider order entry	23	22	19	30		< 0.04
Implement drug-drug and drug-allergy alerts	17	12	13	14		0.55
Maintain up-to-date problem list	23	18	22	46		< 0.001
Maintain active medication list	48	49	33	66		< 0.001
Key demographics	56	70	60	86		< 0.001
Discharge summary	33	36	29	62		< 0.001
Report hospital quality measures	14	16	12	26		< 0.001
Implement one clinical decision support	38	28	25	60		< 0.001
Information exchange	5	1	2	11		< 0.001
Total core functions	0.6	1.4	0.0	2.1		0.19
Total core functions except information exchange	5.5	2.8	0.0	4.2		0.78
<b>MEANINGFUL-USE MENU FUNCTIONS</b>						
Lab results	62	46	32	84		< 0.001
Medication reconciliation	30	33	22	53		< 0.001
Advance directives	17	15	12	49		< 0.001
Total menu functions	11.1	7.1	6.6	33.1		< 0.001
<b>TOTALS</b>						
Total core and menu functions	0.6	0.0	0.0	1.6		0.30
Total functions except information exchange	3.5	0.0	0.0	3.3		0.60

**SOURCE** Authors' analyses of data from the 2009 American Hospital Association annual survey and the Health Information Technology Supplement of Acute Care Hospitals in the United States. **NOTE** For sample sizes, see Exhibit 1. <sup>a</sup>Ineligible hospitals do not meet meaningful-use criteria and therefore are not eligible to receive financial incentives under the Health Information Technology for Economic and Clinical Health provisions of the American Recovery and Reinvestment Act of 2009. <sup>b</sup>Eligible hospitals meet the necessary meaningful-use criteria and therefore may receive financial incentives.

system adoption rates are so much lower among ineligible hospitals. First, the hospitals might not perceive the contribution that EHR systems could make to improving the care they provide, because data on the benefits of inpatient EHR systems come mostly from short-term acute care hospitals. Second, it is likely that providers and vendors alike are uncertain about what type of EHR system functionality these ineligible hospitals need and would find appropriate.

Third, most vendors of EHR systems for hospitals are focused on meeting the demands of short-term acute care hospitals for products that will enable them to meet meaningful-use criteria. It is unlikely that the vendors will devote substantial resources, at least in the short run, to developing EHR systems for ineligible hospitals.

The lower levels of engagement in health information exchange among ineligible hospitals have important consequences. Electronically exchanging health information has the ability to enhance care coordination as patients move among care settings. The full use of information exchange depends on the electronic capabilities of providers to both send and receive data. The low levels of health information exchange among ineligible providers probably reflects

both their lower levels of electronic capabilities, such as fewer EHR systems, and their lack of engagement in these efforts.

Given that health information exchange is a clearly stated priority of the federal incentives—and is one of the three components of meaningful use highlighted in the HITECH provisions—we expect that the rate of information exchange among short-term acute care hospitals will rise substantially over time. In the final rule for the Medicare and Medicaid Electronic Health Record Incentive Program, the Centers for Medicare and Medicaid Services states that “stage two meaningful use requirements will include rigorous expectations for health information exchange.”<sup>11(p44321)</sup> It is unlikely that the ineligible hospitals will catch up.

**POLICY IMPLICATIONS** Our findings have important policy implications. High and rising health care costs, coupled with uneven quality, represent one of the biggest domestic policy challenges facing the nation. The HITECH provisions seek to provide some of the necessary infrastructure to advance the electronic use and exchange of health information.

The use of EHR systems within a care setting will be essential to the continued ability of ineligible hospitals to provide high-quality and effi-

cient care. EHR systems help reduce medication errors, promote compliance with evidence-based treatments, and avoid duplication and inefficiency in receipt of services. As adoption of EHR systems grows among the eligible hospitals, there may be increasing pressure for the ineligible hospitals to become meaningful users of fully functional EHR systems.

A major cause of inefficiency in our health care system is fragmentation and lack of coordination across care settings.<sup>2</sup> The Affordable Care Act makes some efforts to address these challenges by requiring the Centers for Medicare and Medicaid Services to experiment with new delivery and payment models, such as bundled payments and accountable care organizations. Fundamental to the success of any of these programs is the ability to share clinical data across providers. These emerging payment models—along with the needs of postacute care providers to maintain relationships with acute care hospitals—may force ineligible hospitals to adopt EHR systems and use electronic health information exchange, although they will be at a financial disadvantage because of their lack of HITECH incentive payments.

By law, the HITECH incentive program for EHR systems applies to only certain “eligible hospitals” (acute care hospitals) and “eligible professionals” (primarily physicians). Expanding this program to include ineligible providers might not be a viable option because of the costs of making incentive payments to them.

The HITECH incentive programs managed by the Office of the National Coordinator for Health Information Technology are not restricted to those health care providers who could be eligible for the EHR system incentive program. However, initial federal efforts—such as technical assistance through the regional extension centers—were primarily directed to the eligible providers. The Office of the National Coordinator awarded more than half a billion dollars in grants to states and state-designated entities to facilitate health information exchange, primarily among eligible hospitals and professionals.

At the same time, the Office of the National Coordinator recognized the importance of advancing the exchange of health information on behalf of patients who receive services from postacute and long-term care providers, as well as by other providers ineligible for EHR system incentives. As a result, in January 2011 the office provided \$7 million in challenge grants to four states to focus on health information exchange for transitions in care that involve nursing homes and home health agencies.<sup>14</sup> In addition, a few of the Beacon Community Programs, which are health IT pilots, include postacute care, long-

term care, and behavioral health care providers.<sup>15</sup> The Office of the National Coordinator describes a broader set of its activities for ineligible providers on its website.<sup>16</sup>

The Centers for Medicare and Medicaid Services anticipates potentially offering assistance to Medicare providers that are ineligible for financial incentives, through a future contract with Quality Improvement Organizations. These organizations contract with Medicare to help providers improve quality, but they may also be able to function as entities that help provide technical assistance to ineligible providers as they adopt and use EHR systems.

Federal and state policy makers could consider other ways to further advance and accelerate the use of EHR systems by all health care providers. Policy makers could adopt health IT standards and EHR system certification criteria appropriate for the ineligible providers. This would provide important guidance to ineligible providers and health IT vendors. In addition, establishing rigorous health information exchange requirements for eligible providers should increase the value of health information exchange for all providers, which will then be able to send and receive important clinical data.

State health information exchange programs could expand their focus to include ineligible providers. In addition, establishing low-interest loan programs for the acquisition and use of certified EHR systems by ineligible providers could accelerate the acquisition and use of these systems. These actions may encourage ineligible providers to adopt and use EHR systems.

Whether investments in the health IT infrastructure will be sufficient to enable all health care providers to become meaningful users of health IT is an area requiring study. The Office of the National Coordinator uses data from the National Ambulatory Medical Care Survey to track changes in physicians' adoption rates of EHR systems and data from the American Hospital Association annual survey to track EHR system adoption rates by acute care hospitals. As this study has shown, the hospital data can also be used to analyze adoption rates among ineligible hospitals.

The National Home Health and Hospice Care Survey includes questions on the use of EHR systems by home health and hospice care providers. The National Nursing Home Survey creates opportunities to assess trends in EHR system adoption rates by nursing homes. The nursing home survey includes a question on the use of electronic information systems. However, this question should be refined to provide reliable, valid, and national data on the adoption of EHR systems in nursing homes.<sup>17,18</sup>



Including questions in national surveys regarding the meaningful use of EHR systems would enable comparisons of meaningful use across provider types as well as analyses of meaningful use appropriate for each provider type. Fielding questions concerning the adoption of EHR systems by nursing homes and home health care providers would fill an important information gap and facilitate analyses of trends in EHR adoption by these providers.

**CONCLUSION** We examined rates of adoption of EHR systems and engagement in health information exchange among inpatient providers ineligible for financial incentives and found dismally low rates. Given the central importance of

the availability of electronic data in our national efforts to reform the delivery system, these findings have important implications: By leaving out ineligible providers, the nation risks building a new digital divide in which key providers, which already have low levels of electronic clinical data, may fall further behind.

To develop a nationwide health IT infrastructure that provides timely and complete information at the time and place of care, electronic clinical data will need to be available across all sites of care. Consideration should be given to measuring and advancing the use of EHR systems and health information exchange by providers ineligible for federal EHR incentives. ■

The authors are grateful for the access to the survey data provided by the American Hospital Association.

## NOTES

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In this month's *Health Affairs*, Larry Wolf and coauthors examine the use of electronic health records by inpatient providers that are ineligible for the federal incentives made available to others. The authors found that the rate of adoption among those ineligible providers, which includes long-term acute hospitals and psychiatric hospitals, was "dismally low." They recommend additional measures that state and federal policy makers should consider to boost adoption by these providers.

Wolf is a health information technology (IT) strategist at Kindred Healthcare who focuses on clinical systems across the spectrum of care. He is also the chair of the Federation of American Hospitals' Health IT Task Force, cochair of the Healthcare Information and Management Systems Society's Interoperability Showcase Planning Committee, a member of the American Health Care Association's Health IT Task

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