CMS Faces Challenges with Methodology and Distribution of Physician Reports

August 2011
MEDICARE PHYSICIAN FEEDBACK PROGRAM

CMS Faces Challenges with Methodology and Distribution of Physician Reports

Why GAO Did This Study

The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) directed the Department of Health and Human Services (HHS) to develop a program to give physicians confidential feedback on the resources used to provide care to Medicare beneficiaries. In response, HHS’s Centers for Medicare & Medicaid Services (CMS) has established and implemented the Physician Feedback Program by distributing feedback reports to an increasing number of physicians that provided data on resources used and the quality of care. MIPPA mandated that GAO conduct a study of this program. To address this mandate, GAO identified (1) methodological challenges CMS faces in developing feedback reports and approaches CMS has tested to address them and (2) challenges CMS faces in distributing feedback reports and CMS’s plans to address them. GAO interviewed CMS officials and representatives from the program contractor and reviewed relevant documentation.

What GAO Recommends

GAO is recommending that CMS use methodological approaches that increase physician eligibility for reports, statistically analyze the impact of its methodological decisions on report reliability, identify and address factors that may have prevented physicians from reading reports, and obtain input from a sample of physicians on the usefulness and credibility of reports. CMS concurred with these recommendations.

What GAO Found

CMS faces challenges incorporating resource use and quality measures for physician feedback reports that are meaningful, actionable, and reliable. CMS had difficulty measuring the resources used by physicians to treat specific episodes of an illness, such as a stroke or a hip fracture, and the quality measures it used in the program’s most recent phase applied to a limited number of physicians. CMS must also make decisions to address several other methodological challenges with developing feedback reports: how to account for differences in beneficiary health status, how to attribute beneficiaries to physicians, how to determine the minimum number of beneficiaries a physician needs to treat to receive a report, and how to select physicians’ peer groups for comparison. These decisions involve trade-offs; for example, a higher minimum case size requirement increases the reliability of the information in the reports, but it decreases the number of physicians eligible to receive one. While CMS has tested different approaches to measuring and comparing physician performance, methodological difficulties remain in developing feedback reports.

CMS also faced challenges distributing feedback reports to physicians that its plans for improvement may not entirely address. In the most recent phase of the program, about 82 percent of physicians in CMS’s sample were not eligible to receive a report after CMS’s methodological decisions were applied (see figure). CMS plans to make a number of methodological changes in the next phase, but significantly increasing eligibility will continue to be challenging. The electronic distribution of feedback reports also presented multiple challenges that resulted in few physicians accessing their electronic reports in the most recent phase. Factors that may have contributed to this low access rate include CMS’s difficulty in obtaining accurate contact information, burdensome methods for electronic distribution, and lack of a strong incentive for physicians to review their reports. CMS conducted limited follow-up with physicians for whom feedback reports were produced. CMS plans to use a new distribution method in a four-state region in the next reporting phase.

Number of Physicians Excluded from Receiving Feedback Reports, 2010

<table>
<thead>
<tr>
<th>Methodological requirements for a feedback report</th>
<th>All sampled physicians</th>
<th>Methodological requirements for a feedback report</th>
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<tr>
<td>At least 30 beneficiaries for the resource use measures—only 2,205 physicians met this requirement.</td>
<td>9,189</td>
<td>2,205</td>
</tr>
<tr>
<td>At least 11 beneficiaries for the quality measures—only 2,661 physicians met this requirement.</td>
<td>2,661</td>
<td>-5,528</td>
</tr>
<tr>
<td>Only 1,733 physicians met both requirements.</td>
<td>1,733</td>
<td>-55</td>
</tr>
<tr>
<td>At least 30 physicians practicing in the same medical specialty and geographic area for a peer group—only 1,645 physicians met this requirement.</td>
<td>1,645</td>
<td>-8</td>
</tr>
<tr>
<td>Ineligible physicians</td>
<td>7,544</td>
<td>2,205</td>
</tr>
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About 82% of physicians in CMS’s sample were ineligible.

Source: GAO analysis of CMS and contractor data.
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### Abbreviations

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<th>Abbreviation</th>
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<tr>
<td>AHRQ</td>
<td>Agency for Healthcare Research and Quality</td>
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<td>BCSSI</td>
<td>Buccaneer Computer Systems and Services, Inc.</td>
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<tr>
<td>CBO</td>
<td>Congressional Budget Office</td>
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<td>CMS</td>
<td>Centers for Medicare &amp; Medicaid Services</td>
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<td>CTS</td>
<td>Community Tracking Study</td>
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<tr>
<td>E&amp;M</td>
<td>evaluation and management</td>
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<tr>
<td>GEM</td>
<td>Generating Medicare Physician Quality Performance Measurement Results</td>
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<tr>
<td>HCC</td>
<td>Hierarchical Condition Categories</td>
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<tr>
<td>HEDIS®</td>
<td>Healthcare Effectiveness Data and Information Set</td>
</tr>
<tr>
<td>HHS</td>
<td>Department of Health and Human Services</td>
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<tr>
<td>IACS</td>
<td>Individuals Authorized Access to CMS Computer Services</td>
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<td>MAC</td>
<td>Medicare Administrative Contractor</td>
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<td>MedPAC</td>
<td>Medicare Payment Advisory Commission</td>
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<tr>
<td>MIPPA</td>
<td>Medicare Improvements for Patients and Providers Act of 2008</td>
</tr>
<tr>
<td>NCQA</td>
<td>National Committee for Quality Assurance</td>
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<td>NPPES</td>
<td>National Plan and Provider Enumeration System</td>
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<td>NQF</td>
<td>National Quality Forum</td>
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<tr>
<td>PECOS</td>
<td>Provider Enrollment, Chain, and Ownership System</td>
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<tr>
<td>PPACA</td>
<td>Patient Protection and Affordable Care Act</td>
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<tr>
<td>PQRS</td>
<td>Physician Quality Reporting System</td>
</tr>
<tr>
<td>UPIN</td>
<td>Unique Physician Identification Number</td>
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August 12, 2011

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

In recent years, we and other federal fiscal experts—including the Congressional Budget Office (CBO) and the Medicare Trustees—have noted the rise in Medicare spending and the serious long-term financial challenges the program faces.¹ Physicians play a central role in the generation of Medicare expenditures both through the services they provide and the services they order, including hospital admissions, diagnostic tests, and referrals to other physicians. There is evidence that not all of these services may be necessary or appropriate, and that greater spending does not necessarily result in better health outcomes. As a result, policymakers have been exploring methods to reduce costs and encourage physicians to practice efficiently—that is, to provide and

¹Medicare is the federally financed health insurance program for persons aged 65 and over, certain individuals with disabilities, and individuals with end-stage renal disease. Medicare Part A covers hospital and other inpatient stays. Medicare Part B covers physician, outpatient hospital, home health, and other services. Medicare Parts A and B are known as original Medicare or Medicare fee-for-service.
order only those services that are necessary, sufficient, and appropriate to meet a beneficiary’s health care needs.

Efficiency may be encouraged by physician profiling, which measures and compares a physician’s performance to a benchmark, such as the performance of his or her peers. Certain public and private health care purchasers routinely profile physicians in their networks and use the results for a number of purposes, including developing physician “report cards” or feedback reports and placing physicians in tiered networks that can be used to steer patients toward the most efficient providers. We and others have recommended that the Centers for Medicare & Medicaid Services (CMS), the agency within the Department of Health and Human Services (HHS) that administers the Medicare program, profile physicians and provide them with feedback on their use of health care resources to help identify and reduce overuse of Medicare services. In addition to profiling physicians on the resources used to provide care to Medicare beneficiaries, they can also be profiled on the quality of that care. Some specialty societies have called for the inclusion of quality measures in feedback reports and cautioned that focusing solely on costs could create a disincentive to providing appropriate, high-quality care.

The Medicare Improvements for Patients and Providers Act of 2008 (MIPPA) required HHS to establish and begin implementing by January 1, 2009, a Physician Feedback Program that would include distribution of confidential feedback reports to physicians on the resources used to provide care to Medicare beneficiaries. MIPPA gave HHS the flexibility to apply the program to certain types of physicians, such as those who treat conditions that have high costs, and also provided flexibility on whether to provide reports to physician groups and whether to include information on quality. Because developing feedback reports requires a number of methodological decisions, such as selecting performance measures that

2Resource use can be defined as the costs to the Medicare program, including those contributions by Medicare beneficiaries, such as co-payments and deductibles. See GAO, Medicare: Focus on Physician Practice Patterns Can Lead to Greater Program Efficiency, GAO-07-307 (Washington, D.C.: Apr. 30, 2007); GAO, Medicare: Per Capita Method Can Be Used to Profile Physicians and Provide Feedback on Resource Use, GAO-09-802 (Washington, D.C.: Sept. 25, 2009); Medicare Payment Advisory Commission, Report to the Congress: Medicare Payment Policy (Washington, D.C.: Mar. 2005), 142; and CBO, Medicare’s Payments to Physicians: Options for Changing the Sustainable Growth Rate (Washington, D.C.: Mar. 1, 2007), 16-17.

accurately reflect physicians’ resource use and quality of care, CMS has implemented the program in phases by testing different approaches for developing feedback reports and distributing reports to a small number of physicians and physician groups.4

The Patient Protection and Affordable Care Act (PPACA), which was enacted in 2010, directed HHS to adjust Medicare payments to physicians based on the quality of care provided compared to the cost using a “value-based payment modifier.”5 HHS is directed to begin paying a limited group of physicians and physician groups differentially using the payment modifier on January 1, 2015, and all physicians and physician groups by January 1, 2017.6 The law also states that HHS is to coordinate the Physician Feedback Program with the value-based payment modifier.7 CMS has said that it intends to use the quality and cost measures from the Physician Feedback Program to develop the payment modifier and plans to distribute at least one feedback report to physicians before paying them differentially based on their performance.

MIPPA mandated that GAO conduct a study of the Physician Feedback Program and report on our findings no later than March 1, 2011.8 To respond to this requirement, we conducted a series of briefings for congressional staff on our preliminary findings beginning in February 2011. This report contains information we provided during those briefings as well as additional information. Specifically, we (1) identified methodological challenges CMS faces in developing physician feedback reports and the approaches CMS has tested to address them and (2) identified challenges CMS faces in distributing physician feedback reports and CMS’s plans to address them.

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4CMS has distributed feedback reports to various health care providers—primarily physicians—as well as nurse practitioners and physician’s assistants. For this report, we refer to providers as physicians and provider groups as physician groups.


To address these objectives, we interviewed relevant CMS officials and representatives from Mathematica Policy Research, Inc. (Mathematica), the contractor that assisted with the development and testing of different methodologies and distribution methods for the Physician Feedback Program.9 We reviewed internal agency reports and relevant studies, including reports by CMS contractors and the Medicare Payment Advisory Commission (MedPAC), summaries of comments provided by physicians who received feedback reports from CMS, and public comments submitted by medical specialty societies and other stakeholders in response to the portion of CMS’s 2011 proposed physician fee schedule rule related to the Physician Feedback Program.10 In addition, we attended a CMS listening session on the Physician Feedback Program, at which representatives of medical specialty societies and other stakeholders commented on the methodological approaches CMS is considering in developing feedback reports. We limited our study to challenges with feedback report methodology and distribution as our initial audit work indicated that these were the primary challenges faced by the agency in its implementation of the Physician Feedback Program. Our work is based on the most current information available as of June 7, 2011.

We conducted this performance audit from June 2010 through August 2011 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.

9Throughout this report, we generally attribute the analysis and actions taken by Mathematica to CMS.

10See Medicare Program; Payment Policies Under the Physician Fee Schedule and Other Revisions to Part B for CY2011; Proposed Rule, 75 Fed. Reg. 40040 (July 13, 2010). We identified 42 letters related to the Physician Feedback Program that were submitted in response to the proposed rule via the website www.regulations.gov. Sixteen of the letters we reviewed were from medical specialty societies; 25 of the letters were from other stakeholders, such as the National Business Group on Health; and 1 letter was from a medical specialty society and one other organization that commented jointly.
Physicians can be profiled on the health care they provide to Medicare beneficiaries using measures in two performance dimensions: the resources used to provide care to beneficiaries and the quality of that care. CMS has established goals and made progress in developing its Physician Feedback Program.

**Resource Use Measures**

Resource use can be measured using two methods: the per capita method and the per episode method. The per capita method measures the resources used by a physician to treat his or her Medicare beneficiaries over a fixed period of time. By definition, it is a comprehensive measure of a physician’s practice patterns because it includes all health care resources used and is generally considered more straightforward than the per episode method to measure and understand.

The per episode method measures the resource use associated with treating a specific episode of an illness in a beneficiary—for example, a stroke or a hip fracture. An episode of care may refer to all services related to a health condition with a given diagnosis from a patient’s first encounter with a health care provider through the completion of the last encounter related to that condition, including postacute services such as home health, skilled nursing, and rehabilitation. Since this method provides condition-specific results, it may provide more useful, or “actionable,” feedback to physicians. Per episode costs are generally considered more difficult to measure than per capita costs since it can be challenging to determine whether a particular health care service should be grouped to one episode of care or another. Per episode costs may be determined using “episode groupers,” which are software programs that use diagnosis codes to assign claims to clinically distinct episodes of care.

Using both the per capita and per episode methods may more fully capture differences in resource use among physicians. For example, in a 2006 report, MedPAC found that beneficiaries in Miami had significantly

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11For chronic conditions, which do not have clearly defined start or end dates, episodes of care may be measured over a specified time period, such as on a 12-month basis.

lower per episode costs for coronary artery disease than beneficiaries in Minneapolis, suggesting that Miami physicians were providing more efficient care for coronary artery disease. However, MedPAC noted that because the beneficiaries in Miami had more episodes of care for this disease, physicians in Miami actually used more health care resources in total to treat their coronary artery disease beneficiaries than physicians treating similar patients in Minneapolis. In this case, the per capita method and the per episode method together would provide a more complete picture of physicians’ resource use than either method by itself.

Quality Measures

Health care quality measures can be used to evaluate how well health care is delivered, and information obtained from such measures can promote accountability among physicians. Quality measures can be classified as process or outcome measures. Process measures assess whether appropriate clinical practices, such as screening and diagnosis, were followed. An example of a process measure is whether a patient with high blood pressure received appropriate medication. Outcome measures assess a patient’s health status after receiving health care services. An example of an outcome measure is tracking the percentage of patients who were diagnosed with high blood pressure and whose blood pressure was adequately controlled during the measurement year.

Efforts are under way by a range of organizations, including CMS and the National Committee for Quality Assurance (NCQA), to develop measures of physician quality, and by the National Quality Forum (NQF) to endorse the quality measures developed by others. For example, NCQA created the Healthcare Effectiveness Data and Information Set (HEDIS®), which is a tool used by over 90 percent of health plans in the nation and includes measures of both health plan and physician performance. CMS has developed the Physician Quality Reporting System (PQRS), which is

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13 Other types of measures can also be used to evaluate the quality of care, such as tracking a patient’s experience with health care services.

14 NQF is a nonprofit organization that fosters agreement on national standards for measuring and public reporting of health care performance data. NCQA is a national nonprofit organization that develops health care quality and performance standards and accredits health plans, physicians, and other health care providers.

15 HEDIS® is a group of standardized measures used to measure clinical performance in areas such as medication use, control of high blood pressure, breast cancer screening, immunization, and comprehensive diabetes care.
a quality reporting program that provides an incentive payment to professionals who satisfactorily report data on quality measures for covered professional services furnished during a specified reporting period. CMS also contracted with Masspro, a quality improvement organization for Massachusetts, to calculate performance rates for the Generating Medicare Physician Quality Performance Measurement Results (GEM) project. The GEM project used 2006 and 2007 Medicare administrative claims data to generate performance rates for 12 process measures that were drawn from HEDIS®, such as persistence of beta blocker treatment after a heart attack.

CMS established the Physician Feedback Program in 2008 with the goal of encouraging higher-quality and more efficient medical practice and creating a transparent process for developing meaningful, actionable, and fair physician performance indicators that could later be used in CMS’s value-based purchasing initiative. Feedback reports can help ensure quality health care and control costs in three ways. First, the feedback reports are intended to be educational by providing useful information to physicians on how their resource use and quality of care compare to their peers. Second, the reports are intended to be actionable by helping physicians identify and develop strategies for improving quality and reducing costs in their practices. Third, the reports are intended to help physicians become familiar with the resource use and quality measures that the agency plans to use to adjust their Medicare reimbursement under the value-based payment program. CMS intends to distribute at least one feedback report to physicians before paying them differentially under the value-based modifier.

CMS has implemented the program in phases by distributing feedback reports to an increasing number of physicians in selected metropolitan areas. In each phase, CMS conducted pretesting to obtain physicians’ reactions to the methodology and format of mock feedback reports, distributed feedback reports populated with actual performance data, and followed up with a sample of the profiled physicians to obtain their input on the reports. In Phase I, CMS distributed feedback reports to
239 physicians who practiced in one of 12 metropolitan areas. These reports were distributed in April and August 2009, and included information about physicians’ resource use but not their quality of care. In Phase II, CMS expanded the program to distribute feedback reports to 36 physician groups and to 1,641 individual physicians who practiced within these groups from the same 12 metropolitan areas used in Phase I. Phase II reports were produced in November 2010, and included resource use measures and selected quality measures as well as information on beneficiaries’ hospital admissions. In addition, the reports to physician groups included hospitalization rates for ambulatory care sensitive conditions—acute conditions for which effective outpatient care could have prevented complications or more severe disease. The reports also contained the average per capita costs of treating Medicare beneficiaries, as well as per capita costs by specific categories of service, such as laboratory tests and imaging services. In addition, the reports provided summary information about the average annual cost of treating a subset of Medicare beneficiaries with selected common chronic conditions: congestive heart failure, chronic obstructive pulmonary disease, coronary artery disease, diabetes, and prostate cancer.

CMS plans to continue to develop feedback reports and distribute them to an increasing number of physicians and physician groups. It plans to distribute Phase III reports to about 20,000 physicians in late 2011, and intends to provide feedback reports to all physicians and physician groups by 2017.

16 The areas were those included in an ongoing Community Tracking Study (CTS) being conducted by a research organization, the Center for Studying Health System Change. The CTS sites were designated because they provide a random sample of communities that represent different geographic areas, populations, physician and health care market structures, patterns of Medicare spending, and experience with public- or private-sector performance measurement. They were Boston, Massachusetts; Cleveland, Ohio; Greenville, South Carolina; Indianapolis, Indiana; Lansing, Michigan; Little Rock, Arkansas; Miami, Florida; Northern New Jersey; Orange County, California; Phoenix, Arizona; Seattle, Washington; and Syracuse, New York.

17 Physician groups were selected based on the following criteria: that they have at least 5,000 Medicare beneficiaries in 2007 and at least one physician who participated in the PQRS program since it began in 2007.
CMS faces challenges in selecting resource use and quality performance measures that make feedback reports meaningful, reliable, and actionable. In addition, the agency faces trade-offs in making other key methodological decisions concerning risk adjustment, attribution of beneficiaries to physicians, minimum case size, and peer group selection. While CMS has tested different approaches to developing feedback reports, challenges remain in making methodological decisions that will enable CMS to accomplish its program goals.

### Measuring resource use

CMS intends to use both per capita and per episode methods to measure physicians' resource use, but it faces particular challenges in determining per episode costs for the Medicare population. In Phase I, CMS tested two commercially available episode groupers, but found that these groupers had the following shortcomings when used with Medicare claims data:

- Because of the prevalence of comorbidities in the Medicare population, a beneficiary can be treated for several different conditions concurrently, and it was difficult for the groupers to determine which services belonged with a given episode.

- Because diagnosis coding used for different Medicare claim types was inconsistent, claims from different sources were not always linked to the same episode of care, even when they appeared to be clinically related. For example, hospital, physician, and skilled nursing facility claims have slightly different diagnostic information.

- Because it was difficult to identify the appropriate beginning and end of an episode involving a chronic condition, the commercial groupers did not work well to create episodes of care for the Medicare population, since a significant portion of Medicare beneficiaries have chronic conditions.

CMS concluded that per episode measurements included in Phase I reports were inaccurate, and discontinued use of the commercial groupers. Some medical specialty societies and other stakeholders commended this decision.
CMS intends for shortcomings to be addressed by the Medicare-specific episode grouper under development. In September 2010, CMS awarded four contracts to develop a Medicare-specific episode grouper.\textsuperscript{18} CMS plans to select a grouper developed under one of these four contracts for future feedback reports.\textsuperscript{19} However, it is not clear that all the problems identified with the commercial groupers can be solved by a Medicare-specific grouper and the timeline for its development is challenging.

In Phase II feedback reports, CMS elected to provide information on resource use for beneficiaries with five high-cost, high-volume chronic conditions. Because episode measures were not available, it used per capita measures as proxies for per episode costs for patients with diabetes, congestive heart failure, coronary artery disease, chronic obstructive pulmonary disease, and prostate cancer. These proxies included all the resources used to treat beneficiaries with these select chronic conditions, regardless of whether the resource use was related to that specific condition. CMS officials stated that these proxies were adequate substitutes for episode-based cost measures for these chronic conditions. In Phase III reports, CMS plans to provide per capita information on subgroups with the same chronic conditions as in Phase II with the exception of prostate cancer.\textsuperscript{20}

**Measuring quality.** CMS faces the challenge of incorporating into its feedback reports quality measures that are available, apply to specialists, and provide information on patient outcomes.\textsuperscript{21} Phase I reports did not contain quality measures. In Phase II, CMS included 12 GEM measures


\textsuperscript{19}Two contracts were awarded to make the existing commercially available software more usable for the Medicare population, and two contracts were awarded to have a new episode grouper constructed.

\textsuperscript{20}CMS officials explained that they found that prostate cancer was rarely reported in their sample.

\textsuperscript{21}Including quality measures in feedback reports is optional. 42 U.S.C. § 1395w-4(n)(1)(A)(iii).
in feedback reports. These measures have the advantage of being readily available because they are based on claims data. For Phase III, CMS is considering 28 claims-based quality measures, which are endorsed by NQF. These 28 measures, most of which are HEDIS® measures, were vetted by an interagency committee composed of medical officers and other internal experts who reviewed the specifications of each measure, including whether the measure was an appropriate reflection of physician care and whether it was evidence based.

While a number of quality measures available to CMS for use in feedback reports are applicable to primary care physicians, there are fewer measures for specialists. For example, the GEM measures used in Phase II reports are only applicable to primary care physicians and a limited number of specialists, such as cardiologists. In addition, the 28 measures CMS is considering for Phase III reports are, as a whole, mostly applicable to primary care physicians, although individual measures apply to certain specialists. Some stakeholders have encouraged CMS to work with specialty societies to develop adequate quality measures. CMS officials stated that while the agency is willing to work with these specialty societies to develop quality measures accurately reflect physicians’ practices, CMS prefers to use NQF-endorsed quality measures and many of the measures that specialty societies have created have not yet achieved NQF endorsement. In

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22Phase II feedback reports also provided a link to CMS’s Hospital Compare, Nursing Home Compare, and Home Health Compare websites to provide information on the quality of the hospitals used by the physician’s beneficiaries and nursing homes and home health agencies in the physician’s metropolitan area. In addition, physician group feedback reports contained six ambulatory care sensitive conditions, which are medical conditions for which timely and coordinated outpatient care could have prevented the need for hospitalization. These include congestive heart failure and dehydration.

23A recent Agency for Healthcare Research and Quality (AHRQ) report also noted that other beneficial aspects of administrative data, including claims data, are that they are relatively inexpensive to acquire in electronic formats, coded by health information professionals using accepted coding systems, and drawn from large populations and therefore more representative of the populations of interest. However, the report states that administrative data are limited in that because most administrative data are intended for financial management rather than quality assessment, they contain varying degrees of clinical detail and are often limited in content, completeness, timeliness, and accuracy. Patrick Romano, Peter Hussey, and Dominique Ritley, Selecting Quality and Resource Use Measures: A Decision Guide for Community Quality Collaboratives, Final Contract Report (prepared by the University of California and RAND Corporation, under contract No. 08003967), AHRQ Publication No. 09(10)-0073 (Rockville, Md.: AHRQ, May 2010).
addition, CMS anticipates using PQRS measures that are applicable to specialists, but according to CMS officials, it has not done so yet because of limitations with the PQRS program, such as low physician participation rates. CMS officials said that PQRS has measures that are applicable to every type of physician, and the agency is working to increase physician participation in PQRS, which is currently voluntary. They expect program participation rates to increase when, in 2013, CMS plans to begin penalizing physicians who fail to report PQRS measures.

In addition, the GEM measures CMS used for Phase II reports are process measures, which show whether a physician followed generally accepted recommendations for clinical practice but may not reflect the impact of the health care services on the health status of a beneficiary. CMS officials have stated that although there is a need to evaluate physician quality of care based on outcome measures, there are currently few suitable measures. NQF has also stated that there is a need to develop additional outcome quality measures, and funding of $75 million is authorized for this in each of fiscal years 2010 through 2014. In addition, CMS officials stated that PQRS contains a number of clinical outcome measures, and it is likely that moving forward physician feedback reports will include these PQRS outcome measures.

Other Key Methodological Decisions Involve Trade-offs, and CMS Has Tested Different Approaches to Inform These Decisions

Determining risk adjustment factors. CMS faces trade-offs in deciding which factors to use for risk adjustment, which accounts for differences outside the physician’s control, such as beneficiary health status. Because sicker beneficiaries are expected to use more health care resources than healthier beneficiaries, the health status of physicians’ beneficiaries must be taken into account to make meaningful comparisons among physicians. Without risk adjusting resource use, physicians who treat sicker beneficiaries could appear to use resources less efficiently than their peers in their feedback reports. CMS used the Hierarchical Condition Categories (HCC) model to risk adjust per capita

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24 CMS considered, but decided not to include, measures from the PQRS program in Phase II feedback reports because of current limitations, such as physicians’ low participation rate in the program and because physicians had flexibility to choose which measures to report under PQRS. CMS officials stated that as a result of these limitations, it would have been difficult to make meaningful comparisons using PQRS measures.

25 CMS officials stated that they also plan to include measures from the Health Information Technology for Economic and Clinical Health Act in future feedback reports.
resource use in the Phase I and Phase II feedback reports. This model was originally developed for risk adjustment in Medicare managed care. The HCC model used in Phase II feedback reports is a method of adjusting for the expected resource use of Medicare beneficiaries based on the health conditions they experienced during the previous year and other factors, such as gender and age.

There are trade-offs involved in determining whether to use a prospective or concurrent risk adjustment model. A prospective model uses risk factors from a previous period to predict physicians' spending for a future period. A prospective model works well for some health conditions, such as chronic conditions, which are accurate predictors of health spending not only in the current year, but also in future years. Conversely, a concurrent model uses factors from the current period to adjust health spending for that period. The concurrent model may risk adjust health care costs incurred in the current year more fully by including acute conditions, such as a broken leg, as well as acute exacerbations of chronic illnesses, such as hospitalizations resulting from uncontrolled diabetes. However, it may be appropriate to categorize the expenditures associated with some complications as part of the physician’s performance, as opposed to factors outside of the physician’s control that require risk adjustment. For example, if a beneficiary needed to be hospitalized because of poorly managed diabetes, it could be appropriate to hold the physician accountable for those costs. CMS used a prospective model in Phase II feedback reports.

CMS must also decide which factors, if any, should be added to the HCC model. Although CMS officials believe the HCC risk adjustment model adequately risk adjusted per capita costs, some stakeholders have questioned CMS’s use of the HCC model and have urged CMS to adjust for additional factors that affect costs that CMS did not include. These factors include some socioeconomic indicators, patient noncompliance, and care setting. Some medical specialty societies and other stakeholders have stated that if CMS does not risk adjust physician resource use adequately, physicians could be discouraged from treating atypical or disadvantaged populations that may be more costly to treat. Although risk adjusting for additional factors could help address these

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26 CMS has used a concurrent risk adjustment model for its Physician Group Practice Demonstration.
concerns, there may be a case for not including them. For example, noncompliance with physicians’ instructions may suggest that physicians have not adequately educated their patients on the importance of compliance. CMS officials also explained that they do not want to adjust for factors that can provide meaningful information about differences in practice patterns. CMS officials said that they plan to continue using the HCC model to risk adjust per capita costs in Phase III.

Selecting an attribution method. CMS faces trade-offs in determining how to assign responsibility, or “attribute” beneficiaries’ care to physicians, in a way that promotes program goals. Program goals include maximizing the number of physicians eligible for feedback reports and encouraging care coordination, while also ensuring that physicians are not held accountable for care they did not provide or influence. Medicare fee-for-service beneficiaries may seek care from any Medicare provider and often receive care from several physicians and other providers. This makes it difficult to attribute responsibility for all of the health care provided. Attributing care to the physician who directly provided it may appear to be straightforward, but it may not adequately reflect relative responsibility for that care. For example, individual physicians may have control over some costs directly incurred by another physician by referring beneficiaries to specialists. Physicians may also indirectly affect other health care costs by exercising their judgment regarding hospital and postacute care decisions. As a result, determining to whom a beneficiary’s care should be attributed is an important methodological decision.

In Phase I, CMS tested two attribution methods—a single and a multiple provider attribution method.

- A single provider attribution method holds one physician responsible for all of a beneficiary’s care. This method is designed to identify the principal “decision maker,” such as the beneficiary’s primary care physician, and holds this physician responsible for all care provided, including referrals and services provided by other physicians. The single provider method CMS tested attributed a beneficiary’s entire cost of care to the single physician who provided the most evaluation and management (E&M) services that the beneficiary received.

- A multiple provider attribution method holds more than one physician responsible for the care provided to a beneficiary. This method assumes that any one physician is unlikely to have complete responsibility for all of that care. The multiple provider method CMS
tested held all physicians who billed for at least 10 percent of a beneficiary’s E&M costs partially responsible for that beneficiary’s care by attributing resource use in proportion to the amount of care provided by a given physician.

In Phase II, CMS officials used a single provider attribution method. The agency generally prefers single provider attribution, believing that it encourages physicians to coordinate care. However, CMS has not provided evidence that using a single provider attribution method would lead to increased coordination, and physicians may not accept this method as a credible way to attribute costs. According to Mathematica officials, physicians profiled in Phase I generally preferred the multiple provider attribution method. These physicians’ comments reflected concerns that it was unfair to attribute other providers’ resource use to them. Furthermore, most of the physicians and other stakeholders who provided comments to Mathematica during pretesting in Phase II thought it inappropriate to be held accountable, even partially, for care provided by other physicians. Both specialists and primary care physicians told Mathematica that they did not have control over how another provider treated a beneficiary. Specialists noted that they treated beneficiaries for certain conditions and would not have knowledge of or be responsible for care unrelated to those conditions. Similarly, Mathematica reported that primary care physicians felt they had little control over the care provided by the specialists to whom they referred beneficiaries.

Despite physicians’ concerns about being held responsible for care they did not directly provide, they do have indirect control over some costs incurred by other providers, such as referrals to specialists and decisions about hospitalizations. Given that there is no definitive way to determine which costs a physician was indirectly or directly responsible for, a multiple provider attribution method may be the more reasonable way to attribute costs. For example, the multiple provider method CMS tested in Phase I held physicians accountable for a proportion of the total care provided to a beneficiary. Under this method, a physician who billed for 70 percent of a beneficiary’s total E&M services was assigned 70 percent of the total Medicare resources used by that beneficiary—including office visits, hospitalizations, skilled nursing facility stays, and diagnostic tests and procedures.
A multiple provider attribution approach also increases the number of physicians potentially eligible to receive feedback reports. Because multiple provider attribution holds more than one physician accountable for a beneficiary’s care, more physicians will have patients attributed to them, thus increasing the number of physicians eligible for feedback reports. CMS officials recognize that using a single attribution method will not allow all physicians to be eligible to receive a report, and noted that it is likely that some Phase III reports will use a multiple provider attribution method to assign resource use to physicians.27

CMS set a threshold for the minimum amount of care that a physician or physician group needed to provide in order to be assigned responsibility for all or part of that beneficiary’s care. For example, in Phase II, individual physicians needed to bill for at least 20 percent of a beneficiary’s total E&M costs, and physician groups needed to bill for at least 30 percent of the total E&M costs in order to be assigned responsibility for that beneficiary’s care. The minimum threshold was intended to reduce the likelihood that physicians and groups would be assigned responsibility for beneficiaries for whom they provided only minimal care. CMS is considering setting a lower threshold in Phase III to increase the number of physicians eligible to receive reports.

**Determining minimum case size.** CMS faces a challenging trade-off in determining the minimum number of Medicare beneficiaries or episodes of care a physician must have to produce reliable information without excluding a large number of physicians—those without enough beneficiaries or episodes—from receiving a report. A higher minimum increases the reliability of the information, but decreases the number of physicians eligible to receive a report. In contrast, decreasing the minimum case size increases the number of physicians receiving reports but reduces reliability.

In Phase I, CMS conducted a statistical reliability test to determine the minimum number of episodes a physician needed to be eligible for a feedback report. Reliability indicates how confidently one can classify a physician’s performance relative to that of his or her peers. Estimates for this test range from zero to one, with an estimate above 0.8 generally

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27CMS officials explained that one way to increase physician eligibility is to use more than one attribution rule in future physician feedback reports; for example, the attribution rule CMS uses could vary by physician specialty.
considered a strong indicator of reliability. CMS used an estimate of 0.5—which is considered a moderate level of reliability—to help ensure that enough physicians would be eligible for Phase I reports. However, few physicians met the minimum case size requirements for certain episodes, such as acute myocardial infarctions, even when using this moderate level of reliability. CMS did not conduct a reliability test to determine the minimum number of beneficiaries a physician must treat for per capita cost measurement.

In Phase II, CMS provided feedback reports to physicians with at least 30 Medicare beneficiaries attributed to them. CMS did not conduct reliability tests for this estimate, stating that a minimum case size of 30 is generally accepted in the research community. However, as some stakeholders have noted, the appropriate minimum case size may vary by condition, suggesting that CMS should instead use a measure of reliability or precision to establish the appropriate case size. For example, Phase II reports contained resource use information for five high-cost, high-volume chronic conditions, and it is likely that different minimum case sizes were needed to generate reliable information for different conditions, such as diabetes and coronary artery disease. CMS officials noted that minimum case size is a major factor in excluding physicians from receiving feedback reports. CMS officials have considered reducing the minimum case size from 30 to 20 beneficiaries for Phase III reports. Officials analyzed the potential effect of this change on individual physicians’ per capita resource use rankings, and found that nearly all physicians were ranked in the same quartile when the case size was lowered from 30 to 20. According to CMS officials, this change would increase the number of physicians eligible to receive Phase III reports by about 10 percent.

Selecting peer groups for comparisons. CMS faces trade-offs in balancing stakeholders’ preferences that feedback reports compare physicians only to those most like themselves—that is, peer groups representing narrow subspecialties or limited geographic areas—with the need to establish a minimum peer group size that is large enough to make statistically significant comparisons.

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28The minimum number of episodes required varied by physician specialty and condition.
29A measure of reliability or precision could include, for example, a confidence interval.
Individual-level feedback reports distributed in Phases I and II contained two peer group comparisons: (1) physicians in the same specialty in the same metropolitan area and (2) physicians in the same specialty across all 12 metropolitan areas, which was meant to serve as a proxy for a nationwide comparison. Some stakeholders have encouraged CMS to compare physicians within a limited geographic area. However, if a large number of physicians in a limited geographic area were practicing inefficiently, a nationwide sample might be needed to identify the inefficiencies.

In addition, some medical specialty societies and other stakeholders urged CMS to compare physicians only within narrow subspecialties. For example, the American Urological Association noted that surgeons with active surgery practices are substantially different from those who engage primarily in medical management of urological conditions, and comparisons that do not differentiate between these distinct types of physicians are not meaningful to physicians and do not promote learning and improvement.

However, if CMS were to identify and compare physicians in smaller subspecialties, it would face the challenge of ensuring that the peer group size was large enough to make meaningful comparisons across physicians. In Phase I, CMS did not impose a minimum peer group size, but in Phase II it imposed a minimum peer group size of 30 physicians. However, because not all individual physicians had peer groups consisting of 30 physicians practicing in the same geographic area and in the same specialty, some physicians received a report that did not contain information on all performance measures. CMS officials said they may use a minimum peer group size of 15 for Phase III feedback reports.

30In Phase II, physician groups were compared to other physician groups in 12 metropolitan areas.
The majority of sampled physicians were not eligible to receive a Phase II report after CMS’s methodological decisions were applied. CMS officials plan to revise their methodology to increase eligibility for Phase III reports, but significantly increasing the number of physicians who are eligible will be challenging. Further, CMS faced multiple challenges with the electronic distribution of feedback reports to eligible physicians, and as a result, few physicians accessed their reports. CMS officials plan to use a new distribution method for Phase III reports.

Over 80 percent of CMS’s initial sample of 9,189 physicians were ineligible to receive a Phase II feedback report after CMS’s methodological decisions, such as minimum case size requirements, were applied. To identify physicians for the Phase II reports, CMS began with a sample of 9,189 individual physicians affiliated with 36 physician groups. To be eligible for a Phase II report, individual physicians needed to meet CMS’s criteria by having the following:

- **At least 30 Medicare beneficiaries attributed to them to meet the minimum case size requirement for per capita resource use measures.** Of the 9,189 physicians in the original sample, 2,205 (24 percent) had at least 30 beneficiaries attributed to them.

- **At least 11 Medicare beneficiaries attributed to them who were eligible for 1 or more of the 12 GEM quality measures.** Of the 9,189 physicians in the original sample, 2,661 physicians (29 percent) had at least 11 beneficiaries attributed to them who were eligible for at least 1 of the 12 GEM quality measures.

- **A sufficient number of attributed beneficiaries for both the per capita resource use and GEM quality measures.** Of the 9,189 physicians in the original sample, 1,733 physicians (19 percent) had a sufficient number of beneficiaries attributed to them for the per capita resource use and GEM quality measures.

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31CMS’s initial sample consisted of individual physicians who were affiliated with 1 of the 36 physician groups in 2007, the year of Medicare claims data from which the performance measures in the reports were derived; practiced in 1 of the 12 metropolitan areas selected for Phase II report distribution; were considered eligible for beneficiary attribution based on select criteria; and had a valid Unique Physician Identification Number (UPIN) in 2007. The UPIN has been changed to the National Provider Identifier.
At least 30 individual physicians in the same medical specialty and geographic area for a peer group. Of the remaining 1,733 individual physicians, 1,645 physicians had a peer group of at least 30 individual physicians.

Figure 1 shows the number of physicians excluded by each criterion.

CMS’s methodological criteria also excluded many specialists from receiving feedback reports. Over 90 percent of Phase II reports were created for generalists, such as internal medicine or family practice physicians. The single provider attribution method used by CMS—which assigned a beneficiary to the single physician who billed for the greatest number of E&M services for the beneficiary—limited the number of beneficiaries attributed to each physician. This limitation excluded many specialists from receiving feedback reports.

For example, a cardiologist practicing in Miami, Florida, had to have a peer group of at least 30 other cardiologists in Miami with at least 30 attributed beneficiaries for the resource use measure and at least 11 attributed beneficiaries for at least one GEM quality measure relevant to cardiologists, such as the percentage of patients receiving beta blocker treatment after a heart attack.

Four of the 1,645 physicians were disqualified because CMS could not identify their National Provider Identifier or could not locate a verifiable address; as a result, CMS created Phase II feedback reports for 1,641 individual physicians.
specialists eligible for a report, since specialists often provide fewer but more expensive E&M services to beneficiaries than generalists. Physicians also needed to have at least one GEM quality measure to receive a Phase II report, but the GEM measures were only applicable to a limited number of specialists, such as cardiologists and nephrologists.

In addition, many of the 1,641 physicians eligible to receive a Phase II feedback report did not meet the methodological criteria needed to receive information on all performance measures, such as resource use for the five chronic condition subgroups or the 12 GEM quality measures. For example, only 5 percent of the 1,641 physicians eligible for Phase II reports were eligible to receive resource use information for their beneficiaries with chronic obstructive pulmonary disease, and none were eligible to receive this information for their beneficiaries with prostate cancer. Similarly, none of the 1,641 physicians eligible for Phase II reports were eligible to receive information for 3 of the 12 GEM quality measures. By contrast, the majority of the 36 physician groups profiled received information on all performance measures (see table 1).
Table 1: Percentage of Individual Physicians and Physician Groups Eligible for Select Resource Use and Quality Performance Measures on Phase II Feedback Reports, 2010

<table>
<thead>
<tr>
<th>Resource use for chronic condition subgroups</th>
<th>Individual physicians</th>
<th>Physician groups</th>
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<tbody>
<tr>
<td>Congestive heart failure</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease</td>
<td>5</td>
<td>100</td>
</tr>
<tr>
<td>Diabetes</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>Coronary artery disease</td>
<td>39</td>
<td>100</td>
</tr>
<tr>
<td>Prostate cancer</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td><strong>GEM quality measures</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LDL screening for beneficiaries up to 75 years of age with diabetes</td>
<td>72</td>
<td>100</td>
</tr>
<tr>
<td>Eye exam (retinal) for beneficiaries up to 75 years of age with diabetes</td>
<td>71</td>
<td>100</td>
</tr>
<tr>
<td>HbA1c testing for beneficiaries up to 75 years of age with diabetes</td>
<td>71</td>
<td>100</td>
</tr>
<tr>
<td>Medical attention for nephropathy for diabetics up to 75 years of age</td>
<td>35</td>
<td>100</td>
</tr>
<tr>
<td>LDL-C screening for beneficiaries up to 75 years of age with cardiovascular conditions</td>
<td>38</td>
<td>100</td>
</tr>
<tr>
<td>Beta blocker treatment after heart attack</td>
<td>0</td>
<td>83</td>
</tr>
<tr>
<td>Persistence of beta blocker treatment after heart attack</td>
<td>0</td>
<td>83</td>
</tr>
<tr>
<td>Colorectal cancer screening for beneficiaries up to 80 years of age</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>Breast cancer screening for women up to 69 years of age</td>
<td>71</td>
<td>100</td>
</tr>
<tr>
<td>Annual monitoring for beneficiaries on persistent medications (angiotensin-converting enzyme inhibitors or angiotensin receptor blockers, digoxin, diuretics, and anticonvulsants)</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Antidepressant medication management (acute phase)</td>
<td>0</td>
<td>86</td>
</tr>
<tr>
<td>Disease-modifying antirheumatic drug therapy in rheumatoid arthritis</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: GAO analysis of CMS and contractor data.

As we stated earlier in this report, CMS is considering a number of methodological changes in Phase III, such as using a multiple provider attribution rule and lowering the minimum case size and peer group requirements. While such changes could lead to a modest increase in physician eligibility for Phase III reports, significantly increasing eligibility—particularly for individual physicians with small case sizes—will continue to be challenging.

Multiple Challenges with Distribution Resulted in Few Physicians Accessing Their Electronic Feedback Reports

CMS faced multiple challenges distributing Phase II feedback reports, and as a result of these challenges, few physicians accessed their reports. In November 2010, CMS mailed letters to 36 physician groups and 1,641 individual physicians affiliated with those groups to notify them that electronic feedback reports were available for their review. However, as of March 2011—approximately 4 months later—less than 60 percent of
physician groups and less than 10 percent of individual physicians had accessed their reports electronically.\textsuperscript{34}

Major challenges with Phase II distribution were CMS’s difficulty obtaining physicians’ contact information, methods of electronic distribution that were burdensome for physicians, and lack of a strong incentive for physicians to review the reports.

\textbf{Contact information.} The lack of a comprehensive database with accurate names and addresses for physicians and physician groups made it difficult for CMS to notify physicians and physician groups about the availability of their feedback reports. Although reports in Phase II were produced in electronic form, CMS mailed hard copy notification letters to tell individual physicians and physician groups that an electronic feedback report was available and to provide instructions for accessing it. Because available databases contained incomplete or conflicting contact information, CMS had to use multiple sources, including Internet searches, to compile names and addresses—a process that took approximately 5 months.\textsuperscript{35}

Despite CMS’s efforts to obtain accurate contact information, some individual physicians and physician groups did not receive a notification letter and therefore did not know that a feedback report was available to them. In follow-up phone calls, CMS found that 27 of the 32 physician groups reached reported that they had not seen the notification letter and could not verify whether it had been received. Many of these physician groups reported that the notification letter was not addressed to the most

\textsuperscript{34}As of March 2011, 20 of 36 profiled physician groups had logged onto the Individuals Authorized Access to CMS Computer Services (IACS) system. Because this database is used for a number of purposes, CMS was unable to determine how many of these groups actually downloaded their Phase II feedback reports.

\textsuperscript{35}These sources include the Provider Enrollment, Chain, and Ownership System (PECOS) database; the National Plan and Provider Enumeration System (NPPES) database; and the IACS system. CMS intended to use PECOS as the primary source of contact information but found multiple mailing addresses listed for individual physicians and physician groups. PECOS also did not clearly identify the most appropriate contact person within a physician group, such as the director of quality assurance. As a result, CMS used other sources in order to obtain contact information, such as NPPES and IACS, but in some cases, the names and addresses listed in the other sources did not match any of the information listed in PECOS. CMS ultimately developed decision rules to select contact information for individual physicians and physician groups from competing sources, and in some cases, relied on Internet searches.
appropriate person within the group practice, such as the director of quality assurance. CMS also called a sample of 10 individual physicians to ask whether they had received the notification letter. Of these physicians, 1 was retired, 1 reported not receiving the letter, and the remaining 8 had no memory of receiving the letter. In addition, nearly 10 percent of the notification letters mailed to individual physicians were marked undeliverable and returned to CMS.

Distribution method. CMS’s electronic distribution method for Phase II reports was burdensome for some profiled physicians and physician groups. CMS transitioned from hard copy distribution of feedback reports in Phase I to electronic distribution in Phase II based on physicians’ complaints that the reports distributed in Phase I were too long and cumbersome to manage in hard copy. According to CMS, electronic distribution was meant to help physicians navigate the reports. CMS used two methods to electronically distribute feedback reports in Phase II—one for individual physicians and one for physician groups.

Individual physicians were instructed in the notification letter to contact their Medicare Administrative Contractor (MAC) to request a copy of their feedback report.\(^{36}\) In a report to CMS, Mathematica reported that finding contact information for the correct MAC may not have been a straightforward process for physicians. For example, the notification letter directed physicians to a directory with toll-free phone numbers listed by state for all MAC contact centers, requiring physicians to choose from several possible numbers.\(^{37}\) Mathematica also reported that MAC customer service representatives were not always aware of the feedback reports or the process for distributing them to physicians. According to CMS’s estimate, the majority of individual physicians did not contact their MACs to request their reports. In February 2011, CMS mailed hard copies

\(^{36}\)Once contacted, the MAC verified the identity of the requesting physician and then forwarded the request to Buccaneer Computer Systems and Services, Inc. (BCSSI), a CMS contractor. BCSSI then e-mailed the feedback report to the physician.

\(^{37}\)According to CMS officials, the MAC directory lists several telephone numbers for the convenience of their customers. CMS officials reported that physicians can sort the directory to find the correct MAC contact number in their state.
In theory, the electronic distribution method for physician groups should have been more straightforward since groups were instructed to download their feedback reports from the Individuals Authorized Access to CMS Computer Services (IACS) system, which is the same system used to distribute PQRS reports. However, 8 of the 32 physician groups CMS reached in its follow-up calls reported difficulty downloading their reports from the IACS system. For example, some groups did not know that they needed to register for an IACS account—a process that takes approximately 10 business days to complete—while others reported not being able to download their feedback reports even after logging onto the IACS system. CMS subsequently e-mailed feedback reports directly to those physician groups that had trouble downloading their reports through IACS.

CMS officials recognized the limitations with the distribution method for Phase II reports, and they plan to use a new distribution method for Phase III reports. CMS currently plans to distribute reports to 20,000 individual physicians in one four-state region—Nebraska, Missouri, Iowa, and Kansas. According to CMS officials, the MAC serving this region has e-mail addresses for most physicians in the area. CMS plans to e-mail Phase III reports directly to physicians in this region, thereby avoiding the need to mail hard copy notification letters. In addition to distributing reports to individual physicians in the four-state region, CMS also plans to distribute Phase III reports to 35 physician groups that have participated in the PQRS group practice reporting option. CMS intends to e-mail feedback reports to these 35 physician groups.

**Incentive to access reports.** Physicians did not have a strong incentive to access their Phase II feedback reports. The notification letter sent by CMS said that these reports were “for informational purposes only” and that they would not affect physicians’ participation in the Medicare program or their Medicare payments. In pretesting for Phase II, many physicians noted that they would be unlikely to review a feedback report closely unless they had an incentive to do so. CMS officials said that they

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38CMS mailed hard copy feedback reports to the 1,596 physicians who had not accessed their electronic reports by January 2011.
Several physician groups suggested that CMS send feedback reports for those physicians affiliated with a group practice to the group’s administrator, noting that individual physicians generally contact their administrators for guidance on such reports. In a report to CMS, Mathematica also noted that medical directors or others with quality oversight responsibilities in larger group practices would be more receptive to feedback reports than individual physicians. They added that these individuals are more familiar with the data used to create feedback reports, and have more experience analyzing quality and cost information for practice improvement.

CMS made follow-up calls to representatives of 15 of the 36 profiled physician groups to obtain their input on the feedback reports, but it conducted minimal follow-up with individual physicians. At the time CMS attempted to follow up with individual physicians, only 4 had contacted their MACs to request a feedback report. Three of these physicians were unwilling to participate in a follow-up call about the report, and 1 physician was unable to download the feedback report that had been sent via e-mail. Similarly, CMS called a sample of 10 physicians who had not requested their feedback reports to ask why they had not done so, and 8 of these physicians expressed no interest in their reports.

In light of concerns about the long-term fiscal challenges facing the Medicare program, the Physician Feedback Program is an important effort that could encourage more efficient medical practice as well as higher-quality care. CMS has worked under challenging timelines to test different approaches to feedback report methodology and distribution. Initial phases of the program indicate that significant changes will need to be made for the program to meet its goal of producing reports with meaningful, actionable, and fair performance measures that apply to the majority of Medicare physicians. CMS will need to do more to solicit input and reactions from physicians and physician groups on the methodology and distribution of reports while the stakes are still relatively low—that is, before CMS begins paying physicians based on their performance on the resource use and quality measures included in the feedback reports beginning January 1, 2015.

Conclusions
In the first two phases, CMS tested different methodological approaches to developing feedback reports; however, the majority of physicians in the most recent phase were ineligible for a feedback report once CMS’s methodological criteria were applied. For example, CMS used a single provider attribution method in the most recent phase, believing that it may improve care coordination—but this method limited physician eligibility, and there is limited evidence to suggest that using this method would increase coordination. And while we also agree with CMS’s decision to include quality measures in feedback reports, some physicians who would have been eligible to receive information on their resource use were disqualified from receiving a Phase II report because they were not eligible for at least 1 of the 12 GEM quality measures. Further, none of the individual physicians who were eligible for a Phase II report had enough beneficiaries attributed to them to receive performance data on all 12 quality measures. CMS did not face such sample size issues in the feedback reports it developed for physician groups.

CMS has not conducted the rigorous statistical analysis it needs to fully understand the impact of its methodological decisions on reliability. For example, CMS used a minimum case size of 30 beneficiaries for Phase II reports, but did not conduct reliability testing to determine this number. The results of such testing can and should influence how CMS ultimately uses the information. Lower levels of reliability may be acceptable if feedback reports remain confidential and are used solely for educational purposes. However, since CMS ultimately intends to pay physicians based on their performance as measured in the feedback reports, it must be reasonably confident that these measures reflect real differences in medical practice. It will also be difficult for CMS to obtain physician and stakeholder buy-in if it does not clearly demonstrate that its performance measures are reliable and robust.

Furthermore, CMS faces challenges distributing feedback reports to physicians and physician groups that are eligible to receive them. CMS transitioned to electronic distribution based on physicians’ complaints that hard copy reports were too long and cumbersome, yet few physicians accessed their Phase II reports electronically. Moreover, CMS conducted limited follow-up with profiled physicians to obtain their input on the feedback reports. As a result, the agency missed an important opportunity to increase physician engagement in the program and to ensure that their concerns are addressed while the program is still in its infancy.
In order to develop feedback reports that are more reliable, credible, accessible, and applicable to a greater number of Medicare physicians, we recommend that the Administrator of CMS take the following four actions:

- Use methodological approaches that increase the number of physicians eligible to receive a report, such as
  - multiple provider attribution methods, which could also enhance credibility of the reports with physicians, and
  - distributing feedback reports that include only resource use information, if quality information is unavailable.
- Conduct statistical analyses of the impact of key methodological decisions on reliability.
- Identify factors that may have prevented physicians from accessing their reports and, as applicable, develop strategies to improve the process for distributing reports and facilitating physicians’ access to them.
- Obtain input from a sample of physicians who received feedback reports on the usefulness and credibility of the performance measures contained in the reports and consider using this information to revise future reports.

We received written comments on a draft of this report from CMS, which are reprinted in appendix I. CMS concurred with our recommendations and identified actions agency officials are taking to implement them. These actions include refining the attribution methodology to increase the number of physicians receiving feedback reports in Phase III, analyzing the number of cases required to reliably measure quality and make credible comparisons, developing new strategies for distributing feedback reports, and obtaining input from individual physicians and physician groups about the information contained in the feedback reports. If these actions are implemented in accordance with our recommendations, CMS will be better positioned to meet its goals and objectives for the Physician Feedback Program. CMS also provided technical comments, which we incorporated as appropriate.
We are sending copies of this report to the Administrator of CMS and relevant congressional committees. The report also will be available at no charge on the GAO 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 cosgrovej@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff members who made major contributions to this report are listed in appendix II.

James C. Cosgrove
Director, Health Care
Appendix I: Comments from the Department of Health and Human Services

James Cosgrove
Director, Health Care
U.S. Government Accountability Office
441 G Street N.W.
Washington, DC 20548

Dear Mr. Cosgrove:

Attached are comments on the U.S. Government Accountability Office’s (GAO) draft report entitled: “MEDICARE PHYSICIAN FEEDBACK PROGRAM: CMS Faces Challenges with Methodology and Distribution of Physician Reports” (GAO 11-720).

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

Sincerely,

[Signature]

Jim R. Esqua
Assistant Secretary for Legislation

Attachment

The Department appreciates the opportunity to review and comment on this draft report, which is a factual synopsis of Phase I and Phase II of the Physician Feedback Program, formerly called the Physician Resource Use Measurement and Reporting Program.

This program was established as a confidential feedback program as required by the Medicare Improvements for Patient and Providers Act of 2008 (MIPPA). The program was further modified as a result of the Affordable Care Act in 2010, which also requires a value-based payment modifier that provides for differential payments to specified physicians based on the quality of care furnished compared to cost. The value-based payment modifier would be applied to specified physicians beginning in 2015 and all physicians starting in 2017. Hence, we expect that this program, which started small with flexibility in the number and content of reports disseminated, will quickly evolve to affect physician payment nationwide.

GAO Recommendations

In order to develop feedback reports that are more reliable, credible, accessible, and applicable to a greater number of Medicare physicians, we recommend that the Administrator of the Centers for Medicare and Medicaid Services (CMS):

• use methodological approaches that increase the number of physicians eligible to receive a report, such as
  o multiple provider attribution methods, which could also enhance credibility of the reports with physicians, and
  o distributing feedback reports that include only resource use information, if quality information is unavailable;

CMS Response

We concur with this recommendation. As we discussed with the GAO, we are planning in Phase III to refine the attribution models we used in Phase II, and to test new ones. As a result, the number of physicians receiving a report in Phase III will increase. This attribution methodology will permit us to distribute feedback reports that include only resource use information if quality information is unavailable.

• conduct statistical analyses of the impact of key methodological decisions on reliability;

CMS Response

We concur with this recommendation. We will be analyzing the results in these reports for reliability as well as analyzing the number of cases required to reliably measure quality and make credible comparisons.

• identify factors that may have prevented physicians from accessing their reports and as applicable, develop strategies to improve the process for distributing reports and facilitating physicians’ access to them

CMS Response

We concur with this recommendation. We are working to develop new strategies for distributing reports that will improve physician access. To this end, for Phase III, we are

working with the Jurisdiction 5 (J5) Medicare Administrative Contractor (MAC) which serves the four-State region of Nebraska, Kansas, Missouri, and Iowa. This MAC has an advanced communications portal which allows robust communications between the MAC and physicians in those States. In particular, the MAC has e-mail information on a large number of the physicians it serves and we expect to use this list to provide individual physicians with their feedback reports. We are also working to develop an enterprise-wide solution that could be used to reach all physicians nationwide to provide feedback reports.

- obtain input from a sample of physicians who received feedback reports on the usefulness and credibility of the performance measures contained in the reports and consider using this information to revise future reports.

CMS Response:
We concur with this recommendation. We will be working closely across CMS, with J5 MAC, and with State stakeholders to inform physicians in these four States that they will be receiving the feedback reports. Through these mechanisms we will reach out to these physicians about the information contained within the feedback reports, how the reports can help them understand the quality of care their Medicare patients receive and the resources used to provide this care. We will also obtain feedback from the recipients of the group reports. With both individual and group report recipients, we will discuss the importance of these reports as beginning to provide the information building blocks that could be used to calculate their value modifier. We anticipate that this outreach will help spur physicians to participate in focus groups following report dissemination to discuss these issues.
Appendix II: GAO Contact and Staff

Acknowledgments

<table>
<thead>
<tr>
<th>GAO Contact</th>
<th>James C. Cosgrove, (202) 512-7114 or <a href="mailto:cosgrovej@gao.gov">cosgrovej@gao.gov</a></th>
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<tr>
<td>Staff</td>
<td>In addition to the contact named above, Phyllis Thorburn, Assistant Director; William A. Crafton; Cathleen Hamann; Julian Klazkin; Amanda Pusey; Jessica C. Smith; and Rachael Wojnowicz made key contributions to this report.</td>
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