

Physician Compare Report to Congress

Sylvia Mathews Burwell Secretary of Health and Human Services 2014 [This page is intentionally left blank.]

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EXECUTIVE SUMMARY

In accordance with section 10331(a)(1) of the Affordable Care Act (ACA), which collectively refers to the Patient Protection and Affordable Care Act, Pub. L. 111-148, enacted on March 23, 2010, as amended by the Health Care and Education Reconciliation Act of 2010, Pub. L. 111-152, enacted on March 30, 2010, the Centers for Medicare & Medicaid Services (CMS) established the Physician Compare website in December 2010 with information on physicians and other health care professionals enrolled in Medicare. The Physician Compare website is part of CMS' wide-ranging effort to improve health and quality of care, and lower costs of care by creating greater consumer choice and health care transparency while encouraging health care professionals to improve the quality of care they provide to their patients. As a growing web-based resource on approximately 900,000 physicians and other health care professionals who are enrolled in the Medicare program, Physician Compare will continue to enhance consumers' health care decision-making capacities.

CMS incorporated extensive stakeholder input into each phase of website development. Relevant stakeholder groups include Medicare beneficiaries who are seeking information for themselves, caregivers who are seeking information to provide assistance to a Medicare beneficiary, health care professionals, physicians, primary and specialty care professional organizations, and the general public. To reach these stakeholder groups, CMS has conducted public webinars, Open Door Forums, targeted outreach to specialty societies and group practices, town hall meetings, and listening sessions. CMS also maintains a web-based survey to obtain input from Physician Compare website users. CMS has undertaken extensive testing to ensure proper functionality, data accuracy, and security.

Today, Physician Compare includes a range of website tools, features, and content that enable consumers to evaluate and select among approximately 900,000 physicians and other health care professionals who are enrolled in the Medicare program. Physician Compare receives about 140,000 visits each month. The first and second sections of this Executive Summary highlight the website's content and features, and its traffic patterns and user perceptions, respectively, as of August 2014. The third section of this Executive Summary describes CMS future plans for Physician Compare.

Section 10331 of the ACA is presented in Appendix A.

Physician Compare Today (as of August 2014)

In February 2014, CMS publicly released the first set of physician performance data on Physician Compare. Under the 2012 Physician Quality Reporting System (PQRS),² group practices submitted data on 29 quality measures via the Group Practice Reporting Option (GPRO) Web Interface.³ Of these 29 quality measures, CMS selected five quality measures across the diabetes mellitus (DM) and coronary artery disease (CAD) domains for public reporting on Physician Compare; these include two DM outcome measures, two DM process measures, and one CAD process measure. All quality measures reported on Physician Compare are statistically valid and reliable based on an empirical evaluation of the measures' scientific properties, consumer testing, and other stakeholder input.⁴ Additionally, in accordance with the Medicare Shared Savings Program Final Rule,⁵ CMS published Accountable Care Organization (ACO) performance data on ACO-specific pages on Physician Compare.

Table 1 describes the five quality measures that are reported on Physician Compare for group practices as of February 2014. The first column lists the PQRS and ACO measure numbers, the second provides the title of each measure, and the third describes each measure. The fourth column identifies the measure developer, which includes the National Committee for Quality Assurance (NCQA), the Minnesota Community Measurement (MNCM), and the American Medical Association-Physician Consortium for Performance Improvement (AMA-PCPI). The final column indicates whether the measure is an outcome measure or a process measure. Outcome measures assess results of health care experienced by patients: patients' clinical events, patients' recovery and health status, patients' experiences in the health system, and efficiency/cost. Outcomes are dependent upon process of care because they are by definition the results of the actions of the health care system. Process measures evaluate physicians and other health care professionals on the use of specific evidence-based processes of care.

For this report to Congress, the year preceding the PQRS acronym generally refers to the year in which quality data is submitted by physicians and other eligible professionals during the applicable reporting period under the PQRS. For example, "2012 PQRS data" refers to data submitted by physicians and other eligible professionals to PQRS that pertain to services furnished between January 1, 2012 and December 31, 2012.

For more information about the 2012 PQRS measures, please see: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/2012 Physician Quality Reporting System.html

⁴ Section 4.3 describes the measure selection process in greater detail.

Medicare Shared Savings Program Final Rule 76 FR 67948 (November 2, 2011)

Table 1: Physician Compare Quality Measures

Measure Number	Measure Title	Measure Description	Measure Developer	Measure Type
GPRO DM-3/ ACO_DM_13	High Blood Pressure Control in Diabetes Mellitus	Percentage of patients ages 18 through 75 years with diabetes mellitus who had most recent blood pressure in control (less than 140/90 mmHg)	MNCM	Outcome
GPRO DM-10/ ACO_DM_15	Hemoglobin A1c Control (< 8%)	The percentage of patients ages 18 through 75 years with a diagnosis of diabetes (type 1 or type 2) who had HbA1c < 8%	NCQA	Outcome
GPRO DM-11/ ACO_DM_16	Daily Aspirin Use for Patients with Diabetes and Ischemic Vascular Disease	Percentage of patients ages 18 to 75 years with diabetes mellitus and ischemic vascular disease with documented daily aspirin use during the measurement year unless contraindicated	MNCM	Process
GPRO DM-12/ ACO_DM_17	Tobacco Non-Use	Percentage of patients with a diagnosis of diabetes who indicated they were tobacco non-users	MNCM	Process
GPRO CAD-7/ ACO_CAD_7	Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Patients with CAD and Diabetes and/or Left Ventricular Systolic Dysfunction	Percentage of patients ages 18 years and older with a diagnosis of coronary artery disease seen within a 12-month period who also have diabetes OR a current or prior left ventricular ejection fraction < 40% who were prescribed ACE inhibitor or ARB therapy	AMA- PCPI	Process

To support consumers in locating and selecting health care professionals for the patient's medical needs, Physician Compare offers the following information about physicians and other health care professionals, when possible or applicable:

- Names, addresses, and phone numbers;
- Primary and secondary specialties;
- Information on physicians and other health care professionals who are affiliated with a group practice, including their specialty;
- Clinical training information;
- Gender;
- Languages spoken, other than English;
- Hospital affiliation, which links to the hospital's profile on Hospital Compare;
- American Board of Medical Specialties board certification information;
- Whether physicians and other health care professionals accept Medicare assignment;
- Indicator of satisfactory reporting under the 2012 PQRS Incentive Program;

- Indicator of group practices' satisfactory reporting under the 2012 PQRS GPRO Incentive Program;
- Indicator of successful e-prescribers under the 2012 Electronic Prescribing (eRx) Incentive Program; and
- Indicator of successful program participants in the 2013 Electronic Health Record (EHR) Incentive Program.

CMS has incorporated a range of features to simplify navigation and improve the user's ability to locate and select physicians and other health care professionals within a geographic area. These features include "Intelligent Search," "Map View," "Search Another Way" (i.e., Body Part–Guided Search), and "Compare" for group practices. Table 2 summarizes the functionality of each feature.

Physician Compare Feature	Function		
Intelligent Search	Allows the user to enter a search term, which could be a health care professional's name, a medical condition, a symptom, a medical procedure, a body part, or even an organ system, and returns results in the form of a list of health care professionals' names and health care specialties that are relevant to the user's search term		
Map View	Provides users with a geographic depiction of search results by plotting relevant search results on a map		
Search Another Way (i.e., the Body Part–Guided Search)	Guides users through a series of point-and-click steps to search for the physicians or health care professionals who would be most relevant given the patient's health issues		
Compare	Allows the user to select up to three group practices and compare their information, including distance from the search location, specialty, Medicare assignment status, and group size (i.e., the number of health care professionals affiliated with the group practice)		

Table 2: Physician Compare Features

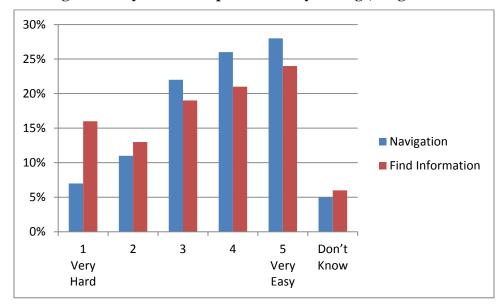
Physician Compare Usage and Consumer Perceptions (as of August 2014)

To understand how Physician Compare can better meet the information needs of health care consumers, CMS collects feedback from website users via an ongoing web-based survey. The web survey collects information from a sample of users who voluntarily participate, and provide feedback on information accuracy, comprehension, and website usability. Feedback from users about the Physician Compare website is positive overall. As of August 2014, more than three-quarters of respondents agreed that they understood search options, terms, and definitions (Figure 1). Feedback on website usability was collected using a scale from 1 to 5, where 1 is very difficult and 5 is very easy. Approximately three-quarters of respondents rated Physician Compare 3 out of 5 or better for ease of finding information and website navigation (see Figure 2).

50% 45% 40% Understand Search 35% Options 30% 25% Understand Terms and 20% **Definitions** 15% 10% 5% 0% Strongly Somewhat Somewhat Strongly Don't Know Agree Agree Disagree Disagree

Figure 1: Physician Compare User Comprehension Ratings, August 2014





Physician Compare Going Forward

Physician Compare will continue to support CMS' overarching goals of creating greater consumer choice and health care transparency while encouraging health care professionals to improve the quality of care they provide to their patients. CMS plans to continue to engage multiple stakeholder groups, including health care consumer and clinician groups, to inform the development of Physician Compare.

Because Physician Compare is first and foremost a website that serves the information needs of health care consumers, CMS will continue to prioritize the needs of consumers in all

future website development processes. To enhance Physician Compare's capacity to support consumers' health care decision-making, CMS plans to incorporate additional features, functionality, and content onto Physician Compare over the next several years. CMS plans to work toward offering an expanded range of measures information, close to real—time data about physicians and other health care professionals, additional interactive website tools, and additional and more dynamic linkages with other Compare websites.

INTRODUCTION

In accordance with section 10331(a)(1) of the ACA of 2010, the CMS established the Physician Compare website in December 2010 with information on physicians and other health care professionals enrolled in Medicare. The Physician Compare website is part of CMS' wideranging effort to improve health and quality of care, and lower costs of care by creating greater consumer choice and health care transparency while encouraging health care professionals to improve the quality of care they provide to their patients. As a growing web-based resource on approximately 900,000 physicians and other health care professionals who are enrolled in the Medicare program, Physician Compare will continue to enhance consumers' health care decision-making capacities.

Physician Compare represents a significant step forward in CMS' commitment to improving the quality of health care delivered to Medicare beneficiaries. Physician Compare expands public reporting to the physician setting, where opportunities exist for quality improvement within the Medicare program. As the first year the website publicly reported quality-of-care ratings for group practices, 2014 represents a milestone year for Physician Compare. As part of its ongoing health care improvement efforts, CMS is working to select appropriate physician performance measures collected through its various pay-for-reporting and pay-for-performance programs for future years of public reporting. In the coming years, CMS will continue to support the development of Physician Compare as the premier source of administrative and performance information on physicians and other health care professionals.

As required by section 10331(f) of the ACA, CMS is submitting a report to Congress on the Physician Compare website that includes information on the efforts of and plans made by the Secretary of Health and Human Services to collect and publish data on physician quality and efficiency and on patient experience of care in support of consumer choice and value-based purchasing. Recommendations for legislation and administrative action, which may also be included in the report to Congress as the Secretary determines appropriate, are not included in this report because the public reporting landscape continues to mature and evolve.

This report provides information about the development of Physician Compare. Section 2 describes CMS' efforts through September 2014 to collect and publish data on the performance of physicians and other health care professionals across care settings. Section 3 summarizes CMS' progress in fulfilling the mandates set forth by section 10331 of the ACA. Section 4 describes the development of Physician Compare from 2010 to present. Section 5 describes the

Section 10331 of the ACA is included in Appendix A.

Physician Compare website as it exists today. Finally, Section 6 concludes with next steps for Physician Compare.

2 PHYSICIAN QUALITY MEASUREMENT AND REPORTING

Quality measurement and reporting are key elements of CMS' health care quality improvement initiatives. These initiatives align with the National Quality Strategy, which was required by the ACA and established by the HHS, and the CMS Quality Strategy. The National and CMS Quality Strategy set goals and priorities to guide health care quality improvement efforts at the local, state, and national levels and serve as a compass for a national approach to measuring quality. Under both strategies, HHS is pursuing three aims:

- Better Care: Improve the overall health care quality by making health care more patient centered, reliable, accessible, and safe;
- Healthy People/Healthy Communities: Improve the health of the U.S. population by supporting proven interventions to address behavioral, social, and environmental determinants of health in addition to delivering higher quality care; and
- Affordable Care: Reduce the cost of quality health care for individuals, families, employers, and government.

CMS currently administers a range of quality measurement and reporting programs across multiple care settings to improve the quality of health care delivered to Medicare beneficiaries. These care settings include physicians' offices, hospitals, ambulatory surgical centers, skilled nursing facilities and other post-acute care settings, and outpatient dialysis facilities.

Quality measurement and reporting are cornerstones of three categories of CMS initiatives: pay-for-reporting, pay-for-performance, and public reporting (i.e., via CMS "Compare" websites). Pay-for-reporting programs, such as programs that provide an incentive payment to health care professionals who submit certain quality measure data to CMS, enable CMS to collect quality data to facilitate data-driven quality improvement across care settings. Pay-for-performance programs, which reward health care professionals with financial incentives based on performance on select measures, encourage health care professionals to implement improvements aimed at achieving optimal outcomes for patients. Finally, through public reporting of data CMS aims to increase the transparency of quality and cost information and equip consumers to make informed decisions about their health care while motivating health care professionals to improve the quality and efficiency of care provided to patients. As part of its ongoing health care quality improvement efforts, CMS is working to select appropriate physician

http://www.ahrq.gov/workingforquality/ (accesses

Centers for Medicare & Medicaid Services, CMS

Agency for Healthcare Research and Quality. The National Quality Strategy [Website]. http://www.ahrq.gov/workingforquality/ (accessed January 23, 2014).

Centers for Medicare & Medicaid Services. CMS Quality Strategy, 2013 – Beyond. Baltimore, MD: Centers for Medicare & Medicaid Services; 2013. http://cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/CMS-Quality-Strategy.html (accessed April 22, 2014).

performance measures collected through its various pay-for-reporting and pay-for-performance programs for future years of public reporting via Physician Compare. The remainder of this section reviews initiatives in each category as of September 2014.

2.1 Pay-for-Reporting Programs

Pay for reporting serves as an important first step in data-driven quality improvement. By providing incentive payments for health care professionals who choose to provide quality measure data or by penalizing through negative payment adjustments health care professionals who fail to provide data, CMS builds a collection of quality measures that can be used to analyze variations in health care performance and support public reporting and value-based purchasing (VBP) initiatives. CMS collects quality data in several ways, including via a Web Interface, claims, assessment instruments, medical charts, registries, surveys and electronic health records; and reports the data at various intervals: monthly, quarterly, and/or yearly.

CMS supports pay-for-reporting programs in a variety of care settings. The remainder of this section describes three key CMS pay-for-reporting programs that specifically target physicians and other health care professionals, including the (i) PQRS, (ii) eRx Incentive Program, and (iii) EHR Incentive Program. Physician Compare currently provides information about whether physicians or eligible health care professionals have met the program requirements for each incentive program.

2.1.1 Physician Quality Reporting System

The PQRS, formerly known as the Physician Quality Reporting Initiative (PQRI), is an early CMS pay-for-reporting system. Introduced in 2007, the PQRS uses a combination of incentive payments and payment adjustments to promote the reporting of quality information by eligible professionals. Beginning in 2007, the PQRS provided an incentive payment to individual eligible professionals and group practices with eligible health care professionals who satisfactorily reported data on quality measures for covered Medicare Physician Fee Schedule services furnished to Medicare Part B Fee-for-Service (FFS) beneficiaries. Incentives will not be paid after 2014. Physicians and other health care professionals who do not satisfactorily report data on the PQRS quality measures for covered services will receive a 1.5 percent downward adjustment in 2015 and a 2.0 percent downward payment adjustment in 2016 and subsequent years.

Participation in the PQRS has expanded every year since its inception. The participation rate among all eligible professionals using any method to participate in the PQRS increased from 15 percent to 36 percent between 2007 and 2012 (including those who were part of a group

practice that participated under the Group Practice Reporting Option). Additionally, to ensure that the PQRS continues to meet health care professionals' quality reporting needs, CMS increased the total number of individual PQRS quality measures from 259 in 2013 to 287 in 2014.

The PQRS serves as CMS' key data collection program for physician performance data. CMS has been working to align the PQRS quality-reporting requirements with other quality initiatives, including the EHR Incentive Program and the Physician Value-Based Payment Modifier.

2.1.2 Electronic Prescribing Incentive Program

The eRx Incentive Program, which began on January 1, 2009, used a combination of incentive payments and payment adjustments to encourage physicians and other health care professionals to use electronic prescribing to improve communication, increase accuracy, and reduce errors. For the purposes of qualifying for the incentive, CMS considered an eligible professional a successful e-prescriber if the eligible professional met the specified thresholds for reporting an e-prescribing quality measure. From 2009 to 2013, CMS paid incentives to eligible professionals who were successful e-prescribers. Beginning in 2012 and continuing through 2014, eligible professionals who were not successful e-prescribers under the eRx Incentive Program were subject to a payment adjustment. ¹⁰

2.1.3 Electronic Health Record Incentive Program

The Medicare and Medicaid EHR Incentive Programs promote the use of EHRs among health care professionals by providing incentive payments to eligible professionals as they adopt, implement, upgrade, or demonstrate meaningful use of certified EHR technology. CMS administers the Medicare component of the EHR Incentive Program, while individual states administer the Medicaid component. Incentive payments under the Medicare EHR Incentive Program were paid to eligible professionals beginning in 2011 and incentive payments will continue through 2016.

To receive the incentive payments, Medicare eligible professionals must register and attest via the Medicare and Medicaid EHR Incentive Programs' web-based Registration and Attestation System (R&A) to "meaningful use" of certified EHR technology. Eligible

Centers for Medicare & Medicaid Services. 2012 Reporting Experience Including Trends (2008-2013): Physician Quality Reporting System and eRx Incentive Program. Baltimore, MD: Centers for Medicare & Medicaid Services; 2014. http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/2012-PQRS-and-eRx-Experience-Report.zip (accessed April 22, 2014).

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Centers for Medicare & Medicaid Services. eRx Incentive Program. Baltimore, MD: Centers for Medicare & Medicaid Services; 2014. http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ERxIncentive/index.html?redirect=/erxincentive (accessed March 25, 2014).

professionals demonstrate meaningful use by attesting to meeting specific objectives and reporting on specific clinical quality measures during a specific time period. Eligible professionals can report quality measures via the R&A or electronically submit their clinical quality measures data to CMS. The meaningful use criteria, objectives, and measures have been evolving in three stages. Stage 1, which began in 2011, focuses on the application of EHRs to capture patient data and sharing those data either with the patient or with other health care professionals. Stage 2 began in 2014 and focuses on use of EHRs to advance clinical processes, including more rigorous health information exchange, patient control of data, and increasing eprescribing and lab results requirements. Stage 3 will begin in 2017, and the criteria for meaningful use are expected to focus on improving health outcomes through better quality, safety, and efficiency of care, among other strategies. Beginning in 2015 and in each subsequent year, as required by section 1848(a)(7) of the Social Security Act, eligible professionals who do not meet the requirements for meaningful use will be subject to payment adjustments under Medicare.

Pay-for-Performance Programs 2.2

Pay-for-performance programs typically provide a bonus to health care providers if they meet or exceed goals and a penalty if they do not. The remainder of this section reviews key CMS pay-for-performance programs and demonstration models, including the Physician Group Practice (PGP) Demonstration, the Medicare Shared Savings Program (Shared Savings Program), and the Physician Value-Based Payment Modifier as well as initiatives being tested by the Center for Medicare and Medicaid Innovation, such as the Pioneer Accountable Care Organization (ACO) Model.

2.2.1 Physician Group Practice Demonstration

In 2005, CMS initiated the PGP demonstration, which offered 10 large practices the opportunity to earn performance payments for improving the quality and efficiency of health care delivered to Medicare fee-for-service beneficiaries. The PGP was the first pay-for performance initiative for physicians under the Medicare program. The demonstration created incentives for physician groups to coordinate the overall care delivered to Medicare beneficiaries, rewarded them for improving the quality and cost efficiency of health care services, and created a framework to collaborate with health care professionals to the advantage of Medicare beneficiaries. The demonstration program used quality measures from Doctor's

Office Quality Project. ¹¹Program results were made available through reports to Congress in 2006 and 2009. ¹²

Under the 5-year demonstration, CMS rewarded physician groups for improving patient outcomes by proactively coordinating their patients' total health care needs, especially for beneficiaries with chronic illness, multiple comorbidities, and those transitioning between care settings. Since physicians shared in financial savings that resulted from improving the quality and cost efficiency of care, the groups had incentives to further integrate new care management strategies and electronic tools into day-to-day practice that, based on clinical evidence and patient data, improve patient outcomes and lower total medical costs. These strategies were designed to anticipate patient needs, prevent chronic disease complications and avoidable hospitalizations, and improve quality of care.

By the fifth year of the demonstration, all 10 of the physician groups achieved benchmark performance on at least 30 of the 32 measures. The 10 groups also increased their quality scores from baseline to performance year 5 an average of 11 percentage points on the diabetes measures, 12 percentage points on the heart failure measures, 6 percentage points on the coronary artery disease measures, 9 percentage points on the cancer screening measures, and 4 percentage points on the hypertension measures. The PGP demonstration was extended through the two-year PGP Transition Demonstration. The PGP demonstration laid the groundwork for the Shared Savings Program.

2.2.2 Medicare Shared Savings Program (Shared Savings Program)

The Shared Savings Program aims to facilitate coordination and cooperation among health care providers and suppliers to improve the quality of care for Medicare beneficiaries and reduce growth in health care costs. The Shared Savings Program rewards ACOs that lower Medicare expenditures below a historical benchmark while meeting a quality performance standard. Eligible providers of services and suppliers voluntarily participate in the Shared Savings Program by creating or participating in an ACO. The program is designed to improve health outcomes and increase value of care by promoting accountability for the care of Medicare

Centers for Medicare & Medicaid Services. Shared Savings Program [Web site].

http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/index.html?redirect=/sharedsavingsprogram (accessed January 23, 2014).

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The Doctors Office Quality (DOQ) Project was a 3-year collaborative initiative to define quality measures that assess clinician performance in providing ambulatory care for beneficiaries with chronic diseases.

Centers for Medicare & Medicaid Services. Shared Savings Program [Web site].
http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/index.html?redirect=/sharedsavingsprogram (accessed January 23, 2014).

fee-for-service beneficiaries, coordinating care for services provided under Medicare parts A and B, and encouraging investment in infrastructure and redesigned care processes. 14

Final performance year 1 results were made available in the fall of 2014 for the 220 ACOs that started in 2012 and 2013. Among participating ACOs, 58 generated shared savings and another 60 reduced health care costs below their benchmark but not enough to share in savings. Shared Savings Program ACOs achieved higher performance rates on 17 of the 22 Group Practice Reporting Option (GPRO) Web Interface measures when compared with the average for other Medicare FFS providers reporting through this system. Across all Medicare Shared Savings Program ACOs that reported quality in 2012 and 2013, average performance improved on 30 of the 33 individual quality measures included in the program, as well as the two composite measures.

2.2.3 Physician Value-Based Payment Modifier

As required by section 1848(p) of the Social Security Act, CMS will apply a value-based payment modifier ("Value Modifier") that provides for differential payment to a physician or group of physicians under the Medicare Physician Fee Schedule, based on the quality of care furnished compared to cost during a performance period. The Value Modifier must be budget neutral, meaning that, in aggregate, the upward payment adjustments for high performance will balance the downward payment adjustments applied for poor performance or failure to satisfactorily meet the PQRS reporting requirements. In 2015, CMS will apply the Value Modifier to physician payments in groups with 100 or more eligible professionals 15 based on performance in Calendar Year 2013. In 2016, CMS will lower the group size threshold and apply the Value Modifier to physician payments in groups with 10 or more eligible professionals based on performance in Calendar Year 2014. The statute requires that the Value Modifier be applied to all physicians and groups of physicians beginning no later than January 1, 2017. In 2017, CMS will apply the Value Modifier to physicians in all group practices as well as solo practitioners. In 2018 the Value Modifier will also apply to non-physician eligible professionals. CMS will not apply the Value Modifier in 2015 or 2016 to a group of physicians if one or more physicians in the group participate in the Shared Savings Program, the Pioneer ACO Model, or the Comprehensive Primary Care Initiative during the performance period.

CMS is also testing the Advance Payment ACO Model, which is providing additional support to certain ACOs such as those that are physician-owned or rural who have qualified for participation in the Shared Savings Program and who would benefit from additional start-up resources to build the necessary infrastructure, such as new staff or information technology systems.

Group of physicians is defined as a single taxpayer identification number (TIN) with two or more individual eligible professionals, as identified by their individual National Provider Identifier, who have reassigned their Medicare benefits to the TIN.

The Value Modifier is aligned with other CMS quality measurement programs, including PQRS and the Physician Feedback program that sends Quality and Resource Use Reports (QRURs) to physicians. Upward, neutral and downward payment adjustments under the Value Modifier are based in part on reporting and performance on PQRS and other outcome measures.

In order to avoid an automatic negative one percent ("-1.0%") Value Modifier payment adjustment in 2015, groups with 100 or more eligible professionals were required to:

- (1) self-nominate/register for a PQRS GPRO and report at least one measure via the GPRO Web Interface or a registry, or
 - (2) elect the CMS-calculated administrative claims option as a group in 2013.

Qualitytiering is the methodology that is used to evaluate a group's performance on cost and quality measures for the Value Modifier. Groups with 100 or more eligible professionals in 2013 that elected quality-tiering to calculate the group's 2015 Value Modifier will receive an upward, downward, or no payment adjustment in 2015 based on their performance on quality and cost measures. In 2016 and 2017, qualitytiering is mandatory. However, groups of a certain size and solo practitioners are held harmless from downward adjustments under quality-tiering for the first year they are subject to the Value Modifier.

Groups with 10 or more eligible professionals can avoid the automatic "-2.0%" Value Modifier payment adjustment in 2016 by participating in the PQRS GPRO in 2014 and meeting the satisfactory reporting criteria to avoid the "-2.0%" CY 2016 PQRS payment adjustment. These groups can also avoid the automatic "-2.0%" Value Modifier payment adjustment in 2016, if the eligible professionals in each group participate in the PQRS as individuals in 2014 and at least 50 percent of the eligible professionals in each group meet the satisfactory reporting criteria as individuals (or in lieu of satisfactory reporting, satisfactorily participate in a Qualified Clinical Data Registry) to avoid the "-2.0%" 2016 PQRS payment adjustment. Quality-tiering is mandatory for groups subject to the Value Modifier in 2016. Groups with 100 or more eligible professionals could receive an upward, downward, or no payment adjustment under quality-tiering in 2016; and groups with between 10 and 99 eligible professionals could receive an upward or no payment adjustment under quality-tiering in 2016 since they are held harmless from any downward adjustment derived under the quality-tiering methodology.

CMS has been using the annual QRURs to show groups their performance on the quality and cost measures that will be used to calculate the Value Modifier. In September 2014, CMS made available Calendar Year 2013 QRURs to every physician group practice and solo practitioner nationwide. The 2013 QRURs contain data regarding quality and cost of care for calendar year 2013. This is the same performance period that will be used for calculating the Value Modifier applicable to physician payments for items and services furnished under the

Medicare Physician Fee Schedule for groups of 100 or more eligible professionals in 2015. Physician solo practitioners and physicians in groups of all sizes can use the reports to improve the quality and efficiency of care they provide to Medicare beneficiaries and to improve their performance on the measures that will be used to calculate the Value Modifier in future years.

2.2.4 Pioneer Accountable Care Organization Model

The CMS Innovation Center is testing an alternative ACO model, the Pioneer ACO Model. The Pioneer ACO Model is designed to support organizations with experience operating as ACOs or in similar arrangements in providing more coordinated care at a lower cost. The Pioneer ACO Model is testing the impact of different payment arrangements in helping organizations achieve the goals of providing better care to Medicare beneficiaries and reducing Medicare costs. In September of 2014, CMS reported year 2 Pioneer ACO results highlighting that Pioneer ACOs showed improvements in three key areas: financial, quality of care, and patient experience.

Among the Pioneer ACOs, 11 earned shared savings in year 2, three generated shared losses, and three elected to defer reconciliation until after year 3. Overall, per capita growth in spending by Pioneer ACOs was only 1.4 percent, 0.45 percent lower than Medicare fee-for-service. In years 1 and 2, the Pioneer ACO Model tested a shared-savings and shared-losses payment arrangement with higher levels of reward and risk than in the Shared Savings Program. In year 3, the Pioneer ACO Model provides an option for eligible ACOs to move to population based payments, where the ACO may elect to receive a per-beneficiary per month payment amount that is intended to replace some or all of the ACO's fee-for-service payments with a prospective monthly payment. ¹⁷

2.3 Public Reporting

As part of its commitment to achieving health care quality improvement for Medicare beneficiaries, CMS publicly reports measures of health care quality. Public reporting aims to increase transparency, assist consumers in making health care decisions, and motivate health care professionals to improve care. Enhancement of the quality measure data and system infrastructure to make performance information transparent to the public is a foundational

Centers for Medicare & Medicaid Services. Medicare ACOs continue to succeed in improving care, lowering cost growth. Baltimore, MD: Centers for Medicare & Medicaid Services; September 16, 2014. http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2014-Fact-sheets-items/2014-09-16.html (accessed October 20, 2014).

Centers for Medicare & Medicaid Services/Center for Medicare and Medicaid Innovation. *Pioneer Accountable Care Organization Model: General Fact Sheet*. Baltimore, MD: Centers for Medicare & Medicaid Services; September 12, 2012. http://innovation.cms.gov/Files/fact-sheet/Pioneer-ACO-General-Fact-Sheet.pdf (accessed January 23, 2014).

principle of the CMS Quality Strategy. Consumers may leverage publicly available performance data to inform their health care decisions, including the decision of where to receive care. Health care professionals may also incorporate publicly reported quality measures into internal improvement projects and can readily see how their performance compares with that of other health care professionals. Currently, CMS publicly reports quality data in multiple care settings via the CMS-operated "Compare" websites, which are located under the Medicare.gov umbrella.

Launched in 1998 and built on the foundational hard-copy *Medicare and You* handbook, ¹⁸ Medicare.gov contains a growing source of information about Medicare benefits and how to access care. In addition to housing the Compare websites, Medicare.gov serves the following public functions:

- Helping beneficiaries manage their health by providing information about available services, including recommended preventative services;
- Providing information about Medicare benefits, coverage choices, claims information, eligibility, and enrollment; Medicare supplement insurance policy, suppliers of medical equipment and supplies, etc.;
- Serving as an online resource locator, directing users to frequently accessed forms and planning tools; and
- Providing overarching help and support including answers to frequently asked questions, instructions for common inquiries, and information on external resources.

Although the Compare websites primarily exist to serve Medicare beneficiaries and caregivers and a broader consumer audience, health care professionals also use the websites for internal quality improvement and as a source of referral information.

Physician Compare represents the sixth and latest addition to the suite of Compare websites. The remainder of this section briefly describes the other five Compare websites; Data.Medicare.gov, which provides access to data that are used on the Medicare.gov Compare websites and directories; and Physician Compare's predecessor, the Healthcare Provider Directory.

2.3.1 Nursing Home Compare

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Launched in 1998, <u>Nursing Home Compare</u> was part of 22 initiatives to improve nursing home quality of care and was specifically designed to help consumers choose a nursing home. As

Medicare and You is the official government Medicare handbook and is updated annually with information regarding coverage options and beneficiary rights. Consumers can access all the information in the Medicare and You Handbook from http://www.medicare.gov/Pubs/pdf/10050.pdf (accessed January 23, 2014). Medicare and You was the primary source of consumer information about the Medicare program prior to the launch of Medicare.gov.

Nursing Home Compare has evolved, information has been added on nursing home characteristics and quality measures. Examples of new information include detailed inspection reports from recertification and complaint surveys, enforcement data, and consumer-oriented information, such as residents' rights and instructions on how to file a complaint against a nursing home. In 2008, CMS introduced the Five-Star Quality Rating System to help consumers compare nursing homes more easily. The Five-Star system includes one overall rating for each nursing home and separate ratings for health inspections, staffing, and quality measures.¹⁹

2.3.2 Dialysis Facility Compare

Modeled after the Nursing Home Compare website and leveraging CMS' End Stage Renal Disease Core Indicators Project, CMS launched Dialysis Facility Compare in 2001. When first launched, the website included only seven facility-specific measures. ²⁰ As the website has evolved, additional measures were added and functionality was updated. Currently, the Dialysis Facility Compare website supports users by providing information on types of dialysis services each facility offers (e.g., home dialysis training or evening appointments). Quality measures are available for best treatment practices, hospitalizations, and deaths.

2.3.3 Hospital Compare

Hospital Compare has information about several aspects of care for over 4,000 Medicarecertified hospitals across the country, including timely and effective care; readmissions, complications, and deaths; use of medical imaging; patients' experience of care, the number of Medicare patients treated; and Medicare payments. 21 Hospital Compare allows consumers to find hospitals and compare the quality of their care. ²² In 2005, the first set of 10 core measures was displayed on the website. Since then, Hospital Compare has undergone regular updates and expansions and currently displays over 100 quality measures.

2.3.4 Home Health Compare

Home Health Compare has information about the quality of care provided by Medicarecertified home health agencies. Both process measures and outcomes measures have been available on the website since 2003. Measure data are drawn from the Outcome and Assessment

Centers for Medicare & Medicaid Services. What is Nursing Home Compare? Medicare.gov [website]. http://www.medicare.gov/NursingHomeCompare/About/What-Is-NHC.html (accessed January 23, 2014).

Frederick PR, Maxey NL, Clauser SB, et al. Developing dialysis facility-specific performance measures for public reporting. Health Care Financing Review. Summer 2002:37-50. http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/downloads/02summerpg37.pdf (accessed January 23.

²¹ Centers for Medicare & Medicaid Services. What information can I get about hospitals? Medicare.gov [website]. http://www.medicare.gov/hospitalcompare/About/Hospital-Info.html (accessed March 25, 2014).

Centers for Medicare & Medicaid Services. What is Hospital Compare? Medicare.gov [website]. http://www.medicare.gov/hospitalcompare/About/What-Is-HOS.html (accessed March 25, 2014).

Information Set and from Medicare claims. As of 2013, Home Health Compare includes 13 process measures and 9 outcome measures, which form the basis of the facility comparison. In addition, patient experience of care survey results show how well home health agencies communicated and provided care.

2.3.5 Medicare Plan Finder

The <u>Medicare Plan Finder</u> has evolved substantially over time to support consumers in searching, comparing, and enrolling in Medicare plans. In 2006, Medicare Plan Finder was updated to provide information about Medicare prescription drug plans, Medicare Advantage plans by drug cost, and other relevant information. Medicare Plan Finder includes a wide array of consumer support materials and information on plan performance ratings that is broken out in many individual dimensions.

2.3.6 Data.Medicare.gov

<u>Data.Medicare.gov</u> provides direct access to the official data that are used on the Compare websites and directories. The goal of the site is to make these data readily available in open, accessible, and machine-readable formats in accordance with the Digital Government Strategy.²³ In addition to viewing the data in a browser, users can download the data in a variety of formats. Users can also access the data through an Application Programming Interface, which lets developers connect other applications to the data in real time using the same data that power the Compare websites and directories.

2.3.7 Healthcare Provider Directory

The immediate predecessor to Physician Compare was CMS' Healthcare Provider Directory, also referred to as "Find a Doctor". The Healthcare Provider Directory was a publicly available tool within the Medicare.gov website. Since the early 2000s, the Healthcare Provider Directory supported CMS' goal of providing information to consumers by helping consumers locate health care professionals in their community. Data and functionality of the Healthcare Provider Directory were refreshed and improved regularly. The website was repurposed in 2010 as an early-phase Physician Compare website.

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The White House. Digital Government: Building a 21st Century Platform to Better Serve the American People Whitehouse.gov [website] http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government-strategy.pdf (Accessed June 4, 2014).

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3 LEGISLATION AND RULEMAKING FOR PHYSICIAN COMPARE

Section 10331 of the ACA supports the Centers for Medicare & Medicaid Services (CMS) overarching goals of fostering health care quality improvement through public reporting of health care professionals' performance data. In accordance with section 10331(a)(1) of the ACA, CMS established Physician Compare in December 2010 with information on physicians and other health care professionals enrolled in Medicare. In 2012, CMS began implementing a plan for making performance information on health care professionals publicly available through Physician Compare. CMS has also used the annual Medicare Physician Fee Schedule rulemaking process to implement section 10331.

The remainder of this section summarizes CMS' progress in fulfilling the requirements set forth by section 10331 of the ACA. Section 3.1 describes CMS' public reporting plan for Physician Compare. Section 3.2 addresses public reporting in the context of CMS' plan to transition to VBP.

3.1 Developing a Physician Compare Public Reporting Plan

In developing and implementing a plan for reporting health care professionals' performance data through Physician Compare CMS must consider several factors and requirements under section 10331 of the ACA. CMS' plan for public reporting includes selecting quality measures that accurately portray the performance of physicians and other health care professionals, providing health care professionals with the opportunity to preview their data prior to the public reporting of those data, ensuring accurate public reporting through a robust reporting infrastructure, and ensuring the protection of patient privacy in public reporting. The remainder of this section outlines CMS' efforts in meeting these requirements.

3.1.1 Measure Selection

Section 10331(a)(2) of the ACA requires by January 1, 2013, and with respect to reporting periods that begin no earlier than January 1, 2012, that CMS develop a plan for making publicly available through Physician Compare information on physician performance that provides comparable information on quality and patient experience measures. CMS began outlining a plan for public reporting on Physician Compare in the Calendar Year (CY) 2012 Medicare Physician Fee Schedule Final Rule.²⁴ This rule identified the PQRS as a source of quality measures for Physician Compare and specified the performance data that group practices submitted under the 2012 PQRS via the Group Practice Reporting Option (GPRO) Web Interface

²⁴ Medicare Physician Fee Schedule Final Rule 76 FR 73026, 73417-73422 (November 28, 2011)

for public reporting.²⁵ In accordance with the CY 2012 Medicare Physician Fee Schedule Final Rule, CMS published the first set of physician performance data for group practices on Physician Compare in February 2014.²⁶ Additionally, in accordance with the Medicare Shared Savings Program Final Rule,²⁷ CMS published on Physician Compare 2012 performance data that ACOs submitted under the Shared Savings Program via the GPRO Web Interface.²⁸

To expand the physician quality information available to health care consumers through Physician Compare, CMS has continued to gather feedback from multi-stakeholder groups and finalize quality measures for public reporting in each subsequent rulemaking cycle. ²⁹ Table 3.1 summarizes the quality measure sets previously finalized by CMS for public reporting on Physician Compare

Medicare Physician Fee Schedule Final Rule 76 FR 73419-73420 (November 28, 2011)

²⁶ Section 5.1 describes these performance measures in greater detail.

Medicare Shared Savings Program Final Rule 76 FR 67948 (November 2, 2011)

²⁸ Medicare Physician Fee Schedule Final Rule 76 FR 73422 (November 28, 2011)

²⁹ Section 4.3.1 describes our stakeholder outreach activities in greater detail.

Table 3.1: Summary of Previously Finalized Policies for Public Reporting on Physician Compare

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Data Collection Year	Public Reporting Year	Reporting Mechanism(s)	Quality Measures and Data for Public Reporting	
2012	2013	Web Interface (WI), EHR, Registry, Claims	Include an indicator for satisfactory reporters under PQRS, successful e-prescribers under eRx, and participants in the EHR Incentive Program.	
2012	2014	WI	5 DM and CAD measures collected via the WI for group practices reporting under PQRS GPRO with a minimum sample size of 25 patients and Shared Savings Program ACOs.	
2013	2014	WI, EHR, Registry, Claims	Include an indicator for satisfactory reporters under PQRS, successful e-prescribers under eRx, and participants in the EHR Incentive Program. Include an indicator for EPs who earn a PQRS Maintenance of Certification Incentive and EPs who report the PQRS Cardiovascular Prevention measures group in support of Million Hearts initiative to prevent heart attacks (millionhearts.hhs.gov)	
2013	Expected to be December 2014	WI	Up to 6 DM and 2 CAD measures collected via the GPRO WI for groups of 25 or more EPs and Shared Savings Program ACOs with a minimum sample size of 20 patients. Will include composites for DM and CAD, if feasible.	
2013	Expected to be December 2014	WI	Up to 5 Clinician and Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS) summary measures for groups of 100 or more EPs reporting under PQRS GPRO via the WI and up to 6 ACO CAHPS summary measures for Shared Savings Program ACOs.	
2014	Expected to be 2015	WI, EHR, Registry, Claims	Include an indicator for satisfactory reporters under PQRS and participants in the EHR Incentive Program. Include an indicator for EPs who earn a PQRS Maintenance of Certification Incentive and EPs who report the PQRS Cardiovascular Prevention measures group in support of Million Hearts.	
2014	Expected to be late 2015	WI, EHR, Registry, Administrative Claims	All measures reported via the GPRO WI, 13 EHR, and 16 Registry GPRO measures are also available for group practices of 2 or more EPs reporting under PQRS GPRO with a minimum sample size of 20 patients. Also, all Shared Savings Program ACO measures are available for public reporting. Include composites for DM and CAD, if feasible.	
2014	Expected to be late 2015	WI, Certified Survey Vendor	Up to 12 CG-CAHPS summary measures for groups of 100 or more EPs reporting via the WI and group practices of 25 to 99 EPs reporting via a CMS-approved certified survey vendor, as well as 6 ACO CAHPS summary measures for Shared Savings Program ACOs reporting through the GPRO Web Interface or other CMS-approved tool or interface.	
2014	Expected to be late 2015	Registry, EHR, or Claims	A sub-set of 20 PQRS measures submitted by individual EPs that align with those available for group reporting via the WI and that are collected through a Registry, EHR, or claims with a minimum sample size of 20 patients.	
2014	Expected to be late 2015	Registry	Measures from the Cardiovascular Prevention measures group reported by individual EPs in support of the Million Hearts Initiative with a minimum sample size of 20 patients.	

As stated in the Medicare Physician Fee Schedule Final Rules referenced above, CMS will evaluate the data collected for the measures noted in Table 3.1 as available for public reporting and report on Physician Compare only those measures deemed suitable for public reporting. This process includes ensuring the data are presented in a way that is both accurate and most useful to consumers through consumer testing and stakeholder outreach. CMS also conducts a range of technical analyses on the performance data to ensure that only quality measures that are scientifically sound and statistically reliable are selected for public reporting on Physician Compare. 1

3.1.2 Data Preview for Physicians and Other Health Care Professionals

Providing physicians and other health care professionals with the opportunity to preview their data prior to their data being made public ensures the accuracy of the performance data, thereby promoting stakeholder confidence in the public reporting process. Prior to the release of the first set of performance data in February 2014, CMS gave physicians and other health care professionals 30 days to preview their performance data as it would appear on Physician Compare. To enhance the data preview process, CMS is currently developing a secure webbased portal that will enable CMS to communicate directly with physicians and other health care professionals in coordinating quality measurement and reporting activities, including data preview activities. CMS will continue to engage stakeholders and solicit public comments via the annual Medicare Physician Fee Schedule rulemaking process and make adjustments to the data preview process as needed.

3.1.3 Public Reporting Infrastructure

CMS works to support the development of the Physician Compare infrastructure in several ways. Through each update made to the website, CMS adds new data and content elements, refines the backend infrastructure, and enhances the functionality and features of the website. Additionally, to support accurate public reporting, CMS' computer and data systems support ongoing information updates on Physician Compare. For example, the information about health care professionals (e.g., name, credentials, gender, education, primary and/or secondary specialties, Medicare participation) on Physician Compare comes primarily from the Provider Enrollment, Chain, and Ownership System (PECOS); health care professionals can enter and update their information via Internet-based PECOS. An updated PECOS file is available on a semi-monthly basis. To ensure that information on Physician Compare is accurate and timely,

Medicare Physician Fee Schedule Final Rule 78 FR 74450 (December 10, 2013)

³¹ Section 4.3 describes our measure evaluation process in greater detail.

Section 4.1 describes the development of Physician Compare infrastructure in greater detail.

Centers for Medicare & Medicaid Services. Welcome to the Medicare Provider Enrollment, Chain, and Ownership System (PECOS). https://pecos.cms.hhs.gov/pecos/login.do (accessed January 23, 2014).

approximately once per month, CMS combines the latest PECOS file with several other data sources and loads an updated Physician Compare backend database.

3.1.4 Ensuring Patient Privacy in Public Reporting

When developing and maintaining physician quality measures, CMS takes numerous steps to protect personally identifiable information (PII), to prevent the unauthorized access to, use of, and disclosure of PII, and to adhere to privacy laws, such as the Privacy Act of 1974 and the Health Insurance Portability and Accountability Act of 1996 (HIPAA). Physician Compare performance measure information is calculated from de-identified aggregate patient data, and hence, is not PII. Additionally, all performance measures reported on the website are based on 20 or more records. Measure data based on fewer than 20 records are suppressed and not shown on the website. When quality measure contractors are allowed access to PII to support CMS in developing and maintaining quality measures, the CMS Privacy Office provides the technical and management support necessary for CMS to achieve compliance with Title II and III of the E-Government Act of 2002 and the Federal Information Security Management Act of 2002. For example, the Privacy Office accounts for all disclosures of PII and requires data use agreements with quality measure development contractors to account for all such disclosures.

3.2 Aligning Public Reporting with Value-Based Purchasing

As CMS continues to move toward a VBP payment model for physicians and other health care professionals, CMS will continue to consider appropriate physician performance measures collected through its pay-for-reporting and pay-for-performance programs for future years of public reporting via Physician Compare. Aligning Physician Compare with quality programs and payment adjustments, including PQRS and the Value Modifier, provides significant opportunities for CMS to achieve its quality goals.

CMS has been working to align public reporting on Physician Compare with elements of PORS and the Value Modifier. For example, in the CY 2013 Medicare Physician Fee Schedule Final Rule, CMS reduced the reporting threshold for Physician Compare from 25 to 20 patients to align with the reliability threshold for the PQRS reporting criteria.³⁴ Through measure alignment, CMS will aim to select quality measures from the PQRS and Value Modifier that are useful for health care consumers and report them through Physician Compare. CMS will continue to develop its alignment strategy through continued engagement with stakeholder groups and align its quality initiatives through future Medicare Physician Fee Schedule rulemaking.

Medicare Physician Fee Schedule Final Rule 77 FR 69165 (November 16, 2012)

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4 DEVELOPMENT OF PHYSICIAN COMPARE

Since establishing Physician Compare in 2010, the Centers for Medicare & Medicaid Services (CMS) has made significant progress in enhancing the website and refining the selection of performance measures for public reporting. In February 2014, CMS achieved a public reporting milestone: the first set of physician performance data was publicly reported via Physician Compare (see Section 5).

This section describes the development of Physician Compare from 2010 to the present. Section 4.1 presents the major website development phases. Generally, website development encompasses two broad sets of activities. The first set of activities involves developing new functionality and features for the website while enhancing existing website functionality. The second set of activities involves selecting performance measures for public reporting. Sections 4.2 and 4.3 describe these activities in turn.

4.1 Physician Compare Development Phases

The development of Physician Compare from its establishment in 2010 to the present spans three phases:

- **Phase I** covers the period from December 2010 to June 2013. In this initial development phase, CMS launched Physician Compare and completed a major redesign that significantly enhanced the website's functionality and data infrastructure.
- **Phase II** covers the period from July 2013 through February 2014. This phase includes the preparation and release of the first set of physician performance data (at the group level).
- **Phase III** describes the development phase from March 2014 onward. CMS is working toward reporting performance data for individual physicians and other health care professionals.

This section describes the achievements realized within each development phase.

4.1.1 Phase I Development (December 2010–June 2013)

During Phase I, CMS achieved the following key objectives:

- CMS repurposed the Healthcare Provider Directory (an existing directory on Medicare.gov that helped consumers locate health care providers in their community) as Physician Compare in December 2010;
- CMS developed the Physician Compare infrastructure via a system of regular releases and a significant redesign in 2013;
- CMS expanded the range of physician administrative information available on Physician Compare; and

• CMS worked to select quality measures for public reporting on Physician Compare in preparation for the implementation of public reporting in Phase II.

The remainder of this section describes each Phase I objective in turn.

Establishment of Physician Compare

CMS repurposed the Healthcare Provider Directory as Physician Compare in December 2010. At the beginning of Phase I, Physician Compare was primarily an online directory of information on health care professionals who served Medicare beneficiaries. Phase I infrastructure relied on information from the Provider Enrollment, Chain, and Ownership System (PECOS). PECOS is CMS' Medicare enrollment system covering all health care professionals enrolled in Medicare. When Physician Compare was initially launched, consumers could search for a physician or other health care professional by using a drop down list of specialties or types of professionals. To refine their search, consumers could also specify the ZIP Code or city/State where they were looking for a health care professional, and the health care professional's gender. Next, they could search by whether or not the health care professional accepted the Medicareapproved amount as payment in full for services, or Medicare Assignment. Finally, the website provided information about health care professionals' languages spoken, group practice locations, education, and hospital affiliation.

CMS developed the Physician Compare infrastructure via a system of regular releases and a more significant redesign in 2013. Phase I development included regular updates to Physician Compare, and new releases of the website were made available in July 2011, October 2011, January 2012, and April 2012. Website development focused on enhancing the accuracy of the information published on Physician Compare and adding content and data elements. The updates refreshed information about physicians and other health care professionals, using the most recent data from PECOS, and added new data elements to the website, including information on the hospital affiliation of each physician and other health care professional.

Physician Compare Redesign

Phase I development included a significant redesign of the Physician Compare website. In 2012, CMS put regular releases on hold to prepare for more significant changes to the website through the 2013 redesign. The goal of the 2013 redesign process was to overhaul the website, including enhancing the look and feel of the website, improving the website functionality and usability, providing additional information that would help inform consumers' health care decisions, and improving the accuracy and performance of the website's underlying data infrastructure. To inform the 2013 redesign process, CMS conducted extensive testing of the database, functionality, and website page presentation. CMS also pretested the redesigned website with consumers to ensure that they could navigate the pages and obtain desired

information. The redesigned Physician Compare website was launched in June 2013. New website content was vetted with a wide range of stakeholders as described in Section 4.3.

Among the most innovative improvements achieved through the 2013 redesign was the addition of the intelligent search functionality. CMS developed the intelligent search functionality in collaboration with more than 50 specialty societies. Prior to the addition of the intelligent search functionality, consumers, as part of the search process, were required to select the specialty of the physician or health professional they were looking for; this step could be problematic for consumers who were not familiar with specialty names. To overcome this problem, the intelligent search functionality allows consumers to conduct a search by entering a health care professional's last name or group practice name, a medical specialty, a medical condition, a body part, or an organ system. CMS also created a more visually guided search option, called "Search Another Way," which enables consumers to perform a search by clicking on the part of the body that is affected by the health issue. Section 5.2 describes the intelligent search functionality in greater detail.

CMS also improved the backend infrastructure of the website. The Physician Compare backend infrastructure relies in part on PECOS for information on health care professionals. To improve the accuracy and currency of the data published on Physician Compare, CMS implemented a process to verify the information in PECOS using Medicare Part A and Part B Fee-for-Service (FFS) claims data. This verification process significantly reduced the Physician Compare database size, as it ensures that only active health care professionals are listed on the website (i.e., health care professionals who have submitted a claim in the previous 12 months), and has improved the accuracy of the group practice affiliations and address information for health care professionals.

Expansion of Administrative Information

CMS expanded the range of administrative information available on Physician Compare about health care professionals. As a first step toward public reporting, the Phase I website included an indicator of health care professionals' satisfactory participation in the PQRS, successful e-prescribers under the eRx Incentive program, and program participants in EHR Incentive program, although specific data results were not presented.

Quality Measures Selection

CMS worked with multi-stakeholder groups to identify the best means to publicly report the quality measures on Physician Compare. CMS considered a series of quality measures for inclusion on the Physician Compare website, including the PQRS quality measures and patient experience of care measures from CG-CAHPS surveys; how and when to report group-level

measures and individual-level measures; composite measures; setting minimum patient thresholds, and how to report or suppress data with small sample sizes.³⁵

4.1.2 Phase II Development (July 2013–February 2014)

Phase I provided a solid foundation for adding performance data on physicians and other health care professionals to Physician Compare in Phase II. In Phase II, CMS accomplished two major objectives: first, CMS further developed the Physician Compare infrastructure and unveiled new releases of the website in December 2013 and February 2014. CMS improved the website's navigation, updated the data, enhanced the intelligent search functionality, and added pages specific to ACOs on Physician Compare. Section 5 describes the content, tools, and features available on Physician Compare website as of the end of Phase II.

CMS successfully published the first set of performance data on Physician Compare in February 2014. CMS reported a subset of quality data (e.g., DM and CAD quality measures) that group practices submitted via the Group Practice Reporting Option (GPRO) Web Interface under the 2012 PQRS GPRO.³⁶ Before the release of the first set of performance data, CMS gave physicians and other health care professionals 30 days to preview their performance data as it would appear on Physician Compare. CMS held the 30-day preview period from mid-December 2013 to mid-January 2014. CMS also reported ACO performance data on the newly added ACO-specific pages. CMS continued to work with stakeholders to identify potential quality measures for future public reporting on Physician Compare, including quality measures data at the individual-clinician level.

4.1.3 Phase III Development (March 2014 Onward)

Phase II established a robust data infrastructure to support public reporting activities in Phase III. The major focus of Phase III, which represents the current website development phase, includes the addition of performance data for individual physicians and other health care professionals. In Phase III, CMS is also working on expanding the range of group practice—level performance data available on Physician Compare based on what was finalized in the CY 2014 Medicare Physician Fee Schedule Final Rule (see Section 3.1.1) and the CY 2015 Medicare Physician Fee Schedule Final Rule and onward. Additionally, CMS is developing the Physician-Clinician Portal to streamline information update processes and data sharing with physicians and other health care professionals. Last, to supplement the ongoing reporting of PQRS, and Electronic Health Record participation information, CMS continues to expand the range of administrative information available on Physician Compare. Specifically, as stated in the CY 2013 and 2014 Medicare Physician Fee Schedule Final Rules, in December 2014 CMS will add

Section 4.3 describes stakeholder input that informed the measure selection process. Section 5 describes the quality measures that CMS finalized for public reporting.

³⁶ Section 5.1.1 describes these performance data in greater detail.

on the website, an indicator for eligible professionals who satisfactorily report the PQRS Cardiovascular Prevention measures group in support of Million Hearts and an indicator for eligible professionals who have earned the 2013 PQRS Maintenance of Certification Incentive (Additional Incentive).

4.2 Website Design, Testing, and Development

Since establishing Physician Compare in 2010, CMS has been working with stakeholders and consumers to get input on the design of the website and the plan for public reporting and measure display. Relevant stakeholder groups include consumers and their caregivers who seek information from the website, health care professionals, physician groups, primary and specialty care professional organizations, and the general public. CMS incorporates stakeholder input into each phase of website development and undertakes extensive testing to ensure proper functionality, data accuracy, and security. The remainder of this section provides an overview of the stakeholder outreach activities, consumer testing, and quality assurance measures undertaken in support of the development of the website.

4.2.1 Stakeholder Outreach

CMS uses several outreach methods to gather feedback from stakeholders. CMS has solicited public comments via the annual Medicare Physician Fee Schedule rulemaking process (see Section 3). Additionally, CMS conducts (i) public webinars, (ii) Open Door Forums (ODFs), (iii) targeted outreach to specialty societies and group practices, (iv) "town hall" meetings and listening sessions, and (v) an ongoing web-based survey to obtain input from Physician Compare website users. The remainder of this section summarizes CMS' stakeholder outreach through each of these mechanisms. Public materials related to these stakeholder outreach efforts are available on the CMS.gov Physician Compare Initiative page.

Public Webinars

CMS hosted webinars in July 2012 and January 2013 to gather stakeholder input on the 2013 redesign. The July 2012 webinar sought input on concepts under development for Physician Compare in Phase I (i.e., concepts related to functionality and new features). The January 2013 webinar, which CMS offered to the public via a prerecorded session, outlined the features and functionality of the redesigned Physician Compare website and presented CMS' plan for public reporting. Following the webinar, CMS provided the general public with an opportunity to submit feedback in writing. Feedback suggested that users were impressed with the overall redesign, including the website usability and functionality and the improved backend database. The recommendations CMS received included suggested modifications to the specialty finder and intelligent search functions, as well as suggested changes to the displays of composites and quality measures.

Open Door Forums

CMS organizes ODFs to share information with the public and clarify any questions the public might have regarding the website. In June 2013, CMS conducted two WebExTM based ODFs to share information about the redesigned Physician Compare website. CMS provided attendees with a walkthrough of the redesigned website. No questions were fielded during the ODF. After the ODF, the Physician Compare technical assistance team responded to follow-up questions from attendees regarding the 2013 redesign.

Outreach to Specialty Societies and Group Practices

CMS reached out to specialty societies and group practices to obtain their input on website navigation and intelligent search functionalities (see Section 4.1.1). For example, specialty societies provided feedback on terms of reference and common consumer terms for conditions, symptoms, and body parts related to different specialties. CMS also conducted webinar sessions, to seek input on how measures were being displayed. CMS continues to obtain input from specialty societies to refine Physician Compare's search and navigation functionalities.

Town Hall Meetings and Listening Sessions

CMS conducts town hall meetings and listening sessions to give stakeholders the opportunity to provide input on the website. CMS conducted a town hall meeting in October 2010 to gather input from stakeholders on various topics, including website design, measure selection, and the process for physicians and other health care professionals to review their data prior to public reporting. CMS conducted another Town Hall Meeting in February 2014, which focused on gathering stakeholder input regarding the types of information and measures that could be included on Physician Compare in the future.

Web Survey

CMS fields a voluntary web-based survey of website users. Implemented in February 2013, the web survey is a "pop-up" that invites approximately 20 percent of visitors to the website to voluntarily participate in the survey. The web survey requests visitors to voluntarily provide feedback on various aspects of Physician Compare, including the accuracy of the information published on the website, website usability, and user comprehension of the website content. Each month, CMS collects 300 to 1,000 survey responses from website users and monitors the feedback received via monthly analytic reports; the feedback is used to inform future website enhancements (e.g., search functionality and display features).

4.2.2 Consumer Testing

To further develop Physician Compare's capacity to serve consumers, CMS incorporates consumer input into the development of the website. CMS gathers consumer input via (i) concept

testing, (ii) cognitive testing, and (iii) usability testing. Test participants typically involve the primary audience for the website, including Medicare beneficiaries who are seeking information for themselves, and caregivers who are seeking information to provide assistance to a Medicare beneficiary. The remainder of this section describes each type of testing in turn.

Concept Testing

Concept testing evaluates consumer preferences for different layouts and information displays on Physician Compare. Concept testing utilizes visual aids (e.g., website mockups) to assess participants' understanding of the steps needed to perform specified tasks using different website layouts and information displays. As a result of concept testing conducted in June 2012, CMS improved the website's consumer interface. Improvements made to the website design as a result of this testing included presenting the key for explaining Medicare Assignment status in a location where consumers can more easily find it. Concept testing was conducted again in July 2013 to assess an effective means of presenting information about ACOs. Based on results of this testing, ACO pages were included in an ACO-specific set of website pages, which are separate from pages of group practices and physicians and other health care professionals.

Cognitive Testing

Cognitive testing assesses consumers' ability to understand the quality measures information for the measures available for public reporting. In August 2012, CMS conducted cognitive testing with Medicare beneficiaries and their caregivers to assess their understanding of the plain language labels and descriptions for the DM and CAD measures. CMS incorporated the testing findings to develop the language used to describe the DM and CAD measures currently published on Physician Compare. Additionally, testing revealed that participants were generally able to understand the directionality of the star ratings. Last, participants appeared to have an easier time interpreting the patient experience of care measures (i.e., CG-CAHPS than the DM and CAD process measures.

Usability Testing

Usability testing evaluates the website by testing it on representative users. During testing, participants are given a series of tasks to execute on the website (e.g., searching for a primary care physician), while observers watch, listen, and take notes on the participants' progress. Usability testing provides the opportunity to assess user reactions to the website's look and feel, layout of the screens, and website navigation features and functionality. CMS conducted usability testing on the website in July 2011, December 2012, and July 2013.

Usability testing findings have provided vital information for improving Physician Compare. The December 2012 usability testing, for example, found that a few participants did not know that the default Intelligent Search path was set to find *only* individual physicians or other health care professionals rather than group practices; this misconception caused confusion

for some participants whose intent was to search for group practices. As a result of these findings, CMS implemented three separate tabs in the main search box, which are labeled "Find Physicians and Other Healthcare Professionals," "Find Group Practices," and "Search Another Way," respectively, to indicate alternative ways to conduct a search. The July 2013 usability testing provided evidence that the three-tab layout significantly helped participants use the correct search box.

4.2.3 Website Quality Assurance

Before each update to the website is made, CMS performs extensive user acceptance testing (UAT) to ensure that each new website release is functioning as expected before being made available to the public. To implement UAT, CMS approaches the testing of the website from the viewpoint of the target user. User-driven questions include the following examples:

- What is the task the user is setting out to perform?
- How would a typical user maneuver the website?
- Would the user understand how and why they ended up on a particular page?

Using these questions as a guide, CMS thoroughly and systematically tests the website's functions to identify and address any irregularities in the processes and/or results, for example, evaluating whether searches return appropriate results and whether the results are prioritized in the desired fashion.

4.3 **Measure Selection for Public Reporting**

While website development activities are under way, CMS works concurrently to select quality measures to be published on Physician Compare; in February 2014, CMS successfully published the first set of physician performance data on Physician Compare.³⁷ Section 4.3.1 describes the outreach activities that CMS conducted throughout the development phases to ensure that stakeholder input is considered and that the quality measures selected for public reporting are accurately presented to consumers to portray physician performance. Section 4.3.2 outlines CMS' processes for ensuring the accuracy and reliability of the DM and CAD quality measures information currently (as of February 2014) reported through the website. Additionally, to enhance health care consumers' understanding of quality measure information, CMS plans to report composite measures via Physician Compare in late 2014. Composite measures consolidate, into a single score, information relevant to several elements of care captured by separate quality measures. Section 4.3.3 describes CMS' composite measure development approach.

Section 5.1 describes these performance measures in greater detail.

4.3.1 Stakeholder Outreach

Stakeholder outreach is an essential step in the measure selection process for Physician Compare. In the CY 2013 Medicare Physician Fee Schedule Final Rule, CMS finalized the plan to report on the Physician Compare website elements of CMS quality reporting programs, including PQRS and the Value Modifier³⁸ To ensure accurate reporting of these data, the CMS Physician Compare team coordinates regularly with other CMS stakeholders from the PQRS, Medicare Shared Savings Program, and Value Modifier. CMS also continually seeks external stakeholder input on measure selection via a wide range of channels, including the National Provider Calls, the annual Medicare Physician Fee Schedule rulemaking process, public webinars, ODFs, targeted outreach to specialty societies, and CMS public listening sessions (see Section 4.2.1).

Section 10331(d) of the ACA directs CMS to take into consideration input provided by multi-stakeholder groups consistent with sections 1890(b)(7) and 1890A of the Social Security Act, as added by section 3014 of the ACA, in selecting measures for Physician Compare. Accordingly, CMS subjects all quality measures being considered for public reporting to the prerulemaking process required under section 1890A of the Act. As part of this process, the entity with a contract with the Secretary under section 1890(a) of the Act (currently the National Quality Forum or NQF) convenes multi-stakeholder groups to provide input to the Secretary on the selection of such measures described in section 1890(b)(7)(B) of the Act. In accordance with section 1890A(a)(1) of the Act, the NQF convened the aforementioned multi-stakeholder groups by creating the Measure Applications Partnership (MAP). The MAP is a public-private partnership that reviews performance measures and provides input to the HHS on the selection of measures. Each year, by December 1, CMS makes publicly available a list of measures under consideration for use within certain CMS programs, as well as the Physician Compare website. The MAP reviews the list of measures under consideration and transmits its feedback to the Secretary by February 1 of each year. The pre-rulemaking process collects input from an extensive range of stakeholder groups about the performance measures being considered for public reporting, including groups that represent the interests of consumers, businesses, and health plans. The MAP uses a collaborative, consensus-building process in recommending performance measures to the HHS agencies.³⁹

Medicare Physician Fee Schedule Final Rule 77 FR 68891 (November 16, 2012)

For more information regarding the MAP, see the NQF website: Measures Applications Partnership, http://www.qualityforum.org/MAP/ (accessed January 23, 2014).

In keeping with the mandate set forth by CMS' Blueprint for the Measures Management System⁴⁰, in 2013 and 2014, CMS convened the Physician Compare Quality Measurement Technical Expert Panel (TEP) to provide input into the measures selection process for Physician Compare. The TEP comprised 16 members representing a diversity of organizational affiliations, geographic locations, and experiences. The TEP included individuals with patient/caregiver experience, technical expertise in the public reporting of performance measures, health care quality improvement, and quality measure development and testing. In September and October 2013, the TEP provided input on the presentation of specific DM and CAD quality measures for group practice-level public reporting and how these could be incorporated meaningfully on the Physician Compare website. In 2013 and in March 2014, the TEP offered feedback regarding possible future quality measures for public reporting on Physician Compare.

4.3.2 Quality Measure Evaluation

Ensuring that the quality measures selected for public reporting are robust and accurately portray physician performance is a crucial component of the measure inclusion process. To ensure that all quality measures reported on Physician Compare are scientifically sound and statistically reliable, CMS conducts a range of analyses on the performance data. Broadly, measures deemed suitable for public reporting include measure properties such as those used by NQF for measure endorsement: clinical importance, scientific acceptability, usability, and feasibility.

Before publishing the group-level performance data on Physician Compare in February 2014, CMS evaluated the measures to ensure that the data submitted by group practices via the GPRO Web Interface under the 2012 PQRS were accurate and reliable in portraying physician performance. First, CMS performed quality assurance checks on the data to verify that measures reported by group practices adhered to CMS sampling and reporting specifications in submitting their quality measures data via the GPRO Web Interface.

Second, to assess whether the comparison of performance results across group practices is meaningful, CMS examined the statistical significance of the measure performance rates by comparing the rate of each group practice with the mean rate across all group practices. Across all DM and CAD candidate measures, CMS found that more than 50 percent of group practices had performance rates that differed statistically from the mean. Additionally, CMS assessed the

A detailed description of CMS' Blueprint for the Measures Management System is available on the CMS website: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/MMS/MeasuresManagementSystemBlueprint.html

reliability of the DM and CAD performance scores and found that more than 75 percent of group practices had high reliability scores.⁴¹

Third, to ensure that health care consumers can readily comprehend the quality information, CMS conducted cognitive testing of the DM and CAD quality measures. CMS used the findings to develop "plain language" measure labels and descriptions for these measures. Section 4.2.2 describes the cognitive testing findings in greater detail. CMS will continue to employ a rigorous set of quality assurance checks and analyses to evaluate future quality measure sets being considered for public reporting.

4.3.3 Composite Measure Development

As the volume and variety of quality measures information increase on Physician Compare, composite measures will become increasingly vital in helping health care consumers interpret the physician performance data reported through the website. Early focus group testing revealed a strong desire among Medicare beneficiaries for composite measures. Stakeholder groups have also expressed support for this type of information. Therefore, in the CY 2013 Medicare Physician Fee Schedule Final Rule, CMS finalized a policy to develop and report disease module–level composite measures for DM and CAD based on measures that group practices and Shared Savings Program ACOs report through the GPRO Web Interface or other CMS-approved tool or interface. CMS will continue to consider additional composites across measure types and disease modules as public reporting is expanded through Physician Compare.

For more information about reliability testing for physician performance measurement, as well as the methodology for constructing the reliability score, see Adams J. *Reliability of Provider Profiling: A Tutorial*. Santa Monica, CA: RAND Corporation; 2009. http://www.rand.org/pubs/technical_reports/TR653.html (accessed January 23, 2014).

⁴² Medicare Physician Fee Schedule Final Rule 77 FR 69166 (November 16, 2012)

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5 PHYSICIAN COMPARE TODAY

As a result of significant stakeholder input and CMS development and testing, Physician Compare currently includes a range of website tools, features, and content that enable consumers to evaluate and select among approximately 900,000 physicians and other health care professionals who are enrolled in the Medicare program. Today, CMS continues to enhance Physician Compare to better help consumers navigate the website and make informed health care decisions.

The remainder of this section provides an overview of Physician Compare as of August 2014. Section 5.1 describes the content available on Physician Compare. Section 5.2 describes Physician Compare's tools and features. Last, Section 5.3 presents information about consumer usage and perceptions of the website.

5.1 **Physician Compare Content**

To support consumers in making informed decisions about their health care, Physician Compare offers a range of information about physicians and other health care professionals. The remainder of this section describes the content available on Physician Compare as of August 2014.

5.1.1 Physician Performance Data

In February 2014, CMS publicly released the first set of physician performance data on Physician Compare. Under the 2012 the PQRS, group practices submitted data on 29 quality measures via the GPRO Web Interface. Of these 29 quality measures, CMS selected five quality measures across the DM and CAD domains for public reporting on Physician Compare. The chosen five include two DM outcome measures, two DM process measures, and one CAD process measure. Measure inclusion was determined based on an empirical evaluation of the measures' scientific properties, consumer testing, and other stakeholder input. 43 Additionally, CMS published ACO performance data on these same five measures on ACO-specific pages on Physician Compare.

Section 4.3 describes the measure selection process in greater detail.

Table 5.1 describes the five quality measures that are reported on Physician Compare for group practices as of February 2014. The first column lists the PQRS and ACO measure numbers; the second provides the title of each measure and the third describes each measure. The fourth column identifies the measure developer, which includes the NCQA, the MNCM, or the AMA-PCPI. The final column indicates whether the measure is an outcome measure, or a process measure. Outcome measures assess results of health care experienced by patients: patients' clinical events, patients' recovery and health status, patients' experiences in the health system, and efficiency/cost. Outcomes are dependent upon process of care because they are by definition the results of the actions of the health care system. Process measures evaluate physicians and other health care professionals on the use of specific evidence-based processes of care.

Table 5.1: Physician Compare Quality Measures

Measure Number	Measure Title	Measure Description	Measure Developer	Measure Type
GPRO DM-3/ ACO_DM_13	High Blood Pressure Control in Diabetes Mellitus	Percentage of patients ages 18 through 75 years with diabetes mellitus who had most recent blood pressure in control (less than 140/90 mmHg)	NCQA	Outcome
GPRO DM-10/ ACO_DM_15	Hemoglobin A1c Control (< 8%)	The percentage of patients ages 18 through 75 years with a diagnosis of diabetes (type 1 or type 2) who had HbA1c < 8%	NCQA	Outcome
GPRO DM-11/ ACO_DM_16	Daily Aspirin Use for Patients with Diabetes and Ischemic Vascular Disease	Percentage of patients ages 18 to 75 years with diabetes mellitus and ischemic vascular disease with documented daily aspirin use during the measurement year unless contraindicated	MNCM	Process
GPRO DM-12/ ACO_DM_17	Tobacco Non-Use	Percentage of patients with a diagnosis of diabetes who indicated they were tobacco non-users	MNCM	Process
GPRO CAD-7/ ACO_CAD_7	Angiotensin- Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Patients with CAD and Diabetes and/or Left Ventricular Systolic Dysfunction	Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who also have diabetes OR a current or prior left ventricular ejection fraction < 40% who were prescribed ACE inhibitor or ARB therapy	AMA- PCPI	Process

To view group practices' performance data, the user first enters the location of interest (e.g., ZIP Code) into a box located under the "Find Group Practices" tab on the Physician Compare landing page. Second, the user is prompted to enter a search term, which could be a health care professional's name, medical condition, symptom, medical procedure, body part, or even an organ system. Next, the user selects a group practice of interest from a list of group practices that are relevant to the user's search term, ⁴⁴ which would take the user to the group practice's profile page. Last, on the profile page, the user can access the group practice's performance data under the "Clinical Quality of Care" tab. Physician Compare displays group practices' performance scores using five-stars as a graphical representation of 100 percent, with each star representing 20 percentage points. The display also presents group practice scores as a percentage (Figure 5.1).

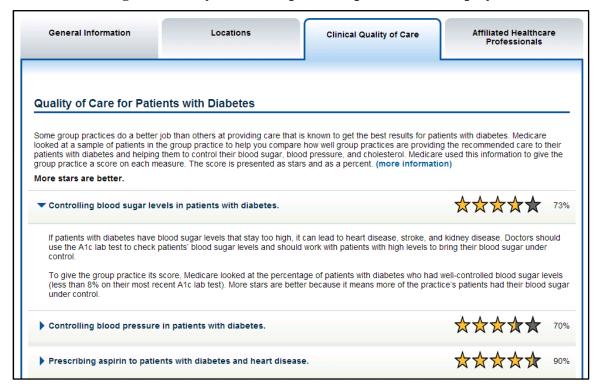


Figure 5.1: Physician Compare Sample Measure Display

Section 5.2.1 describes the intelligent search functionality in greater detail.

5.1.2 Other Physician Compare Information

To support consumers in locating and selecting health care professionals for the patient's medical needs, as of August 2014, Physician Compare offers the following information about physicians and other health care professionals, when possible or applicable:

- Names, addresses, and phone numbers;
- Primary and secondary specialties;
- Information on physicians and other health care professionals who are affiliated with a group practice, including their specialty;
- Clinical training information;
- Gender:
- Languages spoken, other than English;
- Hospital affiliation, which links to the hospital's profile on Hospital Compare;
- American Board of Medical Specialties Board Certification information;
- Whether physicians and other health care professionals accept Medicare Assignment;
- Indicator of satisfactory reporting under the 2012 PQRS Incentive Program;
- Indicator of group practices' satisfactory reporting under the 2012 PQRS GPRO;
- Indicator of successful e-prescribers under the 2012 Electronic Prescribing (eRx) Incentive Program; and,
- Indicator of successful program participants in the 2013 Electronic Health Record (EHR) Incentive Program.

5.2 Physician Compare Features

As of August 2014, CMS has incorporated a range of features to simplify navigation and improve the user's ability to locate and select physicians and other health care professionals within a geographic area. These features include the "Intelligent Search," "Map View," "Search Another Way" (i.e., the Body Part–Guided Search), and "Compare" feature for group practices. The remainder of this section describes each feature in turn.

5.2.1 Intelligent Search

The intelligent search functionality offers website users an intuitive and flexible way to search for information related to health care professionals of interest to them. To initiate a search, the user first enters the location of interest (e.g., ZIP Code) into a box located under the "Find Physicians and Other Health Care Professionals" or "Find Group Practices" tab (Figure 5.2) on the landing page. Next, the user is prompted to enter a search term, which could be a health care professional's name, a medical condition, symptom, medical procedure, body part, or even an organ system. Once the user enters the search term, the intelligent search functionality matches it to a database consisting of the names of approximately 900,000 physicians and other health care professionals who are enrolled in the Medicare program, 22,000 medical-related terms and phrases, and 57,000 search term-to-specialty linkages. The intelligent search returns results in the form of a list of health care professionals' names and health care specialties that are relevant to the user's search term, including the distance from the search location of each health care professional's practice location(s).



Figure 5.2: Physician Compare Intelligent Search Functionality

5.2.2 Map View

Users may be interested in searching for physicians or other health care professionals who are most conveniently located for the patient. To help users visualize health care professionals' office locations, Physician Compare offers the "Map View" feature. This feature provides users with a geographic depiction of search results by plotting the relevant search results on a map (Figure 5.3). To enable users to review search results in the desired format, the search results feature allows users to alternate between the map and list views.

Physician Compare Results 🔟 Accepts Medicare Assignment 🛛 🤁 May Accept Medicare Assignment There are 31 Healthcare Professionals related to "Family Go to List View Practice" within 15 miles of Chicago, IL, USA. Map Satellite Results List Modify Your Results ~ > View 1 - 20 of 31 41) General Information \$ Distance 🔞 KAI CLARK Specialties: Family Practice, + 0.76 Miles Internal Medicine 151 N MICHIGAN AVE CHICAGO, IL 60601 STREETERVILLE (773) 228-9806 Show All Locations EST SARFIELD Chicago Want to start a new search? Start New Search Burnham Park DOUGLAS (4) MCKINLEY PARK 41 SOUTH SIDE INDIAN VILLAGE W 51st St Map data @2014 Google Terms of Use Report a map error

Figure 5.3: Physician Compare Map View Functionality⁴⁵

Data presented in this figure are fictional and are intended for demonstration only.

5.2.3 Search Another Way—Body Part–Guided Search Functionality

Occasionally, users may not be familiar with medical terminology and may encounter difficulty inputting relevant search terms for the intelligent search box. To aid this group of users, Physician Compare offers the "Search Another Way" functionality (Figure 5.4), which guides users through a series of "point and click" steps to search for the physicians or health care professionals who would be most relevant, given the patient's health issues. To initiate a search under the Search Another Way tab, the user first identifies whether the patient is male, female, or a child. Next, the user selects the part of the body that is affected by the patient's health issue and the symptoms experienced in that part of the body. Based on the user's selections, the Search Another Way functionality generates a list of relevant specialties.

If the health issue affects more than one part of the patient's body or if the user does not know which body part is affected, the user is directed to use the intelligent search under the "Find Physicians and Other Healthcare Professionals" tab.

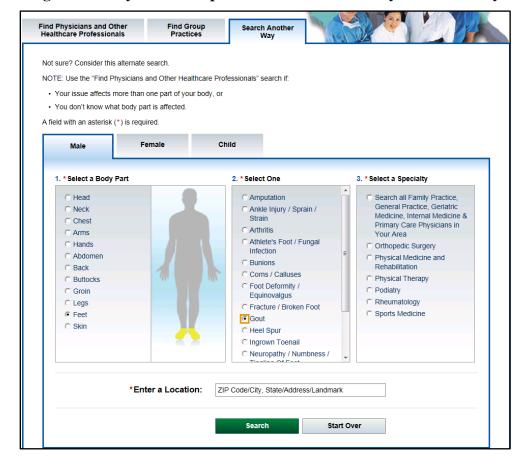


Figure 5.4: Physician Compare "Search Another Way" Functionality

5.2.4 Compare Feature for Group Practices

To help users decide which group practices would be suitable for the patient's health care needs, the website offers the "Compare" feature. The Compare feature allows users to conduct a side-by-side comparison of group practices (see Figure 5.5). Users can select up to three group practices and compare their information, including distance from the search location, specialty, Medicare assignment status, and group size (i.e., the number of health care professionals affiliated with the group practice).

Group Practice Compare Back to Results Print All Information General Information KEY UNIVERSITY FAMILY FAMILY MEDICINE OF CHICAGO INTERNISTS PRACTICE CHICAGO 151 N MICHIGAN AVE Accepts Medicare Assignment CHICAGO, IL 60601 345 F WACKER DR 230 F ONTARIO ST (773) 228-9806 CHICAGO II 60601 CHICAGO II 60611 May Accept Medicare Assignment (872) 582-3342 (312) 412-8000 Add to My Favorites Add to My Favorites Add to My Favorites Map and Directions Map and Directions 1.1 miles Distance 1.58 miles 0.76 miles Internal Medicine, Family Practice, General Practice, Obstetrics/Gynecology General Practice, Family Practice, Internal Medicine Specialty General Practice, Internal Medicine, Family Practice Medicare M M M **Assignment** Affiliated Healthcare Professionals View list of 2 Healthcare Professionals View list of 6 Healthcare Professionals View list of 6 Healthcare Professionals

Figure 5.5: Physician Compare Group Comparison Functionality 46

Please contact the Group Practice to verify information.

5.3 **Physician Compare Usage and Consumer Perceptions**

To understand how Physician Compare can better meet the information needs of health care consumers, CMS regularly analyzes the consumer usage and perceptions of the website and applies these insights to inform the development of new tools and features. Section 5.3.1 presents the website's traffic and usage patterns over time. Section 5.3.2 presents user perceptions of the website.

5.3.1 Website Usage Statistics

CMS uses Google Web Analytics to understand user experience. The remainder of this section describes the Physician Compare traffic and usage patterns through August 2014.

Data presented in this figure are fictional and are intended for demonstration only.

On average, Physician Compare receives about 140,000 visits each month. As shown in

Figure 5.6, website traffic spiked in October 2013 because of the open enrollment for Medicare beneficiaries. Website traffic declined during the holiday season in November and December 2013, and rose again with the addition of quality measures in early 2014.



Figure 5.6: Visits to Physician Compare, September 2013–August 2014

To increase the traffic to Physician Compare, CMS has worked to embed links to the Physician Compare website on other government websites, which in turn refer traffic to Physician Compare. Table 5.2 shows the top four referral websites in August 2014. Next Generation Desktop (NGD), which is the interface that Medicare customer service representatives use to assist beneficiaries who call 1-800-MEDICARE, is the website with the largest number of referrals to Physician Compare, followed by Answers.hhs.gov, CMS.gov, and Tricare.mil.

Referral Website	Number of Referrals	Percentage of Referrals
Prod.ngd.local	15,678	51
Answers.hhs.gov	2,973	10
CMS.gov	976	3
Tricare.mil	816	3

Table 5.2: Top Four Referral Websites for Physician Compare⁴⁷

It is important to note that referral tracking does not include visitors who were referred from any portion of the Medicare.gov site, since Physician Compare is a sub-site under that main website.

5.3.2 Website User Perceptions

Each month, CMS collects 300 to 1,000 responses from website users via the web-based voluntary survey (see Section 4.2.1). The web survey gathers feedback on the website, including information accuracy, comprehension, and website usability. The remainder of this section provides summary data on survey respondents' perceptions of the usability of the website.

Feedback from users about the Physician Compare website is very positive overall. As of August 2014, more than three-quarters of respondents agreed that they understood search options, terms, and definitions (

Figure 5.7). Feedback on website usability was collected using a scale from 1 to 5, where 1 is "very hard" and 5 is "very easy". Approximately three-quarters of respondents rated Physician Compare 3 out of 5 or better for ease of finding information and website navigation (see Figure 5.8).

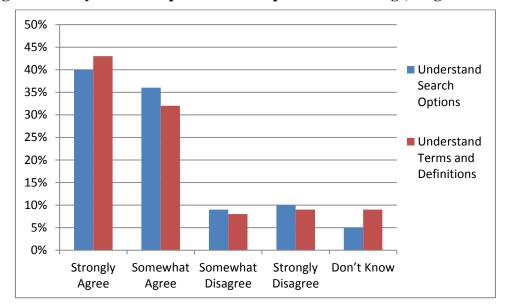
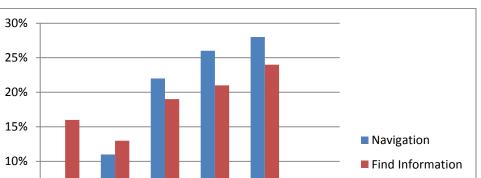


Figure 5.7: Physician Compare User Comprehension Ratings, August 2014



5%

0%

1

Very

Hard

2

3

4

5

Very

Easy

Don't

Know

Figure 5.8: Physician Compare Usability Ratings, August 2014

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6 PHYSICIAN COMPARE—GOING FORWARD

Since establishing Physician Compare in 2010, CMS has made significant progress in enhancing the website and building a strong foundation for reporting quality measures that support consumers' health care decisions. CMS has used extensive stakeholder feedback and consumer testing to guide the development of Physician Compare and has developed robust, secure, and streamlined processes for website and database development, testing, implementation, and operations. As a result, Physician Compare serves as the principal webbased source of information on physicians and other health care professionals who are currently enrolled in the Medicare program.

Going forward, Physician Compare will support CMS' overarching goals of creating greater consumer choice and health care transparency while encouraging health care professionals to improve the quality of care they provide to their patients.

CMS expects to continue engaging multiple stakeholder groups, including health care consumer and clinician groups, to inform the development of Physician Compare. Because Physician Compare is first and foremost a website that serves the information needs of health care consumers and their caregivers, CMS plans to continue to prioritize the needs of consumers in all future website development processes. Section 6.1 describes CMS' longer-term strategies for improving consumer decision-making and utilizing rulemaking to further implement the public reporting plan for Physician Compare. Section 6.2 outlines the anticipated features that would be added to Physician Compare to enhance the consumer experience.

6.1 Informing Consumers' Health Care Decision-Making

To enhance Physician Compare's capacity to support consumers' health care decision-making, CMS anticipates posting a broader range of measure information on Physician Compare. CMS will ensure that health care consumers and their caregivers can readily understand the quality measure information through development and testing of different measures display options (e.g., capturing several measures of care in a single, composite indicator of care quality). CMS will also consider developing geographic benchmarks to better enable consumers to compare clinicians within their geographic area and investigate the feasibility of posting on Physician Compare information on quality and cost indicators (e.g., quality relative to spending per beneficiary) and patients' out-of-pocket costs. Additionally, CMS will continue to align public reporting on Physician Compare with elements of the PQRS and consider adding non-PQRS data sources (e.g., clinical qualified data registries or specialty society registry data) to ensure that performance data publicly reported via Physician Compare are relevant to the needs of health care consumers and their caregivers.

CMS will continue to utilize the rulemaking process to detail the Physician Compare public reporting plan, propose measures, solicit comments from stakeholders, and further define options for implementing aspects of section 10331 of the ACA. As in the past, CMS plans to improve and develop Physician Compare with an eye toward broader health care quality improvement and systems transformation. It is CMS' goal for quality reporting through Physician Compare to continue to advance CMS' Quality Strategy goals and principles, such as the goal to strengthen person and family engagement as partners in their care, and the principle to strengthen infrastructure and data systems. Providing access to understandable information and decision support tools equips patients and their families to manage their health and navigate the health care delivery system. 48

6.2 Enhancing the Consumer Experience

CMS plans to continue to optimize usability of the Physician Compare website and enhance the website user experience by incorporating additional functionality and content over the next several years. CMS plans to explore improving the timeliness of data about physicians and other health care professionals and adding interactive website tools and more dynamic linkages with other Medicare.gov Compare websites. By improving usability and utility of Physician Compare, CMS aims to expand the website's potential to meet the needs of a greater number of Medicare beneficiaries and other consumers and improve the website's ability to support effective decision-making.

First, CMS plans to work toward offering close to rea-time data via Physician Compare to support health care decision-making that is based on the most up-to-date information about physicians and other health care professionals. Examples include close to rea-time physician directory information (e.g., phone numbers, office hours), information on whether particular physicians or other health care professionals accept new patients, the Medicare-approved payment amount, and updates to health care professionals' residency and education information. CMS also plans to continue to streamline the process of sourcing, reviewing, and publicly reporting measures so that health care consumers and their caregivers can benefit from having access to close to rea-time data.

Second, CMS anticipates developing additional website tools to enhance the user experience. To serve the information needs of consumers, CMS plans to develop interactive features that enable website users to manipulate and filter the data available on Physician Compare according to different clinician/practice characteristics. CMS will also evaluate the

Centers for Medicare & Medicaid Services. CMS Quality Strategy, 2013 – Beyond. Baltimore, MD: Centers for Medicare & Medicaid Services; 2013. http://cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/CMS-Quality-Strategy.html (accessed April 22, 2014).

feasibility of developing data linkages that enable consumers to "drill down" and "roll up" the data as appropriate (e.g., from group practice-level quality data to individual clinician-level quality data, and vice versa). Last, to support patients' transitional care planning, CMS plans to develop website tools that would assist health care consumers and their caregivers with navigating and using the range of measures information available across the Medicare.gov Compare websites.

6.3 Conclusion

CMS has made substantial progress in developing the Physician Compare website in the past several years and expects to continue to enhance Physician Compare's capacity to support consumers' health care decision-making while encouraging quality improvement on the part of health care professionals.

Quality measurement and reporting are key elements of the CMS Quality Strategy and Physician Compare is an important part of CMS' growing portfolio of information technology solutions that foster improvements in health and in health care quality and affordability.

APPENDIX A: SECTION 10331 OF THE PATIENT PROTECTION AND AFFORDABLE CARE ACT

Section 10331 of the Patient Protection and Affordable Care Act is included below:

SEC. 10331. PUBLIC REPORTING OF PERFORMANCE INFORMATION.

- (a) IN GENERAL.—
- (1) DEVELOPMENT.—Not later than January 1, 2011, the Secretary shall develop a Physician Compare Internet website with information on physicians enrolled in the Medicare program under section 1866(j) of the Social Security Act (42 U.S.C. 1395cc(j)) and other eligible professionals who participate in the Physician Quality Reporting Initiative under section 1848 of such Act (42 U.S.C. 1395w–4).
- (2) PLAN.—Not later than January 1, 2013, and with respect to reporting periods that begin no earlier than January 1, 2012, the Secretary shall also implement a plan for making publicly available through Physician Compare, consistent with subsection (c), information on physician performance that provides comparable information for the public on quality and patient experience measures with respect to physicians enrolled in the Medicare program under such section 1866(j). To the extent scientifically sound measures that are developed consistent with the requirements of this section are available, such information, to the extent practicable, shall include—
 - (A) measures collected under the Physician Quality Reporting Initiative;
 - (B) an assessment of patient health outcomes and the functional status of patients;
- (C) an assessment of the continuity and coordination of care and care transitions, including episodes of care and risk-adjusted resource use;
 - (D) an assessment of efficiency;
 - (E) an assessment of patient experience and patient, caregiver, and family engagement;
 - (F) an assessment of the safety, effectiveness, and timeliness of care; and
 - (G) other information as determined appropriate by the Secretary.
- (b) OTHER REQUIRED CONSIDERATIONS.—In developing and implementing the plan described in subsection (a)(2), the Secretary shall, to the extent practicable, include—
- (1) processes to assure that data made public, either by the Centers for Medicare & Medicaid Services or by other entities, is statistically valid and reliable, including risk adjustment mechanisms used by the Secretary;

- (2) processes by which a physician or other eligible professional whose performance on measures is being publicly reported has a reasonable opportunity, as determined by the Secretary, to review his or her individual results before they are made public;
- (3) processes by the Secretary to assure that the implementation of the plan and the data made available on Physician Compare provide a robust and accurate portrayal of a physician's performance;
- (4) data that reflects the care provided to all patients seen by physicians, under both the Medicare program and, to the extent practicable, other payers, to the extent such information would provide a more accurate portrayal of physician performance;
- (5) processes to ensure appropriate attribution of care when multiple physicians and other providers are involved in the care of a patient;
- (6) processes to ensure timely statistical performance feedback is provided to physicians concerning the data reported under any program subject to public reporting under this section; and
- (7) implementation of computer and data systems of the Centers for Medicare & Medicaid Services that support valid, reliable, and accurate public reporting activities authorized under this section.
- (c) ENSURING PATIENT PRIVACY.—The Secretary shall ensure that information on physician performance and patient experience is not disclosed under this section in a manner that violates sections 552 or 552a of title 5, United States Code, with regard to the privacy of individually identifiable health information.
- (d) FEEDBACK FROM MULTI-STAKEHOLDER GROUPS.—The Secretary shall take into consideration input provided by multi-stakeholder groups, consistent with sections 1890(b)(7) and 1890A of the Social Security Act, as added by section 3014 of this Act, in selecting quality measures for use under this section.
- (e) CONSIDERATION OF TRANSITION TO VALUE-BASED PURCHASING.— In developing the plan under this subsection (a)(2), the Secretary shall, as the Secretary determines appropriate, consider the plan to transition to a value-based purchasing program for physicians and other practitioners developed under section 131 of the Medicare Improvements for Patients and Providers Act of 2008 (Public Law 110–275).
- (f) REPORT TO CONGRESS.—Not later than January 1, 2015, the Secretary shall submit to Congress a report on the Physician Compare Internet website developed under subsection (a)(1). Such report shall include information on the efforts of and plans made by the Secretary to collect and publish data on physician quality and efficiency and on patient

experience of care in support of value-based purchasing and consumer choice, together with recommendations for such legislation and administrative action as the Secretary determines appropriate.

- (g) EXPANSION.—At any time before the date on which the report is submitted under subsection (f), the Secretary may expand (including expansion to other providers of services and suppliers under title XVIII of the Social Security Act) the information made available on such website.
- (h) FINANCIAL INCENTIVES TO ENCOURAGE CONSUMERS TO CHOOSE HIGH QUALITY PROVIDERS.—The Secretary may establish a demonstration program, not later than January 1, 2019, to provide financial incentives to Medicare beneficiaries who are furnished services by high quality physicians, as determined by the Secretary based on factors in subparagraphs (A) through (G) of subsection (a)(2). In no case may Medicare beneficiaries be required to pay increased premiums or cost sharing or be subject to a reduction in benefits under title XVIII of the Social Security Act as a result of such demonstration program. The Secretary shall ensure that any such demonstration program does not disadvantage those beneficiaries without reasonable access to high performing physicians or create financial inequities under such title.
 - (i) DEFINITIONS.—In this section:
- (1) ELIGIBLE PROFESSIONAL.—The term "eligible professional" has the meaning given that term for purposes of the Physician Quality Reporting Initiative under section 1848 of the Social Security Act (42 U.S.C. 1395w–4).
- (2) PHYSICIAN.—The term "physician" has the meaning given that term in section 1861(r) of such Act (42 U.S.C. 1395x(r)).
- (3) PHYSICIAN COMPARE.—The term "Physician Compare" means the Internet website developed under subsection (a)(1).
- (4) SECRETARY.—The term "Secretary" means the Secretary of Health and Human Services.

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APPENDIX B: GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ACA Patient Protection and Affordable Care Act

ACE Angiotensin-converting enzyme

ACO Accountable care organization

AMA-PCPI American Medical Association – Physician Consortium for Performance

Improvement

ARB Angiotensin receptor blocker

CCSQ Center of Clinical Standards and Quality

CG-CAHPS Consumer Assessment of Healthcare Providers and Systems, Clinician

and Group Surveys

CAD Coronary artery disease

CMS Centers for Medicare & Medicaid Services

DM Diabetes mellitus

EHR Electronic health record

eRx Electronic Prescribing

FFS Fee-for-Service

GPRO Group Practice Reporting Option

HHS Department of Health and Human Services

HIPAA Health Insurance Portability and Accountability Act

MAP Measures Application Partnership

MNCM Minnesota Community Measurement

NCQA National Committee for Quality Assurance

NPI National Provider Identifier

ODF Open Door Forum

PECOS Provider Enrollment, Chain, and Ownership System

PFS Physician Fee Schedule

PGP Physician Group Practice

PII Personally Identifiable Information

PQRI Physician Quality Reporting Initiative

PQRS Physician Quality Reporting System

QRURs Quality and Resource Use Reports

TEP Technical Expert Panel

TIN Taxpayer Identification Number

UAT User acceptance testing

VBP Value-based purchasing