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Congressional Committees

Subject: *Electronic Health Records: Number and Characteristics of Providers Awarded Medicare Incentive Payments for 2011*

Widespread use of health information technology, such as electronic health records (EHR), has the potential to improve the quality of care patients receive and reduce health care costs. However, studies have estimated that as of 2009, 78 percent of office-based physicians and 91 percent of hospitals had not adopted EHRs.[1] Among other things, the Health Information Technology for Economic and Clinical Health (HITECH) Act, enacted as part of the American Recovery and Reinvestment Act of 2009 (Recovery Act)[2] provided funding for various activities intended to promote the adoption and meaningful use of certified EHR technology.[3] The largest of these activities, in terms of potential federal expenditures, are the Medicare and Medicaid EHR programs.[4] Starting in 2011, these programs have provided incentive payments for certain providers, including both hospitals and health care professionals such as physicians and dentists, that demonstrate meaningful use of certified EHR technology and meet other program requirements established by the Centers for Medicare & Medicaid Services (CMS). Beginning in 2015, the Medicare EHR

[1]See C. J. Hsiao, E. Hing, T. C. Socey, and B. Cai, "Electronic Medical Record/Electronic Health Record Systems of Office-Based Physicians: United States, 2009 and Preliminary 2010 State Estimates," *National Center for Health Statistics Health E-stat* (2010); and A. K. Jha, C. M. DesRoches, P. D. Kralovec, and M. S. Joshi, "A Progress Report on Electronic Health Records In U.S. Hospitals," *Health Affairs*, no.10 (2010):1951-1957.

[2]The HITECH Act was enacted as title XIII of division A and title IV of division B of the Recovery Act. Pub. L. No. 111-5, div. A, tit. XIII, 123 Stat. 115, 226-279 and div. B, tit. IV, 123 Stat. 115, 467-496 (2009).

[3]Congress defined "meaningful use" in this context to reflect that the user of health information technology demonstrates to the satisfaction of the Secretary of the Department of Health and Human Services (HHS) that the technology is certified and being used in a meaningful manner, that the technology is connected in a manner that provides for the electronic exchange of health information to improve the quality of health care, and that such information is submitted in a form and manner specified by the Secretary. See Pub. L. No. 111-5, § 4101(a) 123 Stat. 467-472. To be certified, EHR technology must meet certain criteria established by HHS's Office of the National Coordinator for Health Information Technology that describe minimum related performance standards and implementation specifications.

[4]See Pub. L. No. 111-5, §§ 4101-4201, 123 Stat. 467-494. Medicare is a federal program financing health care for individuals aged 65 and older, certain disabled individuals, and individuals with end-stage renal disease. In 2010, Medicare covered 47 million beneficiaries. Medicaid is a federal-state program financing health care for certain low-income individuals. In fiscal year 2009, Medicaid covered over 65 million beneficiaries.

program is generally required to begin applying a payment adjustment—that is, a payment reduction—for Medicare providers that do not demonstrate meaningful use. The Congressional Budget Office estimated total spending for the Medicare and Medicaid EHR programs to be $30 billion from 2011 through 2019, of which spending for the Medicare EHR program accounts for more than half—$17.7 billion. This report focuses on the Medicare EHR program.

Provisions in the HITECH Act defined the types of hospitals and professionals that may be eligible to receive Medicare EHR incentive payments.[5] Eligible hospitals include acute care hospitals and critical access hospitals.[6] Eligible professionals include doctors of medicine, dental medicine or surgery, optometry, osteopathy, and podiatric medicine, and chiropractors.[7] During 2011, the first year of the program, 2,802 hospitals and 141,649 professionals registered for the Medicare EHR program, which is a necessary first step to participate in the program.[8] Hospitals can receive Medicare EHR incentive payments for up to 4 years, and professionals can receive such payments for up to 5 years.[9] The incentive payment amounts are determined as follows:

- For acute care hospitals, the incentive payment amount for any given year is generally based on the hospital's annual discharges and Medicare share, which is the percentage of the hospital's inpatient bed days that were attributable to Medicare patients. Theoretically, $6,370,400 is the maximum possible Medicare EHR incentive payment for an acute care hospital for 2011. This assumes that all patients served were Medicare patients and that the hospital had at least 23,001 discharges, which is the highest number of discharges CMS includes in the calculation of Medicare EHR incentive payments.

[5]The HITECH Act created incentive programs for Medicare fee-for-service, Medicare Advantage, and Medicaid. Under the Medicare Advantage EHR program, Medicare Advantage Organizations (MAO)—private companies that provide Medicare health insurance coverage to beneficiaries for hospital, physician, and other services—receive incentive payments for certain affiliated professionals and hospitals that meet program requirements. Pub. L. No. 111-5, §§ 4101(c), 4102(c) 123 Stat. 473-476, 484-486. CMS requires MAOs to receive payment through their affiliated hospitals, which we include as hospital payments in this report. MAOs directly receive Medicare EHR incentive payments for their affiliated professionals that are based on services provided to Medicare Advantage plan enrollees. In this report, we refer to the incentive programs for Medicare fee-for-service and Medicare Advantage collectively as the Medicare EHR program.

[6]Acute care hospitals are hospitals described in Section 1886(d) of the Social Security Act, which are paid under the inpatient prospective payment system in the 50 states and the District of Columbia, including those affiliated with a qualifying MAO.

[7]Professionals must practice in the 50 states, the District of Columbia, or a U.S. insular area to be eligible for the Medicare EHR program.

[8]For hospitals, see CMS, "Medicare and Medicaid EHR Incentive Program Payment and Registration Report, November 2011." For professionals, see CMS, "Medicare and Medicaid EHR Incentive Program Payment and Registration Report, February 2012."

[9]In order to maximize the total amount of Medicare EHR incentive payments that could be awarded, acute care hospitals must begin participating in the program by the 2013 program year, and critical access hospitals and professionals must begin participating by the 2012 program year.

- For critical access hospitals, the incentive payment amount is generally based on the hospital's Medicare share as well as reasonable costs incurred for the purchase of depreciable assets necessary to administer certified EHR technology, such as computers and associated hardware and software. CMS has not established a maximum incentive payment amount for these hospitals.

- For professionals, the amount of incentive payment in any given year is generally based on the professional's (1) Medicare Part B charges or (2) revenue for services provided to Medicare Advantage plan enrollees of a qualifying Medicare Advantage Organization (MAO), subject to an annual limit.[10] For most professionals, the amount of the incentive payment for 2011 could not exceed $18,000. For professionals who predominately furnish services in geographic areas designated as a health professional shortage area, the amount of the incentive payment for 2011 generally could not exceed $19,800.[11]

The HITECH Act requires us to report on, among other things, the impact of its provisions on adoption of EHRs by providers.[12] In response to this requirement, in April 2012 we reported on CMS's efforts to oversee the Medicare EHR program during its first year as well as challenges encountered by providers and strategies they used to participate in the program.[13] We recommended that CMS take steps to enhance its processes to verify that providers met the requirements to receive incentive payments. On behalf of CMS, the Department of Health and Human Services agreed with most of our recommendations.

Concerns have been raised that various factors, such as location in urban or rural areas or the size of hospitals and professional practices, may affect the extent to which different providers will respond to the provisions of the HITECH Act that aim to encourage the meaningful use of EHR technology. Identifying the number and characteristics of providers that participated during the first year of the Medicare EHR program can provide important information on whether certain types of providers were more likely than others to participate. This information could also provide an early indication of the types of providers that may be more likely to receive payment reductions in future years of the program. As discussed with the committees of jurisdiction, in this report we provide information on providers that were awarded Medicare EHR incentive payments for 2011, the first year of the program. We have ongoing work on the Medicaid EHR program and will issue a future report that will provide information on providers awarded incentive payments for the first year of that program, such as the number of award recipients and their characteristics.

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[10]Medicare Part B covers hospital outpatient, physician, and other services for persons aged 65 and over, certain individuals with disabilities, and individuals with end-stage renal disease.

[11]The maximum incentive payment that could be awarded to an MAO on behalf of an eligible professional was $18,000.

[12]Pub. L. No. 111-5, § 13424(e), 123 Stat. 278-279.

[13]See GAO, *Electronic Health Records: First Year of CMS's Incentive Programs Shows Opportunities to Improve Processes to Verify Providers Met Requirements*, GAO-12-481 (Washington, D.C.: Apr. 30, 2012). In our April 2012 report, we analyzed partial-year data that Medicare providers reported to CMS to demonstrate that they meaningfully used their certified EHR technology.

To provide information on providers—that is, hospitals and professionals—awarded Medicare EHR incentive payments for 2011, we analyzed data related to the 2011 program year that CMS collected from January 3, 2011, through April 2, 2012, as well as data from CMS and other government and private sources on provider characteristics.[14] We used these data to

- determine the number of providers that were awarded a Medicare EHR incentive payment;
- estimate the percentage of eligible providers that were awarded a Medicare EHR incentive payment;
- determine the amount of Medicare EHR incentive payments awarded to providers; and
- examine the characteristics of providers that were awarded Medicare EHR incentive payments.

To determine the number of providers that were awarded a Medicare EHR incentive payment for 2011, we counted the number of providers that had an incentive payment disbursed to them or had an incentive payment that was approved and being processed by CMS, but had not yet been disbursed. To estimate the percentage of eligible providers awarded a Medicare EHR incentive payment for 2011, we divided the number of providers awarded an incentive payment by the total number of eligible providers, that is, providers that were eligible for the Medicare EHR program, regardless of whether they were awarded an incentive payment. To determine the total amount of Medicare EHR incentive payments awarded to providers, we summed the Medicare EHR incentive payments awarded to providers. We also examined the distribution of the Medicare incentive payments across providers. Specifically, for hospitals, we determined the minimum, maximum, and median Medicare EHR incentive payment amount. For professionals, we determined the percentage who were awarded an incentive payment of various amounts.

To examine the characteristics of providers awarded Medicare EHR incentive payments for 2011, we analyzed data from CMS, the Health Resources and Services Administration, the Office of the National Coordinator for Health Information Technology (ONC), and Surescripts.[15] As part of our analysis, we compared the characteristics of providers that were awarded Medicare EHR incentive payments for 2011 to those of other providers that were eligible for the Medicare EHR program but were not awarded a payment for that year. For hospitals, these characteristics

[14]Our analysis includes participating hospitals that were affiliated with MAOs, but does not, in general, include data on participating professionals who were affiliated with MAOs. We included professionals who were affiliated with an MAO if they qualified to receive the maximum incentive payment amount based on Medicare Part B charges, which are outside the Medicare Advantage plan. At the time of our analysis, CMS had not yet determined which professionals would receive incentive payments through an MAO.

[15]Surescripts operates the nation's largest electronic prescription network and collects data on, among other things, the number of electronic prescriptions sent to pharmacies in its network.

included, for example, whether the hospital was classified as an acute care hospital or critical access hospital and whether the hospital was a member of a chain. For professionals, these characteristics included whether the professional had previously participated in CMS's electronic prescribing program[16] or signed an agreement to receive technical assistance from a Regional Extension Center.[17] To ensure the reliability of the various data we analyzed, we interviewed officials from CMS, ONC, and Surescripts; reviewed relevant documentation; and conducted electronic testing to identify missing data and obvious errors. On the basis of these activities, we determined that the data we analyzed were sufficiently reliable for our analysis. Enclosure I provides additional information on our scope and methodology.

We conducted this performance audit from January 2012 to July 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

In summary, 761 hospitals and 56,585 professionals were awarded a total of approximately $2.3 billion in Medicare EHR incentive payments for 2011. These 761 hospitals represented 16 percent of the estimated 4,855 eligible hospitals, and were awarded $1.3 billion in Medicare EHR incentive payments for 2011. While the amount of EHR incentive payments awarded to each hospital ranged from $22,300 to $4.4 million, the median payment amount was $1.7 million. About 61 percent of hospitals accounted for about 80 percent of the total amount of incentive payments awarded to hospitals. Among hospitals awarded an incentive payment for 2011, we found that

- the largest proportion (44 percent) were located in the South, and the lowest proportion (12 percent) were located in the Northeast;
- about two-thirds (67 percent) were in urban areas;
- more than four-fifths (86 percent) were acute care hospitals; and
- almost half (46 percent) were in the top third of hospitals in terms of number of beds.

[16]The electronic prescribing program, which was established by the Medicare Improvements for Patients and Providers Act of 2008, provides incentive payments from 2009 through 2013 to physicians and certain other Medicare professionals, such as physician assistants and nurse practitioners, who have prescribing authority and who adopt and use systems that meet CMS's definition of a qualified electronic prescribing system. Pub. L. No. 110-275, § 132(a), 122 Stat. 2492, 2527. From 2012 through 2014, the program may apply a payment adjustment, or penalty, on the program's eligible providers that do not adopt and use such systems. See GAO, *Electronic Prescribing: CMS Should Address Inconsistencies in Its Two Incentive Programs That Encourage the Use of Health Information Technology*, GAO-11-159 (Washington, D.C.: Feb. 17, 2011).

[17]The regional extension center program was established by the HITECH Act and is administered by ONC to help some types of providers, such as those located in rural areas, to participate in CMS's EHR programs.

Hospitals with certain characteristics were more likely to have been awarded a Medicare EHR incentive payment for 2011. For example, acute care hospitals were more than 2 times more likely than critical access hospitals to have been awarded an incentive payment. Hospitals in the top third in terms of numbers of beds were 2.4 times more likely than hospitals in the bottom third to have been awarded an incentive payment. Further, nonprofit and for-profit hospitals were 1.1 and 1.5 times more likely than government-owned hospitals, respectively, to have been awarded an incentive payment.

The 56,585 professionals who were awarded a Medicare EHR incentive payment for 2011 represented about 9 percent of the estimated 600,172 professionals eligible for the program, and were awarded a total of about $967 million in incentive payments. Among professionals awarded an incentive payment for 2011, we found that

- the largest proportion (32 percent) were located in the South, and the lowest proportion (17 percent) were located in the West;
- a significant majority (89 percent) were in urban areas;
- half (50 percent) were specialty practice physicians and over one-third (38 percent) were general practice physicians;
- nearly three-quarters (71 percent) did not previously participate in CMS's incentive program for electronic prescribing; and
- about half were in the top third in terms of 2010 Medicare Part B charges (46 percent) and 2010 Medicare Part B patient encounters (51 percent).

Professionals with certain characteristics were more likely to have been awarded a Medicare EHR incentive payment for 2011. For example, general practice physicians were 1.8 times more likely than specialty practice physicians to have been awarded an incentive payment. Professionals who had previously participated in CMS's electronic prescribing program were almost 4 times more likely to have been awarded an incentive payment than those who had not participated in the electronic prescribing program, and professionals who had signed an agreement to receive technical assistance from a Regional Extension Center were more than twice as likely to have been awarded an incentive payment. Professionals in the top third in terms of 2010 Medicare Part B charges or number of 2010 Medicare Part B encounters were more than 3 times more likely to have been awarded an incentive payment compared to those in the bottom third for charges or number of encounters.

See enclosure II for more information on the characteristics of hospitals that were awarded a Medicare EHR incentive payment for 2011. See enclosure III for more information on the characteristics of professionals who were awarded a Medicare EHR incentive payment for 2011.

We provided a draft of this report to the Department of Health and Human Services for comment. In its written comments, reproduced in enclosure IV, the department stated that our analysis was informative and that it will use the information to enhance its outreach and education efforts related to the EHR programs. The department also suggested that GAO's future work in this area consider the impact of other federal programs on providers' participation in the EHR programs.

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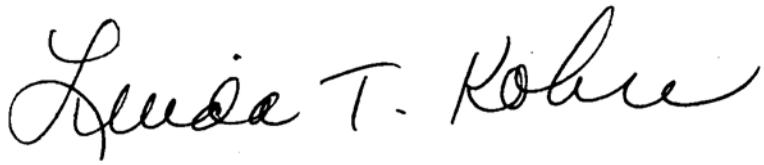
We are sending copies of this report to the Secretary of Health and Human Services, the Administrator of CMS, the National Coordinator for Health Information Technology, and other interested parties. In addition, the report will be available at no charge on GAO's website at http://www.gao.gov. If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or at kohnl@gao.gov. Contact points for our Office of Congressional Relations and Office of Public Affairs can be found on the last page of this report. Major contributors to this report were E. Anne Laffoon, Assistant Director; Julianne Flowers; Krister Friday; Melanie Krause; Shannon Legeer; Monica Perez-Nelson; and Eric Peterson.



Linda T. Kohn
Director, Health Care

Enclosures – 4

List of Committees

The Honorable Max Baucus
Chairman
The Honorable Orrin G. Hatch
Ranking Member
Committee on Finance
United States Senate

The Honorable Tom Harkin
Chairman
The Honorable Michael B. Enzi
Ranking Member
Committee on Health, Education, Labor, and Pensions
United States Senate

The Honorable Fred Upton
Chairman
The Honorable Henry A. Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives

The Honorable Dave Camp
Chairman
The Honorable Sander M. Levin
Ranking Member
Committee on Ways and Means
House of Representatives

Enclosure I

Scope and Methodology

This enclosure provides additional details regarding our analysis of data from the Centers for Medicare & Medicaid Services (CMS) and other government and private sources to (a) determine the number of providers that were awarded a Medicare electronic health record (EHR) incentive payment; (b) estimate the percentage of eligible providers[1] that were awarded a Medicare EHR incentive payment; (c) determine the amount of Medicare EHR incentive payments awarded to providers; and (d) examine the characteristics of providers that were awarded Medicare EHR incentive payments.

Number of providers that were awarded a Medicare EHR incentive payment. To determine the number of providers that were awarded an incentive payment, we analyzed data on providers that were awarded Medicare EHR incentive payments for 2011 from CMS's National Level Repository.[2] We analyzed data related to the 2011 program year that CMS collected from January 3, 2011, through April 2, 2012. As a result, we generally included full-year information in our analysis, since the first program year for hospitals ended on November 30, 2011, and the first program year for professionals ended on February 29, 2012.[3] Specifically, we counted the number of providers that had an incentive payment disbursed to them or whose payment was approved and being processed by CMS.[4]

Estimate of the percentage of eligible providers that were awarded a Medicare EHR incentive payment. To estimate the percentage of providers that were awarded an incentive payment, we divided the number of providers that were awarded an incentive payment by the total number of eligible providers, that is, providers that were eligible for the Medicare EHR program, regardless of whether they were awarded an incentive payment. We identified eligible hospitals as those that fit the following three criteria: (a) were acute care hospitals, including those that were affiliated with a Medicare Advantage Organization (MAO), or critical access

[1]We use the term eligible providers to refer to hospitals and professionals that were generally eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011, as described in greater detail later in this enclosure.

[2]The National Level Repository is a database that contains information on providers pertaining to the Medicare EHR program, including information on providers that are registered for the incentive program, whether those providers have met program requirements to receive an incentive payment, and the amount of incentive payments, if applicable. The National Level Repository also contains some information on providers pertaining to the Medicaid EHR program, which we generally did not include in our analysis.

[3]Due to various reasons, including the time needed to process providers' payments, the total number of providers that received Medicare EHR incentive payments for 2011 and the total amount of incentive payments awarded may increase.

[4]Our analysis includes participating hospitals that were affiliated with Medicare Advantage Organizations (MAO), but does not, in general, include data on participating professionals who were affiliated with MAOs. We included professionals who were affiliated with an MAO only if they qualified to receive the maximum incentive payment amount based on Medicare Part B charges, which are outside the Medicare Advantage plan. At the time of our analysis, CMS had not yet determined which professionals would receive incentive payments through an MAO.

hospitals; (b) were located in one of the 50 states or the District of Columbia; and (c) were not terminated from participating in the Medicare program on or before January 2, 2011.[5] We identified eligible professionals as those that fit the following three criteria: (a) have specialty types that are eligible for the Medicare EHR program, which include all medical doctor/doctor of osteopathic medicine specialties, chiropractors, doctors of dental medicine or surgery, podiatrists, and optometrists; (b) were not hospital-based professionals;[6] and (c) had greater than $0 in Medicare Part B charges in 2010.[7]

Amount of Medicare EHR incentive payments awarded to providers. We determined the total amount of the incentive payments that were awarded to providers by summing the Medicare EHR incentive payments that had been disbursed or were approved and being processed by CMS. We also examined the distribution of the Medicare incentive payments across providers. Specifically, for hospitals, we determined the minimum, 25th percentile, median, 75th percentile, and maximum Medicare EHR incentive payment amount. For professionals, we determined the percentage who were awarded an incentive payment amount of (a) $18,000, which was the maximum Medicare EHR incentive payment amount for most professionals, (b) greater than $18,000, but less than or equal to $19,800, and (c) less than $18,000.[8]

Characteristics of providers that were awarded Medicare EHR incentive payments. To examine the characteristics of providers that were awarded Medicare EHR incentive payments for 2011, we analyzed data on provider characteristics from CMS, the Health Resources and Services Administration, the Office of the National Coordinator for Health Information Technology (ONC), and Surescripts.[9] (See table 1.) Each characteristic is divided into two or more categories. For example, the characteristic “geographic region” is divided into four categories—Midwest, Northeast, South, and West regions. As part of this analysis, we also compared the

[5]Acute care hospitals are hospitals described in Section 1886(d) of the Social Security Act, which are paid under the inpatient prospective payment system. Hospitals that are affiliated with an MAO are hospitals described in Section 1886(d) of the Social Security Act, which are under common corporate governance with a qualifying MAO and for which at least two-thirds of their discharges are of individuals enrolled under Medicare Advantage plans. 42 C.F.R. § 495.200.

[6]CMS defines hospital-based professionals as those who furnish 90 percent or more of their services in either an inpatient or an emergency department of a hospital. We determined whether professionals were hospital-based by using an electronic data file provided by CMS that indicated for specific professionals whether 90 percent or more of their Medicare services in 2010 were provided in an inpatient or emergency department of a hospital.

[7]Medicare Part B charges refers to “allowed charges” set by Medicare that determine the amount of payments received by professionals for physician, outpatient hospital, home health care, and certain other services.

[8]The maximum incentive payment for 2011 that could be awarded to professionals practicing in a health professional shortage area was generally $19,800. Health professional shortage areas are areas designated by the Health Resources and Services Administration as having shortages of primary medical care, dental, or mental health providers.

[9]Surescripts operates the nation’s largest electronic prescription network and collects data on, among other things, the number of electronic prescriptions sent to pharmacies in its network.

characteristics of providers that were awarded a Medicare EHR incentive payment to those of eligible providers that were not awarded such payments. To do so, we calculated relative risk ratios that indicate how much more likely a provider in each category was to have been awarded an EHR incentive payment than a provider in the category that was least likely to have been awarded a payment.

Table 1: Data Sources Analyzed to Examine Characteristics of Eligible Providers

Agency or entity	Data source	Date of extract, download, or release
CMS	National Level Repository	April 2012
	2010 Medicare Part B claims	January – December 2010
	National Plan and Provider Enumeration System Data Dissemination File[a]	February 2012
	Provider Enrollment, Chain, and Ownership System[a]	February 2012
	Provider of Services File	April 2012
	Online Survey, Certification, and Reporting System	May 2011
	Fiscal Intermediary Standard System	December 2011
	Integrated Data Repository	December 2010
	2011 primary care health professional shortage areas	November 2010
	2010 recipients of incentive payments from CMS's electronic prescribing program	July 2011
Health Resources and Services Administration	Area Resource File[b]	August 2010
Office of the National Coordinator for Health Information Technology	Regional Extension Center Customer Relationship Management System extract file[c]	March 2012
	List of zip codes serviced by a Beacon Community[d]	March 2012
Surescripts	Extract file containing county-level information on electronic prescription transactions and prescribers	January – December 2011

Source: GAO.

[a]Data contained in this data source are generally self-reported by providers to CMS.

[b]Although the Area Resource File is typically released annually, at the time of our analysis, the 2010-2011 Area Resource File had not yet been made publicly available.

[c]The Regional Extension Center program was established by the Health Information Technology for Economic and Clinical Health Act and is administered by the Office of the National Coordinator for Health Information Technology to help some types of providers, such as those located in rural areas, to participate in CMS's EHR programs.

[d]The Office of the National Coordinator for Health Information Technology provided funding to support 17 Beacon Communities to build and strengthen their health information technology infrastructure and exchange capabilities. These communities were selected for various reasons, including the progress they had already made in adopting EHRs. The 17 Beacon Communities focus on specific and measurable improvement goals in three areas for health systems improvement—quality, cost-efficiency, and population health—to demonstrate the ability of health information technology to affect local health care systems.

Using the data obtained from the sources listed in table 1, we examined the following provider characteristics:

- *Regional characteristics*. We analyzed data on the following regional characteristics:[10]

    - *Geographic region*. We used the Health Resources and Services Administration's Area Resource File to identify the U.S. census region—Midwest, Northeast, South, or West—where providers were located or practiced.[11]

    - *Location*. We used the Health Resources and Services Administration's Area Resource File to determine whether providers were located in a metropolitan area—an area that has at least one urbanized area of 50,000 people. We then categorized providers located in metropolitan areas as being located in urban areas and providers that were not as being located in rural areas.[12]

    - *Average county volume of electronic prescribing based on transactions per professional who submits electronic prescriptions*. We used data from Surescripts to calculate, for each county during 2011, the average number of electronic prescriptions submitted per month from an ambulatory care setting by each professional who submitted electronic prescriptions. Using these aggregated data, we created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.

[10]In most cases, in order to link the information from these files to individual providers, we obtained zip codes for hospital locations from CMS's Provider of Services file and zip codes for professional practice locations from CMS's National Plan and Provider Enumeration System and CMS's Provider Enrollment, Chain, and Ownership System. Then, with the assistance of a zip code to Federal Information Processing Standard code crosswalk file we obtained from CMS, we were able to determine the counties in which hospitals were located and professionals practiced. We were able to match hospital zip codes to the crosswalk for all hospitals in our analysis. However, we were unable to match professional practice zip codes to the crosswalk for 207 professionals (less than 1 percent). Consequently, we generally excluded these 207 professionals from our analysis of regional characteristics, except for our analysis of geographic region. To analyze information on geographic region, we were able to use state information rather than zip code information.

[11]Information on U.S. census region was available for all eligible hospitals. We excluded four professionals (less than 1 percent) from our analysis of geographic region due to missing data for the practice state.

[12]Information on whether providers were located in urban or rural areas was missing for two hospitals (less than 1 percent). In addition to the 207 professionals for whom we could not match zip codes which are, therefore, excluded from our analysis of all regional characteristics (except geographic region), we excluded an additional 8 professionals (less than 1 percent) from our analysis of location due to missing data.

- *Whether a provider is located in a county with a Beacon Community*. We used data from ONC to categorize providers as either being located in a Beacon Community or not.[13]

- *Whether a professional practices in a health professional shortage area*. We used the list from CMS that identifies the zip codes that were designated as primary care health professional shortage areas for bonus payments in 2011 to categorize providers as either being located in a health professional shortage area or not.[14]

- *Hospital type*. We analyzed data on the following categorizations of hospital type:

  - *Hospital classification*. We determined whether hospitals were classified as acute care hospitals, including hospitals that were affiliated with a MAO, or critical access hospitals by using data from CMS's Provider of Services file.[15]

  - *Major teaching hospital*. We determined whether or not hospitals were listed as having a major affiliation with a medical school in CMS's Provider of Services file.[16]

  - *Ownership type*. We primarily used data on ownership type from CMS's Provider of Services file to create three categories of ownership: (a) for-profit by combining private for-profit and physician ownership, (b) nonprofit by combining church and private not-for-profit, and (c) government-owned by combining four government designations (federal, state, local, and hospital district or authority) and tribal. In instances in which ownership type was listed as "other" in the Provider of Services file, we obtained information needed to classify hospitals as for-profit, nonprofit, or government-owned from another CMS data source—the Online Survey, Certification, and Reporting System.[17]

  - *Chain membership*. We categorized hospitals as being a member of a chain if the hospital has a chain home office listed in CMS's Provider Enrollment, Chain, and Ownership System. All other hospitals with a record in CMS's

[13]ONC provided funding to support 17 Beacon Communities to build and strengthen their health information technology infrastructure and exchange capabilities. These communities were selected for various reasons, including the progress they had already made in adopting EHRs. The 17 Beacon Communities focus on specific and measurable improvement goals in three areas for health systems improvement—quality, cost-efficiency, and population health—to demonstrate the ability of health information technology to affect local health care systems.

[14]CMS's list of zip codes for health professional shortage areas does not contain zip codes that were only partially in a shortage area.

[15]Information on hospital classification was available for all eligible hospitals.

[16]Information on hospital affiliation with a medical school was available for all hospitals.

[17]Information on hospital ownership type was available for all eligible hospitals.

Provider Enrollment, Chain, and Ownership System were designated as not being a member of a chain.[18]

- *Hospital size*. We analyzed data on the following measures of hospital size from CMS's Provider of Services file and Fiscal Intermediary Standard System:[19]

  - *Total beds*. Using data from CMS's Provider of Services file on the total number of hospital beds, we created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[20]

  - *Medicare inpatient bed days*. Using data from CMS's Fiscal Intermediary Standard System, for each hospital we counted the number of Medicare inpatient bed days. Using these aggregated data, we created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[21]

  - *Total discharges*. Using data from CMS's Fiscal Intermediary Standard System on the total number of discharges for each hospital, we created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.

- *Hospital charges*. We analyzed data on the following measures of hospital charges from CMS's Fiscal Intermediary Standard System:[22]

  - *Total charges*. Using data on the total amount of charges, we created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—

[18]Information on chain membership was missing for 247 hospitals (about 5 percent) because those hospitals did not have a record in our extract from CMS's Provider Enrollment, Chain, and Ownership System.

[19]Data from CMS's Fiscal Intermediary Standard System were missing for 453 acute care hospitals (about 13 percent) and 988 critical access hospitals (about 74 percent) because, at the time of our data extract, CMS had not yet populated the system with information on those hospitals. Consequently, we excluded these 1,441 hospitals from our analysis of Medicare inpatient bed days and total discharges.

[20]Information on total beds was available for all eligible hospitals.

[21]In addition to the 1,441 hospitals for which we were missing data on Medicare inpatient bed days, we excluded an additional 6 hospitals from our analysis of Medicare inpatient bed days after determining that the hospitals' data were unreliable because the number of Medicare inpatient bed days exceeded the total number of inpatient bed days.

[22]Data from CMS's Fiscal Intermediary Standard System were missing for 453 acute care hospitals (about 13 percent) and 988 critical access hospitals (about 74 percent) because, at the time of our data extract, CMS had not yet populated the system with information on those hospitals. Consequently, we excluded these 1,441 hospitals from our analysis of hospital charges.

greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[23]

- *Charity charges*. Using data on charity charges, we created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile, but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[24]

- *Professional characteristics*. We included in our analysis the following five types of professional characteristics:

  - *Professional specialty*. We primarily obtained data on professionals' primary specialty from CMS's National Plan and Provider Enumeration System Downloadable File. Then, with the assistance of a crosswalk we obtained from CMS that aggregates specialty taxonomy codes into a smaller number of specialties, we created the following six categories: (a) general practice physician, (b) specialty practice physician, (c) chiropractor, (d) dentist, (e) optometrist, and (f) podiatrist.[25] In instances in which the professional specialty information was missing from the National Plan and Provider Enumeration System, we obtained information on professionals' specialty from another CMS data source—the Provider Enrollment, Chain, and Ownership System. To examine variation among different types of specialty practice physicians, we used information from the CMS crosswalk to assign specialty practice physicians to one of 27 specialty categories, such as cardiology, surgery, and psychiatry. Professionals who had missing information on professional specialty in both data sources and had not been awarded a Medicare EHR incentive payment for 2011 were dropped from our analysis, since we were unable to determine whether they were eligible to receive an incentive payment.[26] Information on professional specialty was

[23]In addition to the 1,441 hospitals for which we were missing data on hospital charges, we excluded an additional 3 hospitals from our analysis of total charges after determining that the hospitals' data were unreliable because the amount of charity charges exceeded the total amount of charges.

[24]Charity charges reflect the cost of providing inpatient and outpatient hospital services for which the hospital is not compensated. In addition to the 1,441 hospitals for which we were missing data on hospital charges, we excluded an additional 3 hospitals from our analysis of charity charges after determining that the hospitals' data were unreliable because the amount of charity charges exceeded the total amount of charges.

[25]We classified doctors of medicine and osteopathic medicine that specialize in family practice, general practice, or internal medicine as general practice physicians; all other doctors of medicine and osteopathic medicine were classified as specialty practice physicians.

[26]Information on professional specialty was missing for 72,107 professionals who were not awarded a Medicare EHR incentive payment.

missing for 35 professionals who had been awarded a Medicare EHR incentive payment (less than 1 percent).[27]

- *Number of professionals in the practice*. We estimated the number of professionals in each practice by counting the number of professionals who were listed as members of each professional practice in CMS's Provider Enrollment, Chain, and Ownership System. We subsequently created four practice size categories: (a) solo practice, (b) practice of 2 to 10 professionals, (c) practice of 11 to 50 professionals, and (d) practice of 51 or more professionals. We also created a fifth category for professionals who were associated with more than one group practice.[28]

- *Whether the professional had signed an agreement to receive technical assistance from a Regional Extension Center*. We obtained data on whether professionals (identified by National Provider Identifier) had signed an agreement to receive technical assistance from a Regional Extension Center from ONC's Regional Extension Center Customer Relationship Management System.[29] We then categorized professionals as either having signed an agreement to receive technical assistance or not.

- *Whether the professional had received an incentive payment from CMS's electronic prescribing incentive program in 2010*. We obtained data from CMS on whether professionals received an incentive payment from CMS's electronic prescribing program in 2010.[30] We then categorized professionals as either having received such an incentive payment or not.

- *Years since the professional's degree was awarded*. Using data on when professionals had received their degree from CMS's Provider Enrollment, Chain, and Ownership System, we determined the number of years since

[27]CMS provided documentation to support the statement that the 21 professionals for whom we were missing information on professional specialty had permissible professional specialties. We excluded an additional 14 professionals (less than 1 percent) from our analysis of professional specialties because, although they had specialty information, the information needed to classify those professionals into one of our professional specialty categories was not available in either CMS system.

[28]Information on the number of professionals in the practice was missing for 86,850 professionals (about 14.5 percent).

[29]The regional extension center program was established by the Health Information Technology for Economic and Clinical Health Act and is administered by ONC to help some types of providers, such as those located in rural areas, to participate in CMS's EHR programs.

[30]The electronic prescribing program, which was established by the Medicare Improvements for Patients and Providers Act of 2008, provides incentive payments from 2009 through 2013 to physicians and certain other Medicare professionals, such as physician assistants and nurse practitioners, who have prescribing authority and who adopt and use systems that meet CMS's definition of a qualified electronic prescribing system. Pub. L. No. 110-275, § 132(a), 122 Stat. 2492, 2527. From 2012 through 2014, the program may apply a payment adjustment, or penalty, on the program's eligible providers that do not adopt and use such systems. See GAO, *Electronic Prescribing: CMS Should Address Inconsistencies in Its Two Incentive Programs That Encourage the Use of Health Information Technology*, GAO-11-159 (Washington, D.C.: Feb. 17, 2011).

each professional's degree was awarded. We dropped data on years since the professional's degree was awarded if the data were potentially unreliable—that is, if the number of years exceeded 75. We subsequently created three categories: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[31]

- *Professional practice size*. We analyzed data on the following two measures of practice size from CMS's calendar year 2010 Medicare Part B claims:[32]

  - *Total amount of 2010 Medicare Part B charges*. For each professional (identified by National Provider Identifier), we summed the amount of Medicare Part B charges over the year. Subsequently, we created three categories by aggregating total charges by professional: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[33]

  - *Total number of 2010 Medicare Part B encounters*. For each professional (identified by National Provider Identifier), we counted the number of Medicare Part B encounters—that is, distinct Medicare patient visits. Subsequently, we created three categories by aggregating total encounters by professional: (a) low—less than or equal to the 33.3rd percentile, (b) middle—greater than the 33.3rd percentile but less than the 66.7th percentile, and (c) high—greater than the 66.7th percentile.[34]

To ensure the reliability of the various data we analyzed, we interviewed officials from CMS, ONC, and Surescripts; reviewed relevant documentation; and conducted electronic testing to identify missing data and obvious errors. On the basis of these activities, we determined that the data we analyzed were sufficiently reliable for our analysis. Although the amount of missing data was generally low, in instances in which data were missing for 6 percent of providers or more, we noted this explicitly.

[31]Information on the number of years since the professional's degree was awarded was missing for 27,661 professionals (about 4.6 percent).

[32]Information on 2010 Medicare Part B claims was missing for 1,195 professionals who were awarded a Medicare EHR incentive payment (less than 1 percent).

[33]Percentiles were created using information on 2010 Medicare Part B charges for all professionals who had greater than $0 in charges.

[34]Percentiles were created using information on 2010 Medicare Part B encounters for all professionals who had at least one encounter.

Enclosure I

We conducted this performance audit from January 2012 to July 2012 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Enclosure II

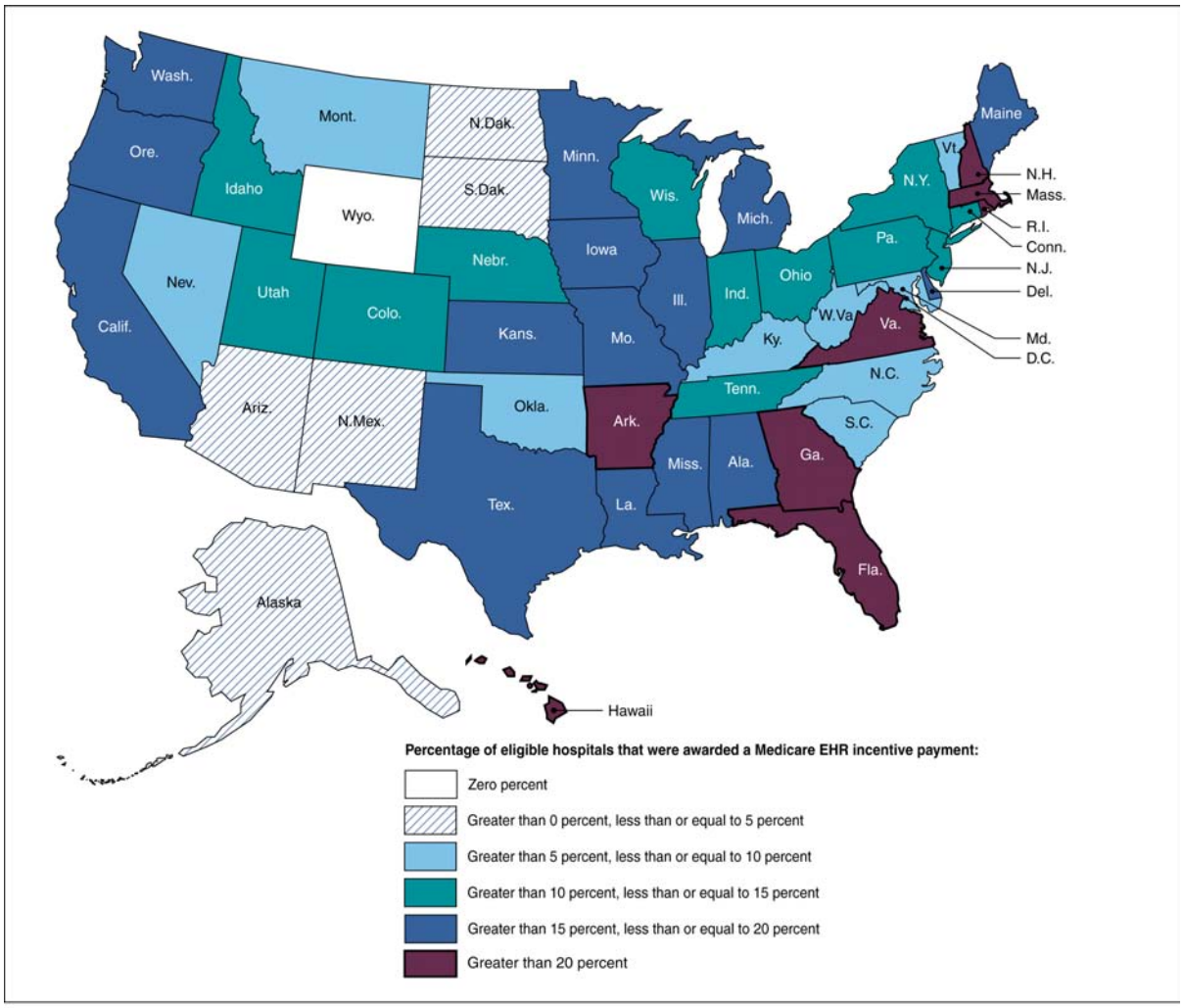
Information on Hospitals That Were Awarded Medicare EHR Incentive Payments for 2011

This enclosure provides information on the number and percentage of hospitals that were awarded Medicare EHR incentive payments for 2011, the amount of incentive payments awarded to hospitals, and the characteristics of hospitals that were awarded incentive payments. This enclosure also compares different categories of eligible hospitals to determine which were more likely and which were less likely to have been awarded an incentive payment.

Of the estimated 4,855 eligible hospitals, 16 percent or 761 hospitals were awarded a Medicare EHR incentive payment for 2011.[1] The percentage of eligible hospitals that were awarded a Medicare EHR incentive payment varied across states. For example, more than 20 percent of eligible hospitals in New Hampshire were awarded a Medicare EHR incentive payment for 2011, whereas less than 5 percent of eligible hospitals in New Mexico were awarded an incentive payment. (See fig. 1.)

[1]In contrast to professionals, certain hospitals may receive an incentive payment from both the Medicare and Medicaid EHR programs in the same year. Through April 2, 2012, 485 hospitals were awarded an incentive payment from both programs for 2011.

Figure 1: Percentage of Eligible Hospitals That Were Awarded a Medicare EHR Incentive Payment for 2011, by State

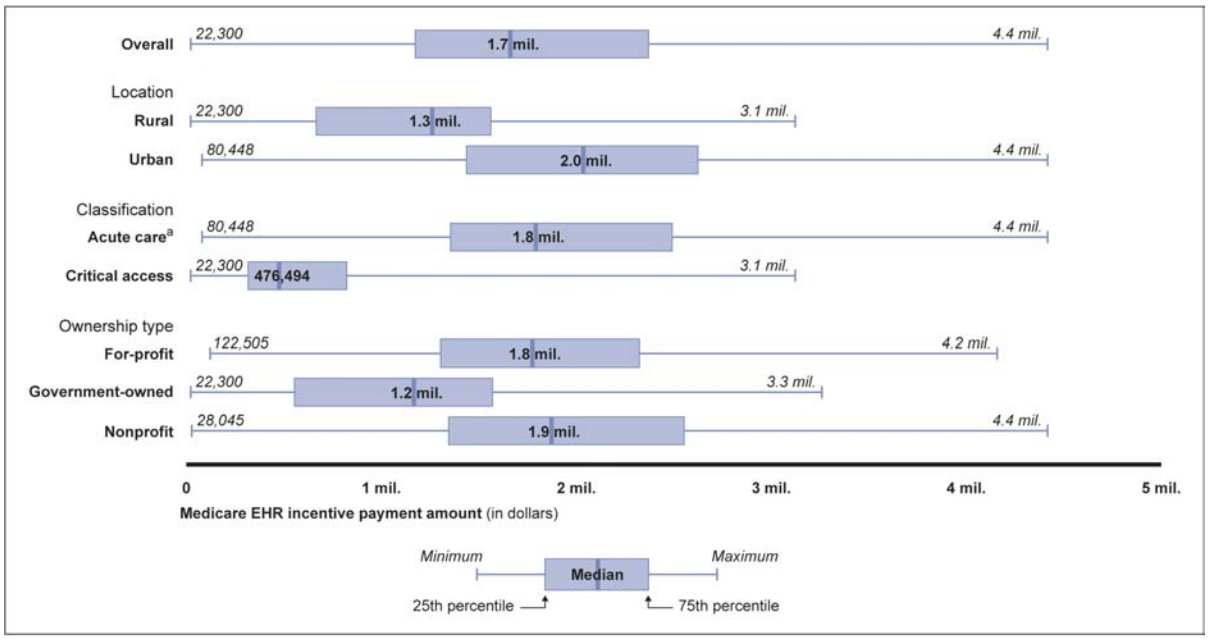


Sources: GAO analysis of CMS data (data); MapArt (map).

Note: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis of the number of hospitals that were awarded a Medicare EHR incentive payment includes hospitals that had a Medicare EHR incentive payment for 2011 disbursed to them or had an incentive payment that was approved and being processed by CMS but had not yet been disbursed. Our analysis also includes hospitals that were affiliated with Medicare Advantage Organizations.

Of the approximately $2.3 billion in Medicare EHR incentive payments that were awarded to providers for 2011, a total of $1.3 billion was awarded to hospitals. The amount of Medicare EHR incentive payments awarded to hospitals ranged from $22,300 to $4.4 million, with the median amount being $1.7 million. About 61 percent of hospitals that were awarded an incentive payment accounted for about 80 percent of the total amount of incentive payments awarded to hospitals. Acute care hospitals tended to receive larger incentive payments than critical access hospitals. (See fig. 2.)

Figure 2: Distribution of Medicare EHR Incentive Payment Amounts Awarded to Hospitals for 2011, by Selected Hospital Characteristics



Source: GAO analysis of CMS and Health Resources and Services Administration data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. This analysis includes incentive payments that were awarded to hospitals for 2011, including those that had not yet been disbursed, but were approved and being processed by CMS.

[a]Acute care hospitals are hospitals described in Section 1886(d) of the Social Security Act, which are paid under the inpatient prospective payment system.

As illustrated in table 2, among hospitals that were awarded a Medicare EHR incentive payment for 2011:

- the largest proportion (44 percent) were located in the South and the lowest proportion (12 percent) were located in the Northeast;
- about two-thirds (67 percent) were in urban areas;
- more than four-fifths (86 percent) were acute care hospitals;
- more than half (57 percent) were nonprofit hospitals;
- more than half (54 percent) were not members of a chain; and
- almost half (46 percent) were relatively large in terms of number of beds.

Table 2: Selected Characteristics of Hospitals That Were Awarded a Medicare EHR Incentive Payment for 2011

Characteristics	Categories	Number (percentage)
Geographic region	Midwest	218 (28.7)
	Northeast	91 (12.0)
	South	333 (43.8)
	West	119 (15.6)
Location	Rural	252 (33.1)
	Urban	509 (66.9)
Hospital classification	Acute care hospital[a]	652 (85.7)
	Critical access hospital	109 (14.3)
Ownership type	For-profit	172 (22.6)
	Government-owned	163 (21.4)
	Nonprofit	426 (56.0)
Chain membership	Chain	343 (45.1)
	Nonchain	409 (53.8)
Total beds	Low (39 beds or fewer)	142 (18.7)
	Middle (40-175 beds)	271 (35.6)
	High (176 or more beds)	348 (45.7)
Total		**761 (100)**

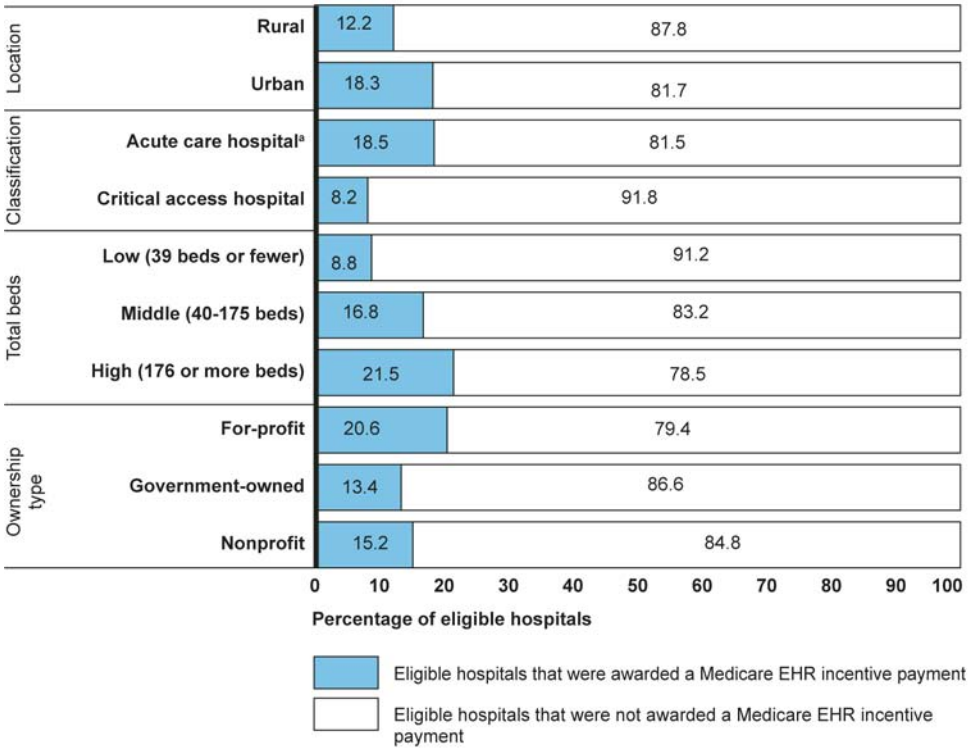
Source: GAO analysis of CMS and Health Resources and Services Administration data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis of the number of hospitals that were awarded a Medicare EHR incentive payment includes hospitals that had a Medicare EHR incentive payment for 2011 disbursed to them or had an incentive payment that was approved and being processed by CMS but had not yet been disbursed. The sum of the number of hospitals listed by chain membership does not equal the total number of hospitals due to missing data. The sum of the percentage of hospitals listed by geographic region does not equal 100 percent due to rounding.

[a]Acute care hospitals are hospitals described in Section 1886(d) of the Social Security Act, which are paid under the inpatient prospective payment system.

Among eligible hospitals, the percentage of hospitals that were awarded a Medicare EHR incentive payment for 2011 varied substantially by certain characteristics, such as total beds and location in an urban or rural setting. (See fig. 3.)

Figure 3: Percentage of Eligible Hospitals That Were Awarded a Medicare EHR Incentive Payment for 2011, by Selected Hospital Characteristics



Source: GAO analysis of CMS and Health Resources and Services Administration data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis of the number of hospitals that were awarded a Medicare EHR incentive payment includes hospitals that had a Medicare EHR incentive payment for 2011 disbursed to them or had an incentive payment that was approved and being processed by CMS but had not yet been disbursed.

[a]Acute care hospitals are hospitals described in Section 1886(d) of the Social Security Act, which are paid under the inpatient prospective payment system.

Tables 3 through 6 below compare the characteristics of hospitals that were awarded Medicare EHR incentive payments for 2011 to those of other eligible Medicare hospitals that did not receive a payment for that year. Each characteristic is divided into two or more categories. For example, the characteristic “geographic region” is divided into four categories—Midwest, Northeast, South, and West regions. As part of this analysis, we calculated relative risk ratios that indicate how much more likely a hospital in each category was to have been awarded an EHR incentive payment than a hospital in the category that was least likely to have been awarded a payment. Hospitals least likely to receive an incentive payment are labeled “ – ”. For example, as table 3 shows, under the characteristic “location,” the relative risk ratio of 1.5 for the category “urban” indicates that hospitals in urban areas were 1.5 times more likely to have been awarded an incentive payment for 2011 than hospitals in rural areas. A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

Table 3 examines the relationship between hospitals receiving Medicare EHR incentive payments for 2011 and characteristics of the regions in which the hospitals are located. We found that

- geographic location had a modest effect on the likelihood that hospitals were awarded an EHR incentive payment for 2011. For instance, hospitals in the South—the region with the highest level of program participation—were 1.4 times more likely to have been awarded a payment than hospitals in the West—the region with the lowest level of program participation; and

- there was little association between the likelihood of having been awarded an EHR incentive payment for 2011 and whether the hospital was located in a county with a Beacon Community or in a county with high levels of electronic prescribing transactions per professionals who submit electronic prescriptions.

Table 3: Number and Percentage of Hospitals That Were Awarded Medicare EHR Incentive Payments for 2011, by Regional Characteristics

Characteristics	Categories	Number of eligible hospitals[a]	Number (percentage)		Relative risk ratio[b]
			Awarded a Medicare EHR incentive payment	Not awarded a Medicare EHR incentive payment	
Overall		4,855	761 (15.7)	4,094 (84.3)	
Geographic location					
Geographic region	Midwest	1,435	218 (15.2)	1,217 (84.8)	1.2
	Northeast	610	91 (14.9)	519 (85.1)	1.2
	South	1,866	333 (17.8)	1,533 (82.2)	1.4
	West	944	119 (12.6)	825 (87.4)	—
Location	Rural	2,070	252 (12.2)	1,818 (87.8)	—
	Urban	2,783	509 (18.3)	2,274 (81.7)	1.5
County level of participation in selected health information technology initiatives[c]					
Average county volume of electronic prescribing based on transactions per professional who submits electronic prescriptions	Low (130.99 or fewer transactions)	1,489	243 (16.3)	1,246 (83.7)	1.0
	Middle (131-182.58 transactions)	1,489	248 (16.7)	1,241 (83.3)	1.1
	High (182.59 or more transactions)	1,487	232 (15.6)	1,255 (84.4)	—
Located in a county with a Beacon Community	Yes	296	44 (14.9)	252 (85.1)	—
	No	4,559	717 (15.7)	3,842 (84.3)	1.1

Source: GAO analysis of CMS, Office of the National Coordinator for Health Information Technology, Health Resources and Services Administration, and Surescripts data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. We compared the characteristics of the 761 hospitals that were awarded a Medicare EHR incentive payment for 2011, including those whose incentive payment was disbursed to them or whose payment was approved and being processed by CMS, to those of other eligible hospitals that were not awarded a payment for that year. The sum of the number of hospitals listed by category may not equal the overall number of hospitals due to missing data.

[a]We use the term eligible hospitals to refer to those hospitals that were eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible hospitals are those that were (1) acute care hospitals, including those that were affiliated with a Medicare Advantage Organization, or critical access hospitals; (2) located in one of the 50 states or the District of Columbia; and (3) not terminated from participating in the Medicare program on or before January 2, 2011.

[b]The relative risk ratios indicate how much more likely a hospital in each category was to have been awarded an EHR incentive payment than a hospital in the category that was least likely to have been awarded a payment, which is labeled " – ". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

[c]These characteristics describe the level of participation in selected health information technology initiatives across all the providers in a given county, rather than the level of participation associated with any particular hospital.

Table 4 examines the relationship between receiving a Medicare EHR incentive payment for 2011 and hospital type. We found that hospital classification and chain membership had a greater impact on the likelihood of receiving a Medicare EHR incentive payment for 2011 than being a major teaching hospital or ownership type. In particular,

- among the two hospital classifications, critical access hospitals were 2.3 times less likely to have been awarded a Medicare EHR incentive payment for 2011 than acute care hospitals; and

- hospitals that were members of chains were 1.6 times more likely to have been awarded a Medicare EHR incentive payment for 2011 than hospitals that were not members of chains.

Table 4: Number and Percentage of Hospitals That Were Awarded Medicare EHR Incentive Payments for 2011, by Hospital Type

Characteristics	Categories	Number of eligible hospitals[a]	Number (percentage)		Relative risk ratio[b]
			Awarded a Medicare EHR incentive payment	Not awarded a Medicare EHR incentive payment	
Overall		4,855	761 (15.7)	4,094 (84.3)	
Hospital classification	Acute care hospital[c]	3,524	652 (18.5)	2,872 (81.5)	2.3
	Critical access hospital	1,331	109 (8.2)	1,222 (91.8)	—
Major teaching hospital	Yes	441	92 (20.9)	349 (79.1)	1.4
	No	4,414	669 (15.2)	3,745 (84.8)	—
Ownership type	For-profit	833	172 (20.6)	661 (79.4)	1.5
	Government-owned	1,217	163 (13.4)	1,054 (86.6)	—
	Nonprofit	2,805	426 (15.2)	2,379 (84.8)	1.1
Chain membership	Chain	1,581	343 (21.7)	1,238 (78.3)	1.6
	Nonchain	3,027	409 (13.5)	2,618 (86.5)	—

Source: GAO analysis of CMS data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. We compared the characteristics of the 761 hospitals that were awarded a Medicare EHR incentive payment for 2011, including those whose incentive payment was disbursed to them or whose payment was approved and being processed by CMS, to those of other eligible hospitals that were not awarded a payment for that year. The sum of the number of hospitals listed by chain membership does not equal the total number of hospitals due to missing data.

[a]We use the term eligible hospitals to refer to those hospitals that were eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible hospitals are those that were (1) acute care hospitals, including those that were affiliated with a Medicare Advantage Organization, or critical access hospitals; (2) located in one of the 50 states or the District of Columbia; and (3) not terminated from participating in the Medicare program on or before January 2, 2011.

[b]The relative risk ratios indicate how much more likely a hospital in each category was to have been awarded an EHR incentive payment than a hospital in the category that was least likely to have been awarded a payment, which is labeled " – ". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

[c]Acute care hospitals are hospitals described in Section 1886(d) of the Social Security Act, which are paid under the inpatient prospective payment system.

Table 5 examines the extent to which the size of hospitals, measured in various ways, is related to whether hospitals were awarded Medicare EHR incentive payments for 2011. We found that large hospitals were generally more likely to have been awarded a Medicare EHR incentive payment for 2011 than either small or medium-sized hospitals. Specifically,

- hospitals with the highest number of total beds were 2.4 times more likely than hospitals with the lowest number of total beds to have been awarded an incentive payment; and

- hospitals with the highest number of total discharges were 1.4 times more likely to have been awarded an incentive payment than hospitals with fewer discharges.

Table 5: Number and Percentage of Hospitals That Were Awarded Medicare EHR Incentive Payments for 2011, by Hospital Size

Characteristics	Categories	Number of eligible hospitals[a]	Number (percentage)		Relative risk ratio[b]
			Awarded a Medicare EHR incentive payment	Not awarded a Medicare EHR incentive payment	
Overall		4,855	761 (15.7)	4,094 (84.3)	
Total beds	Low (39 beds or fewer)	1,619	142 (8.8)	1,477 (91.2)	—
	Middle (40-175 beds)	1,616	271 (16.8)	1,345 (83.2)	1.9
	High (176 or more beds)	1,620	348 (21.5)	1,272 (78.5)	2.4
Medicare inpatient bed days	Low (4,209 or fewer inpatient bed days)	1,135	194 (17.1)	941 (82.9)	1.0
	Middle (4,210-18,525 inpatient bed days)	1,138	187 (16.4)	951 (83.6)	—
	High (18,526 or more inpatient bed days)	1,135	267 (23.5)	868 (76.5)	1.4
	Missing[c]	1,447	113 (7.8)	1,334 (92.2)	N/A
Total discharges	Low (2,442 or fewer discharges)	1,137	190 (16.7)	947 (83.3)	1.0
	Middle (2,443-9,045 discharges)	1,140	190 (16.7)	950 (83.3)	—
	High (9,046 or more discharges)	1,137	269 (23.7)	868 (76.3)	1.4
	Missing[c]	1,441	112 (7.8)	1,329 (92.2)	N/A

Source: GAO analysis of CMS data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. We compared the characteristics of the 761 hospitals that were awarded a Medicare EHR incentive payment for 2011, including those whose incentive payment was disbursed to them or whose payment was approved and being processed by CMS, to those of other eligible hospitals that were not awarded a payment for that year.

[a]We use the term eligible hospitals to refer to those hospitals that were eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible hospitals are those that were (1) acute care hospitals, including those that were affiliated with a Medicare Advantage Organization, or critical access hospitals; (2) located in one of the 50 states or the District of Columbia; and (3) not terminated from participating in the Medicare program on or before January 2, 2011.

[b]The relative risk ratios indicate how much more likely a hospital in each category was to have been awarded an EHR incentive payment than a hospital in the category that was least likely to have been awarded a payment, which is labeled " – ". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

[c]Data on Medicare inpatient bed days and total discharges from CMS's Fiscal Intermediary Standard System were missing for 453 acute care hospitals (about 13 percent of eligible acute care hospitals) and 988 critical access hospitals (about 74 percent of eligible critical access hospitals) because, at the time of our data extract, CMS had not yet populated the system with information on those hospitals. We excluded an additional 6 hospitals from our analysis of Medicare inpatient bed days after determining that the hospitals' data were unreliable because the number of Medicare inpatient bed days exceeded the total number of inpatient bed days.

Table 6 examines the relationship between receiving Medicare EHR incentive payments for 2011 and the type and amount of hospital charges. We found that hospitals with the highest charges were more likely to receive a Medicare EHR incentive payment for 2011 compared to hospitals with lower charges. Specifically,

- hospitals with high total charges were 1.5 times more likely to have been awarded an incentive payment than hospitals with middle-level total charges; and

- hospitals with middle or high-level charity charges were 1.3 and 1.5 times more likely, respectively, to have been awarded an incentive payment than hospitals with low charity charges.

Table 6: Number and Percentage of Hospitals That Were Awarded Medicare EHR Incentive Payments for 2011, by Hospital Charges

			Number (percentage)		
Characteristics	**Categories**	**Number of eligible hospitals[a]**	**Awarded a Medicare EHR incentive payment**	**Not awarded a Medicare EHR incentive payment**	**Relative risk ratio[b]**
Overall		4,855	761 (15.7)	4,094 (84.3)	
Total charges	Low ($118,590,920 or less)	1,136	199 (17.5)	937 (82.5)	1.1
	Middle ($118,590,921-$471,392,814)	1,139	184 (16.2)	955 (83.8)	—
	High ($471,392,815 or more)	1,136	266 (23.4)	870 (76.6)	1.5
	Missing[c]	1,444	112 (7.8)	1,332 (92.2)	N/A
Charity charges[d]	Low ($356,312 or less)	1,136	169 (14.9)	967 (85.1)	—
	Middle ($356,313-$15,279,600)	1,139	219 (19.2)	920 (80.8)	1.3
	High ($15,279,601 or more)	1,136	261 (23.0)	875 (77.0)	1.5
	Missing[c]	1,444	112 (7.8)	1,332 (92.2)	N/A

Source: GAO analysis of CMS data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. We compared the characteristics of the 761 hospitals that were awarded a Medicare EHR incentive payment for 2011, including those whose incentive payment was disbursed to them or whose payment was approved and being processed by CMS, to those of other eligible hospitals that were not awarded a payment for that year.

[a]We use the term eligible hospitals to refer to those hospitals that were eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible hospitals are those that were (1) acute care hospitals, including those that were affiliated with a Medicare Advantage Organization, or critical access hospitals; (2) located in one of the 50 states or the District of Columbia; and (3) not terminated from participating in the Medicare program on or before January 2, 2011.

[b]The relative risk ratios indicate how much more likely a hospital in each category was to have been awarded an EHR incentive payment than a hospital in the category that was least likely to have been awarded a payment, which is labeled " – ". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

[c]Data on hospital charges were missing from CMS's Fiscal Intermediary Standard System for 453 acute care hospitals (about 13 percent of eligible acute care hospitals) and 988 critical access hospitals (about 74 percent of eligible critical access hospitals) because, at the time of our data extract, CMS had not yet populated the system with information on those hospitals. We excluded an additional three hospitals from our analysis of hospital charges after determining that the hospitals' data were unreliable because the amount of charity charges exceeded the total charges.

[d]Charity charges reflect the cost for providing inpatient and outpatient hospital services for which the hospital is not compensated.

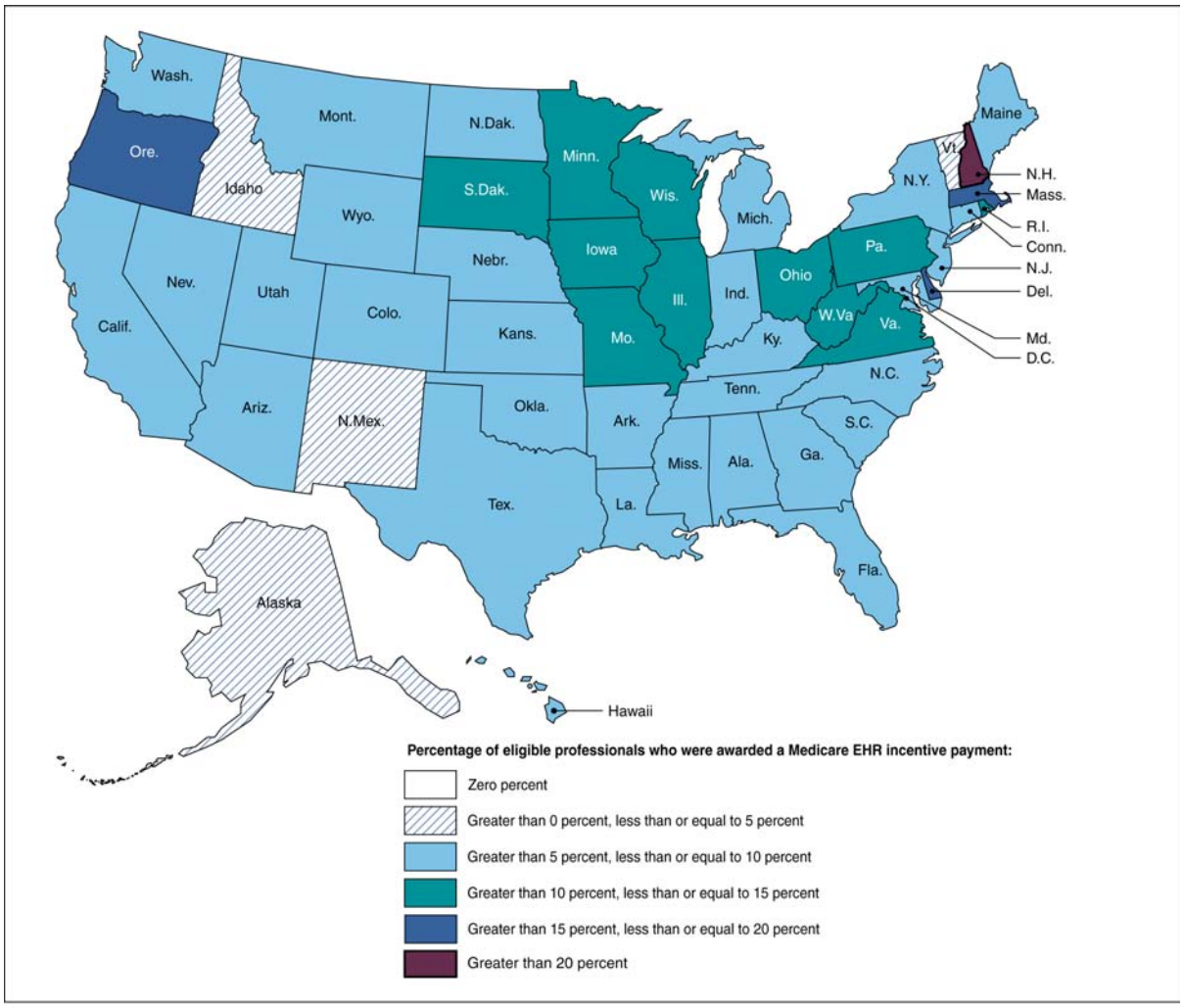
Enclosure III

Information on Professionals Who Were Awarded Medicare EHR Incentive Payments for 2011

This enclosure provides information on the number and percentage of professionals who were awarded Medicare EHR incentive payments for 2011, the amount of incentive payments awarded to professionals, and the characteristics of professionals who were awarded incentive payments. This enclosure also compares different categories of eligible professionals to determine which were more likely and which were less likely to have been awarded an incentive payment.

Of the estimated 600,172 eligible professionals, 9.4 percent or 56,585 professionals were awarded a Medicare EHR incentive payment for 2011. The percentage of eligible professionals who were awarded a Medicare EHR incentive payment varied across states. For example, more than 20 percent of eligible professionals in New Hampshire were awarded a Medicare EHR incentive payment for 2011, whereas less than 5 percent of eligible professionals in New Mexico were awarded an incentive payment. (See fig. 4.)

Figure 4: Percentage of Eligible Professionals Who Were Awarded a Medicare EHR Incentive Payment for 2011, by State



Sources: GAO analysis of CMS data (data); MapArt (map).

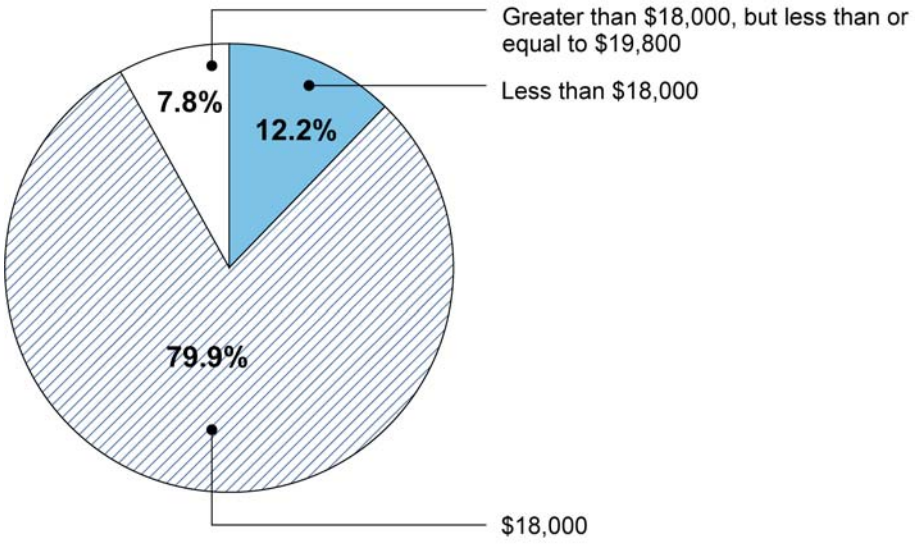
Note: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis of the number of professionals who were awarded a Medicare EHR incentive payment includes professionals who had a Medicare EHR incentive payment for 2011 that was disbursed or had an incentive payment that was approved and being processed by CMS but had not yet been disbursed. Our analysis does not, in general, include data on participating professionals who were affiliated with Medicare Advantage Organizations.

Of the approximately $2.3 billion in Medicare EHR incentive payments that were awarded to providers for 2011, $967 million was awarded to professionals. Among participating professionals, about 80 percent were awarded an incentive payment of $18,000, which was the maximum amount for most professionals.[1] Slightly less than 8 percent of professionals were awarded an incentive payment of greater than $18,000, but less than or equal to $19,800. (See fig. 5.) Eighty-nine percent of the

[1]The amount of the Medicare EHR incentive payment for professionals who practice predominately in a health professional shortage area could not exceed $19,800 for 2011. Health professional shortage areas are areas designated by the Health Resources and Services Administration as having shortages of primary medical care, dental, or mental health providers.

total amount of incentive payments awarded to professionals was awarded to general practice and specialty practice physicians.

Figure 5: Percentage of Professionals Who Were Awarded Medicare EHR Incentive Payments for 2011, by Amount



Source: GAO analysis of CMS data.

Note: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. This analysis includes incentive payments that were awarded to professionals for 2011, including those that had not yet been disbursed, but were approved and being processed by CMS. Our analysis does not, in general, include data on participating professionals who were affiliated with Medicare Advantage Organizations. The amount of the incentive payment for 2011 cannot exceed $18,000 for most professionals. The amount of the incentive payment for professionals who practice predominately in a health professional shortage area cannot exceed $19,800.

As illustrated in table 7, among professionals who were awarded a Medicare EHR incentive payment for 2011:

- the largest proportion (32 percent) were located in the South and the lowest proportion (17 percent) were in the West;
- a significant majority (89 percent) were in urban areas;
- half (50 percent) were specialty practice physicians, and over one-third (38 percent) were general practice physicians;
- nearly three-quarters (71 percent) did not previously participate in CMS's incentive program for electronic prescribing; and
- about half had relatively high amounts of 2010 Medicare Part B charges (46 percent) and numbers of 2010 Medicare Part B patient encounters (51 percent).

Table 7: Selected Characteristics of Professionals Who Were Awarded a Medicare EHR Incentive Payment for 2011

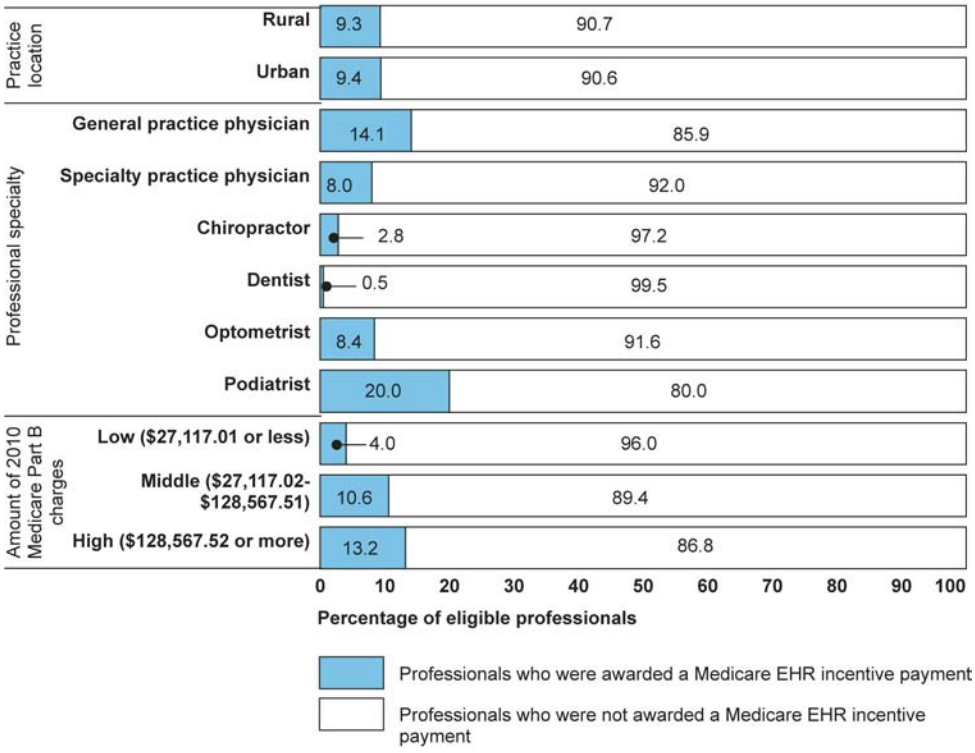
Characteristics	Categories	Number (percentage)
Geographic region	Midwest	15,529 (27.4)
	Northeast	13,545 (23.9)
	South	17,805 (31.5)
	West	9,656 (17.1)
Location	Rural	6,108 (10.8)
	Urban	50,464 (89.2)
Professional specialty	General practice physician	21,588 (38.2)
	Specialty practice physician	28,446 (50.3)
	Chiropractor	1,265 (2.2)
	Dentist	18 (<0.1)
	Optometrist	2,340 (4.1)
	Podiatrist	2,893 (5.1)
Received an incentive payment from CMS's Electronic Prescribing Program for 2010	Yes	16,505 (29.2)
	No	40,080 (70.8)
Total amount of 2010 Medicare Part B charges (dollars)	Low ($27,117.01 or less)	7,892 (13.9)
	Medium ($27,117.02-$128,567.51)	21,265 (37.6)
	High ($128,567.52 or more)	26,233 (46.4)
Total number of 2010 Medicare Part B encounters	Low (615 or fewer encounters)	7,428 (13.1)
	Medium (616-2,665 encounters)	19,402 (34.3)
	High (2,666 or more encounters)	28,560 (50.5)
Total		**56,585 (100)**

Source: GAO analysis of CMS and Health Resources and Services Administration data.

Note: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. This analysis includes professionals who had a Medicare EHR incentive payment for 2011 that was disbursed to them and professionals whose payment was approved and being processed by CMS. Our analysis does not, in general, include data on participating professionals who were affiliated with Medicare Advantage Organizations. The sum of the number of professionals listed by category may not equal the total number of professionals due to missing data. The sum of the percentage of professionals listed for each characteristic may not equal 100 percent due to missing data.

Among eligible professionals, the percentage of professionals who were awarded a Medicare EHR incentive payment for 2011 varied by certain characteristics, such as professional specialty and amount of Medicare Part B charges. (See fig. 6.)

Figure 6: Percentage of Eligible Professionals Who Were Awarded a Medicare EHR Incentive Payment for 2011, by Selected Professional Characteristics

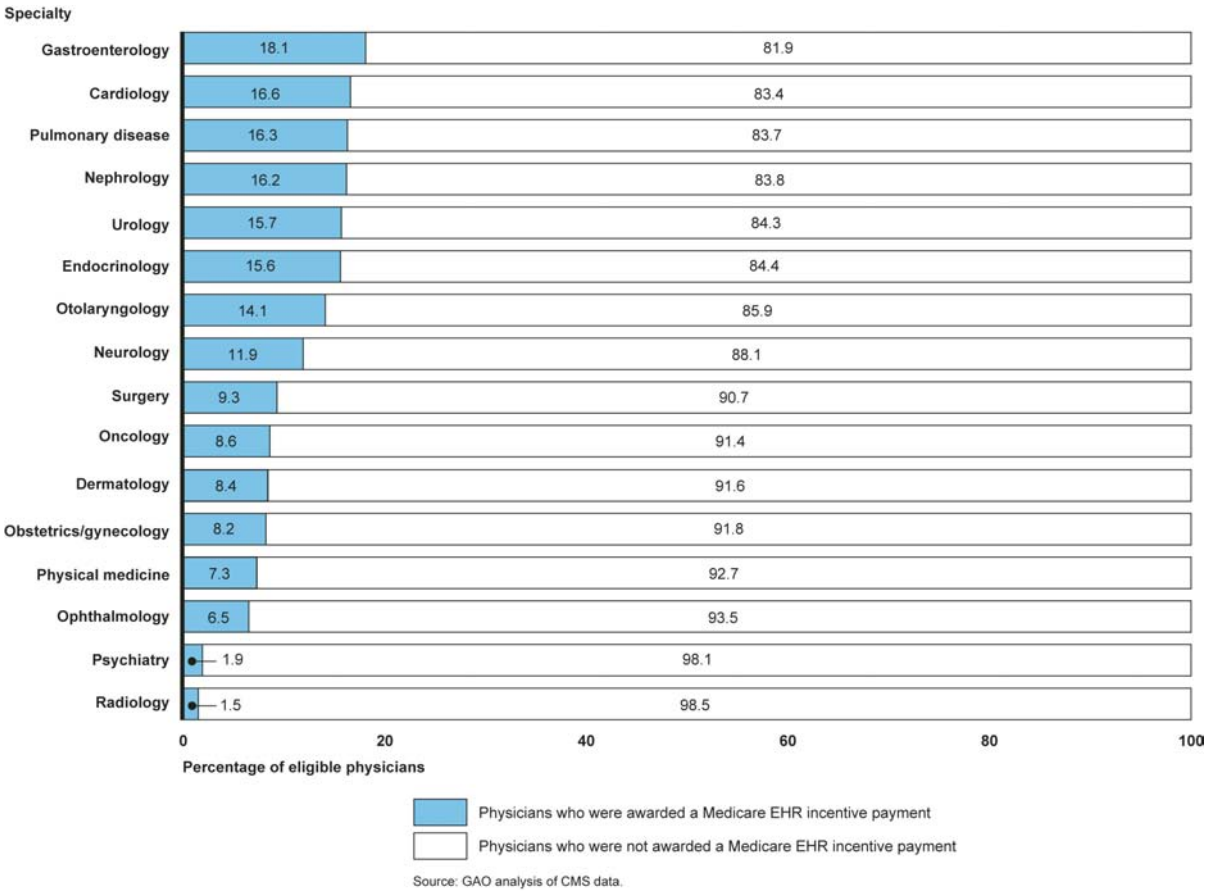


Source: GAO analysis of CMS and Health Resources and Services Administration data.

Note: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis of the number of professionals who were awarded a Medicare EHR incentive payment includes professionals who had a Medicare EHR incentive payment for 2011 that was disbursed to them and professionals whose payment was approved and being processed by CMS. Our analysis does not, in general, include data on participating professionals who were affiliated with Medicare Advantage Organizations.

While 8 percent of all specialty practice physicians were awarded a Medicare EHR incentive payment for 2011, the percentage varied substantially by specialty. For example, 17 percent of cardiologists were awarded a Medicare EHR incentive payment, compared to 2 percent of psychiatrists. (See fig. 7.)

Figure 7: Percentage of Specialty Practice Physicians Who Were Awarded a Medicare EHR Incentive Payment for 2011, by Selected Specialty



Note: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis of the number of professionals who were awarded a Medicare EHR incentive payment includes professionals who had a Medicare EHR incentive payment for 2011 that was disbursed to them and professionals whose payment was approved and being processed by CMS. Our analysis does not, in general, include data on participating professionals who were affiliated with Medicare Advantage Organizations.

Tables 8 through 10 below compare the characteristics of professionals who were awarded Medicare EHR incentive payments for 2011 to those of other eligible Medicare professionals who did not receive a payment for that year. Each characteristic is divided into two or more categories. For example, the characteristic “geographic region” is divided into four categories—Midwest, Northeast, South, and West regions. As part of this analysis, we calculated relative risk ratios that indicate how much more likely a professional in each category was to have been awarded an EHR incentive payment than a professional in the category that was least likely to have been awarded a payment. Professionals least likely to receive an incentive payment are labeled “ – ”. For example, as table 8 shows, under the characteristic “geographic region,” the relative risk ratio of 1.4 for the category “Midwest” indicates that professionals in this census region were 1.4 times more likely to have been awarded an incentive payment for 2011 than professionals in the West, who were the least likely to receive an incentive payment. A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment

between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

Table 8 examines the relationship between professionals receiving Medicare EHR incentive payments for 2011 and characteristics of the regions in which the professionals are practicing. We found that geographic location had a modest effect on the likelihood that professionals were awarded an EHR incentive payment for 2011. For example,

- professionals practicing in health professional shortage areas were 1.4 times less likely to have been awarded a payment than other professionals; and

- in contrast, professionals practicing in urban areas were no more likely to have been awarded an incentive payment than rural professionals.

There was an inconsistent relationship between the level of county involvement in selected health information technology initiatives—such as Beacon communities—and the likelihood that professionals in that location were awarded an EHR incentive payment.

Table 8: Number and Percentage of Professionals Who Were Awarded Medicare EHR Incentive Payments for 2011, by Regional Characteristics

Characteristic	Category	Number of eligible professionals[a]	Number (percentage)		Relative risk ratio[b]
			Awarded a Medicare EHR incentive payment	Not awarded a Medicare EHR incentive payment	
Overall		600,172	56,585 (9.4)	543,587 (90.6)	
Geographic location					
Geographic region[c]	Midwest	142,159	15,529 (10.9)	126,630 (89.1)	1.4
	Northeast	133,236	13,545 (10.2)	119,691 (89.8)	1.3
	South	197,703	17,805 (9.0)	179,898 (91.0)	1.1
	West	121,715	9,656 (7.9)	112,059 (92.1)	—
Location	Rural	65,684	6,108 (9.3)	59,576 (90.7)	—
	Urban	534,273	50,464 (9.4)	483,809 (90.6)	1.0
Located in a health professional shortage area	Yes	19,385	1,290 (6.7)	18,095 (93.3)	—
	No	580,580	55,283 (9.5)	525,297 (90.5)	1.4
Level of participation in selected health information technology initiatives[d]					
Average county volume of electronic prescribing based on transactions per professional who submits electronic prescriptions	Low (117.83 or fewer transactions)	202,811	18,196 (9.0)	184,615 (91.0)	1.0
	Middle (117.84-152.53 transactions)	192,988	16,864 (8.7)	176,124 (91.3)	—
	High (152.54 or more transactions)	199,471	21,393 (10.7)	178,078 (89.3)	1.2
Located in a county with a Beacon Community	Yes	38,853	2,993 (7.7)	35,860 (92.3)	—
	No	561,112	53,580 (9.5)	507,532 (90.5)	1.2

Source: GAO analysis of CMS, Office of the National Coordinator for Health Information Technology, Health Resources and Services Administration, and Surescripts data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis does not, in general, include participating professionals who were affiliated with Medicare Advantage Organizations. We compared the characteristics of the 56,585 professionals who were awarded a Medicare EHR incentive payment for 2011 including those whose incentive payment was disbursed to them and those whose payment was approved and being processed by CMS, to those of other eligible professionals who were not awarded a payment for that year. The sum of the number of professionals listed by category may not equal the overall number of professionals due to missing data.

[a]We use the term eligible professionals to refer to those professionals who were eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible professionals are those who (1) were permissible types of providers: doctors of medicine, dental medicine or surgery, optometry, osteopathy, and podiatric medicine, and chiropractors; (2) were not hospital-based, and (3) had greater than $0 in Medicare Part B charges in calendar year 2010.

[b]The relative risk ratios indicate how much more likely a professional in each category was to have been awarded an EHR incentive payment than a professional in the category that was least likely to have been awarded a payment, which is labeled "–". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

[c]Five thousand three hundred fifty-five eligible professionals practiced in U.S. insular areas, which are not included in the four U.S. census regions. Of those, 46 (about 1 percent) were awarded a Medicare EHR incentive payment.

[d]These characteristics describe the level of participation in selected health information technology initiatives across all the professionals in a given county, rather than the level of participation for any particular professional.

Table 9 examines the relationship between professional characteristics, such as specialty, longevity, and involvement in other health IT initiatives, and receipt of a Medicare EHR incentive payment for 2011. We found that

- among general practice physicians and specialty practice physicians—the two specialty categories that together account for most of the eligible professionals—general practice physicians were 1.8 times more likely than specialty practice physicians to have been awarded a Medicare EHR incentive payment;[2] and

- professionals who received an incentive payment from CMS's Electronic Prescribing Program for 2010 were 3.7 times more likely to have been awarded a Medicare EHR incentive payment for 2011 than professionals who did not.

[2]To determine how much more likely a general practice physician was to have been awarded a Medicare EHR incentive payment for 2011 than a specialty practice physician, we divided the probability that a general practice physician was awarded an incentive payment (21,588/153,402 = 0.1407) by the probability that a specialty practice physician was awarded an incentive payment (28,446/355,926 = 0.0799).

Table 9: Number and Percentage of Professionals Who Were Awarded Medicare EHR Incentive Payments for 2011, by Professional Characteristics

Characteristic	Category	Number of eligible professionals[a]	Number (percentage)		Relative risk ratio[b]
			Awarded a Medicare EHR incentive payment	Not awarded a Medicare EHR incentive payment	
Overall		600,172	56,585 (9.4)	543,587 (90.6)	
Professional specialty	General practice physician	153,402	21,588 (14.1)	131,814 (85.9)	27.2
	Specialty practice physician	355,926	28,446 (8.0)	327,480 (92.0)	15.4
	Chiropractor	45,108	1,265 (2.8)	43,843 (97.2)	5.4
	Dentist	3,479	18 (0.5)	3,461 (99.5)	—
	Optometrist	27,745	2,340 (8.4)	25,405 (91.6)	16.3
	Podiatrist	14,477	2,893 (20.0)	11,584 (80.0)	38.6
Number of professionals in practice	Solo practice	54,938	4,234 (7.7)	50,704 (92.3)	—
	2-10 professionals	101,315	12,266 (12.1)	89,049 (87.9)	1.6
	11-50 professionals	70,297	7,103 (10.1)	63,194 (89.9)	1.3
	51 or more professionals	159,056	17,893 (11.2)	141,163 (88.8)	1.5
	More than one group practice	127,716	11,974 (9.4)	115,742 (90.6)	1.2
	Missing[c]	86,850	3,115 (3.6)	83,735 (96.4)	N/A
Signed an agreement to receive technical assistance from a Regional Extension Center	Yes	65,029	12,155 (18.7)	52,874 (81.3)	2.3
	No	535,143	44,430 (8.3)	490,713 (91.7)	—
Received an incentive payment from CMS's Electronic Prescribing Program for 2010	Yes	59,575	16,505 (27.7)	43,070 (72.3)	3.7
	No	540,597	40,080 (7.4)	500,517 (92.6)	—
Years since degree awarded	Low (18 years or fewer)	203,884	21,500 (10.5)	182,384 (89.5)	1.2
	Middle (19-28 years)	165,563	17,634 (10.7)	147,929 (89.3)	1.2
	High (29 years or more)	203,064	17,318 (8.5)	185,746 (91.5)	—

Source: GAO analysis of CMS and Office of the National Coordinator for Health Information Technology data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis does not, in general, include participating professionals who were affiliated with Medicare Advantage Organizations. We compared the characteristics of the 56,585 professionals who were awarded a Medicare EHR incentive payment for 2011 including those whose incentive payment was disbursed to them or whose payment was approved and being processed by CMS, to those of other eligible professionals who were not awarded a payment for that year. The sum of the number of professionals listed by category may not equal the overall number of professionals due to missing data.

[a]We use the term eligible professionals to refer to those professionals who were eligible for the Medicare EHR program, regardless of whether they were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible professionals are those who (1) were permissible types of providers: doctors of medicine, dental medicine or surgery, optometry, osteopathy, and podiatric medicine, and chiropractors; (2) were not hospital-based, and (3) had greater than $0 in Medicare Part B charges in calendar year 2010.

[b]The relative risk ratios indicate how much more likely a professional in each category was to have been awarded an EHR incentive payment than a professional in the category that was least likely to have been awarded a payment, which is labeled " – ". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

[c]Our analysis of the number of professionals in eligible professionals' practices includes only a subset of professionals. That is, information on the number of professionals in the practice was missing for 86,850 professionals (about 14.5 percent).

Table 10 examines the extent to which the size of professionals' practices under Medicare, measured in various ways, is related to whether professionals were awarded Medicare EHR incentive payments for 2011. We found that professionals who saw the largest number of Medicare patients and billed Medicare the largest amounts were the most likely to have been awarded a Medicare EHR incentive payment for 2011. Specifically,

- professionals with the highest total amount in 2010 Medicare Part B charges were 3.3 times more likely to have been awarded an incentive payment than professionals with the lowest amount of 2010 Medicare Part B charges; and

- professionals with the highest number of 2010 Medicare Part B encounters were 3.8 times more likely to have been awarded an incentive payment than professionals with the smallest number of encounters.

Table 10: Number and Percentage of Professionals Who Were Awarded Medicare EHR Incentive Payments for 2011, by Practice Size

Characteristic	Category	Number of eligible professionals[a]	Number (percentage)		Relative risk ratio[b]
			Awarded a Medicare EHR incentive payment	Not awarded a Medicare EHR incentive payment	
Overall		600,172	56,585 (9.4)	543,587 (90.6)	
Total amount of 2010 Medicare Part B charges (dollars)	Low ($27,117.01 or less)	199,460	7,892 (4.0)	191,568 (96.0)	—
	Medium ($27,117.02-128,567.51)	200,057	21,265 (10.6)	178,792 (89.4)	2.7
	High ($128,567.52 or more)	199,460	26,233 (13.2)	173,227 (86.8)	3.3
Total number of 2010 Medicare Part B encounters	Low (615 or fewer encounters)	199,648	7,428 (3.7)	192,220 (96.3)	—
	Medium (616-2,665 encounters)	199,825	19,402 (9.7)	180,423 (90.3)	2.6
	High (2,666 or more encounters)	199,504	28,560 (14.3)	170,944 (85.7)	3.8

Source: GAO analysis of CMS data.

Notes: We analyzed data CMS collects pertaining to the Medicare EHR program through April 2, 2012. Our analysis does not, in general, include participating professionals who were affiliated with Medicare Advantage Organizations. We compared the characteristics of the 56,585 professionals who were awarded a Medicare EHR incentive payment for 2011 including those whose incentive payment was disbursed to them or whose payment was approved and being processed by CMS, to those of other eligible professionals who were not awarded a payment for that year. The sum of the number of professionals listed by category may not equal the overall number of professionals due to missing data.

[a]We use the term eligible professionals to refer to those professionals who were eligible for the Medicare EHR program, regardless of whether they participated in the program and were awarded a Medicare EHR incentive payment for 2011. Specifically, eligible professionals are those that (1) were permissible types of providers: doctors of medicine, dental medicine or surgery, optometry, osteopathy, and podiatric medicine, and chiropractors; (2) were not hospital-based, and (3) had greater than $0 in Medicare Part B charges in calendar year 2010.

[b]The relative risk ratios indicate how much more likely a professional in each category was to have been awarded an EHR incentive payment than a professional in the category that was least likely to have been awarded a payment, which is labeled " – ". A relative risk ratio of 1.0 indicates no difference in the likelihood of having been awarded an incentive payment between the two categories, and, as relative risk ratios approach 1.0, there is less and less difference in the likelihood of having been awarded an incentive payment between the two categories.

Comments from the Department of Health and Human Services

Note: Page and footnote numbers in the draft report may differ from those in this report.

DEPARTMENT OF HEALTH & HUMAN SERVICES OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

JUL 11 2012

Linda T. Kohn
Director, Health Care
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Ms. Kohn:

Attached are comments on the U.S. Government Accountability Office's (GAO) correspondence entitled: "ELECTRONIC HEALTH RECORDS: Number and Characteristics Providers Awarded Medicare Incentive Payments for 2011" (GAO-12-778R).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Jim R. Esquea
Assistant Secretary for Legislation

Attachment

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "ELECTRONIC HEALTH RECORDS: NUMBER AND CHARACTERISTICS OF PROVIDERS AWARDED MEDICARE INCENTIVE PAYMENTS FOR 2011" (GAO-12-778R)

The Department appreciates the opportunity to comment on this draft report.

This report was developed to analyze the effects of various factors on providers' participation in the Electronic Health Record (EHR) Incentive Programs. The review focused on the participation of Medicare providers in the EHR Incentive Programs for program year 2011. We found the analysis informative and will use the information to further refine our outreach and education efforts.

The Centers for Medicare & Medicaid Services (CMS) will continue to work with the Office of the National Coordinator for Health Information Technology to maximize the success of the EHR Incentive Programs and the related Health Information Technology for Economic and Clinical Health Act provisions. We would welcome further analyses to identify barriers to provider participation so that we can ensure the benefits of health information technology are achieved nationwide.

We look forward to working with GAO and are anxious to read the Medicaid provider analysis when it is available. We also encourage GAO, in future reports, to include the impact of other federal programs such as the work of the Quality Improvement Organizations in the 10th scope of work.

The report does not contain recommendations. However, HHS provides one general comment. On page 26, GAO stated, "there was little association between the likelihood of having been awarded an EHR incentive payment for 2011 and whether the hospital was located in a county with a Beacon Community or in a county with high levels of electronic prescribing transactions per professionals that submit electronic prescriptions." HHS would like to note that e-prescribing is only one indicator and, therefore, it may not be unexpected or relevant that there is no direct correlation between e-prescribing and receiving an EHR Incentive Program payment.

HHS and CMS appreciate the effort that went into this draft report, and thanks GAO for the opportunity to review and comment.

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