

United States Government Accountability Office Report to Congressional Requesters

October 2014

# HEALTH CARE TRANSPARENCY

Actions Needed to Improve Cost and Quality Information for Consumers

## GAO Highlights

Highlights of GAO-15-11, a report to congressional requesters

### Why GAO Did This Study

The cost and quality of health care services can vary significantly, with high cost not necessarily indicating high quality. As consumers pay for a growing proportion of their care, they have an increased need for cost and quality information before they receive care, so they can plan and make informed decisions. Transparency tools can provide such information to consumers and others.

GAO was asked to study cost and quality information for consumers. This report examines (1) information on cost and quality available to consumers from selected transparency tools, (2) characteristics of effective transparency tools, (3) limitations, if any, in the effectiveness of CMS transparency tools, and (4) CMS efforts to expand cost and quality information available through transparency tools. GAO analyzed information from two private toolsselected because they had both cost and quality information-and CMS's five transparency tools, reviewed research to identify best practices for conveying information to consumers, interviewed CMS and HHS officials and subject matter expects, and reviewed CMS and HHS planning documents and relevant criteria for effective planning in the federal government.

#### What GAO Recommends

GAO recommends that HHS's CMS take steps to improve the information in its transparency tools and develop procedures and metrics to ensure that tools address consumers' needs. HHS concurred with the recommendations and provided technical comments that were incorporated as appropriate.

View GAO-15-11. For more information, contact Linda T. Kohn at (202) 512-7114 or kohnl@gao.gov.

### HEALTH CARE TRANSPARENCY

## Actions Needed to Improve Cost and Quality Information for Consumers

### What GAO Found

Results obtained from two selected private consumer transparency tools GAO reviewed—websites with health cost or quality information comparing different health care providers—show that some providers are paid thousands of dollars more than others for the same service in the same geographic area, regardless of the quality of such services. For example, the cost for maternity care at selected acute care hospitals in Boston, all of which rated highly on several quality indicators, ranged between \$6,834 and \$21,554 in July 2014.

Transparency tools are most effective if they provide information relevant to consumers and convey information in a way that consumers can readily understand. GAO identified key characteristics of effective transparency tools through a literature review and interviews with experts. The information that is most relevant to consumers relates directly to their personal circumstances, such as information on specific procedures they are considering, and allows them to make meaningful distinctions among providers based on their performance. Characteristics of such relevant information include describing key differences in quality of care and costs, particularly for what consumers are likely to pay out of pocket based on their specific circumstances. In addition, effective transparency tools must take specific steps to make the information they present understandable by consumers. For example, tools must enable consumers to discern patterns by summarizing related information and allowing consumers to customize information to focus on what is most relevant to them.

The Centers for Medicare & Medicaid Services (CMS) operates five transparency tools—Nursing Home Compare, Dialysis Facility Compare, Home Health Compare, Hospital Compare and Physician Compare—that are limited in their provision of relevant and understandable cost and quality information for consumers. In particular, GAO found that the tools lack relevant information on cost and provide limited information on key differences in quality of care, which hinders consumers' ability to make meaningful distinctions among providers based on their performance. Because none of the tools contain information on patients' out-of-pocket costs, they do not allow consumers to combine cost and quality information to assess the value of health care services or anticipate the cost of such services in advance. Additionally, GAO found substantial limitations in how the CMS tools present information, such as, in general, not using clear language and symbols, not summarizing and organizing information to highlight patterns, and not enabling consumers to customize how information is presented.

CMS, part of the Department of Health and Human Services (HHS), has taken some steps to expand access to cost and quality information for consumers, but has not established procedures or metrics to ensure the information it collects and reports meets consumer needs. Both HHS and CMS have set goals to report on measures that meet consumer needs. However, CMS's process for developing and selecting cost and quality measures for its tools has been heavily influenced by the concerns of providers rather than consumers. Without procedures or metrics focusing on consumer needs, CMS cannot ensure that these efforts will produce cost and quality information that is relevant and understandable to consumers seeking to make meaningful distinctions.

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#### Abbreviations

AHRQ APCD ASC CMS GPRAMA	Agency for Healthcare Research and Quality All-payer-claims database ambulatory surgical center Centers for Medicare & Medicaid Services Government Performance and Results Act Modernization Act of 2010
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HHS IRF IT MAP MRI PPACA ResDAC QE	Department of Health and Human Services inpatient rehabilitation facility information technology Measure Applications Partnership magnetic resonance imaging Patient Protection and Affordable Care Act Research Data Assistance Center Qualified Entity

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U.S. GOVERNMENT ACCOUNTABILITY OFFICE

441 G St. N.W. Washington, DC 20548

October 20, 2014

**Congressional Requesters** 

The cost and quality of health care services can vary significantly, with evidence suggesting that more expensive health care services are not necessarily higher in quality. Providers, such as hospitals or physicians, may be paid two or three times more than similar providers for the same health care services, without delivering higher quality of care.<sup>1</sup> At the same time, a growing proportion of health care costs are being paid by consumers. Consumers without health insurance are generally responsible for paying what the provider charges, rather than discounted rates negotiated by insurance companies, while those with insurance also face increased costs, as use of high-deductible health plans and other forms of cost sharing have increased. In particular, consumers whose out-of-pocket costs are based on a percentage of the total cost of care can be especially affected by cost variations.<sup>2</sup> Consumers may also face fees associated with care received from physicians, laboratories, or hospitals that are outside of an insurance network and bill for their services separately.

As consumers are asked to pay more for their care, they run the risk of obtaining care from high-cost providers without receiving the highest quality care. Therefore, consumers have an increased need for transparent information on cost and quality before they receive care, so they can make informed decisions when choosing treatments and providers. Even when not faced with these decisions, consumers can use such information to better anticipate and plan for expenses. Together, information on both cost and quality enables consumers to assess the

<sup>&</sup>lt;sup>1</sup>See Massachusetts Attorney General, *Examination of Health Care Cost Trends and Cost Drivers* (Boston, Mass.: 2011); Institute of Medicine, *Variation in Health Care Spending: Target Decision Making, Not Geography* (Washington, D.C.: 2013); and P.S. Hussey, S. Wertheimer, and A. Mehrotra, "The Association between Health Care Quality and Cost: A Systematic Review," *Annals of Internal Medicine*, vol. 158, no. 1 (2013).

<sup>&</sup>lt;sup>2</sup>For example, Medicare patients are typically responsible for 20 percent of the costs of the physician services that they receive, after they meet their annual deductible. On average, out-of-pocket costs for Medicare beneficiaries on medical and long-term care services amounted to \$2,744 per year in 2010. See J. Cubanski, et al., *How Much Is Enough? Out-of-Pocket Spending Among Medicare Beneficiaries: A Chartbook*, Kaiser Family Foundation (Menlo Park, Calif.: July 2014).

value of health care services, for example by comparing costs within a group of providers determined to be of high quality. Research suggests that this transparent information is most relevant for services that can be planned in advance, so consumers have time to consider it.<sup>3</sup> We have previously found that this transparent information on cost and quality is difficult for consumers to obtain, and that the information that is available is not always meaningful to consumers.<sup>4</sup>

Transparency tools—websites with health cost or quality information comparing different providers of health care services—are one way that the Department of Health and Human Services (HHS) and other organizations provide this information to consumers and other users. HHS both publishes its own transparency tools and shares data on cost and quality that other public or private entities can use in their transparency tools. Specifically, HHS publishes transparency tools through its Centers for Medicare & Medicaid Services (CMS), such as its series of Compare websites for hospitals, nursing homes, and certain other providers that participate in the Medicare program.

In light of variations in cost and quality and consumers' increased need for transparent information prior to receiving health care, you asked us to study the cost and quality information available to consumers. This report examines

- 1. information on cost and quality available to consumers for selected health care services from selected private transparency tools,
- 2. characteristics of effective transparency tools,
- limitations, if any, in the effectiveness of CMS transparency tools in providing cost and quality information about providers to consumers, and

<sup>&</sup>lt;sup>3</sup>For example, to assist decision making, research suggests that health care price transparency is most relevant for consumers who are having services that are nonurgent, such as a knee replacement, or not complex, such as a colonoscopy. See, for example, Paul Ginsburg. "Shopping for Price in Medical Care," *Health Affairs*, vol. 26, no. 2 (2007).

<sup>&</sup>lt;sup>4</sup>GAO, Health Care Price Transparency: Meaningful Price Information is Difficult for Consumers to Obtain Prior to Receiving Care, GAO-11-791 (Washington, D.C.: 2011); GAO, Nursing Homes: CMS Needs Milestones and Timelines to Ensure Goals for the Five-Star Quality Rating System Are Met, GAO-12-390 (Washington, D.C.: 2012).

4. CMS efforts to expand cost and quality information that could be made available to consumers through transparency tools.

To examine information on cost and quality available to consumers for selected health care services from selected private transparency tools. we obtained examples of information from the transparency tools of a health insurer and Castlight Health, a third-party vendor.<sup>5</sup> We selected these tools based on their capacity to provide consumer-relevant cost information on services that could be planned in advance, as well as some related information on quality of care. Within these tools, we selected services, provider types, and geographic locations based on each tool's ability to provide cost and quality information for those services, provider types, and locations. The selected services were: laparoscopic gallbladder surgery, magnetic resonance imaging (MRI) of the lower back, and maternity care. The selected providers were: ambulatory surgical centers (ASC), hospital outpatient departments, and acute care hospitals. The selected locations were: Boston (Massachusetts), Indianapolis (Indiana), and Denver (Colorado). Both the health insurer and Castlight provided cost information based on an insurance plan common for their customers.<sup>6</sup> We reviewed related documentation and interviewed knowledgeable company officials, and determined that the data were sufficiently reliable for our purposes. The findings from these transparency tools cannot be generalized to other tools. To determine the availability to consumers of cost and quality data in the absence of transparency tools, we directly contacted 24 randomly selected ASCs and hospital outpatient departments in Minneapolis (Minnesota) and Portland (Oregon) health care markets by telephone.<sup>7</sup> We selected these locations because each of these states had cost and guality initiatives to provide information to consumers, and each market

<sup>7</sup>We contacted each provider up to three times in an attempt to get a response between May 28 and July 7, 2014.

<sup>&</sup>lt;sup>5</sup>Castlight serves employers who provide cost and quality health information to their employees.

<sup>&</sup>lt;sup>6</sup>The health insurer provided estimates based on a point-of-service, high-deductible plan offered by employers. Castlight provided estimates based on a standard health plan with a \$2,000 deductible, \$5,000 out-of-pocket maximum, 100 percent coverage for certain preventive services, and 80 percent in-network coverage after application of the deductible. A point-of-service plan is a hybrid of a preferred provider organization plan and a health maintenance organization plan. It resembles a health maintenance organization plan for in-network services, and services received outside of the network are usually reimbursed based on a fee schedule or usual and customary charges.

had the largest number of hospitals in those states.<sup>8</sup> During the calls we requested the cost of two services for an uninsured patient—an inguinal hernia repair and a diagnostic colonoscopy, as well as requested any quality information available for the service or facility. These two services were selected because each could be planned in advance and is commonly performed in an ambulatory setting. We did not assess the accuracy of the cost and quality information provided by these selected providers.

To examine characteristics of effective transparency tools, we reviewed the literature on best practices for conveying cost and quality information to consumers and interviewed subject matter experts. We searched multiple online databases to identify relevant articles and reports published from 2008 to 2013,<sup>9</sup> the most recent available at the time of our work. We also identified nine researchers as experts on the basis of their publications and other activities in the area of communicating cost and quality information to consumers. Six of these experts provided their perspectives in interviews. We synthesized our literature review and interviews into a draft description of key characteristics of effective transparency tools, and then obtained comments from the remaining three consumer transparency experts and revised the description of the characteristics as appropriate.

<sup>&</sup>lt;sup>8</sup>We used hospital referral regions, as defined by the Dartmouth Atlas of Health Care, to identify these regional health care markets. We randomly selected ASCs and hospitals to contact from the National Provider Identifier Registry.

Minnesota's transparency tools include: Minnesota Hospital Price Check, Minnesota HealthScores, Minnesota Nursing Home Report Card, and Minnesota Community Measurement Health Care Quality Report. Oregon's transparency tools include: Oregon PricePoint, Compare Hospital Costs, and Partner for Quality Care. We also selected Minnesota because it requires providers to make estimated costs of treatment and estimated costs that must be paid by the patient available upon request. See Minn. Stat. §§ 62J.81-62J.823.

<sup>&</sup>lt;sup>9</sup>Databases we searched included the ABI/Inform Professional Advanced; Allied & Complementary Medicine; BIOSIS Previews; British Library Inside Conferences; British Nursing Index; Embase; Emcare; Gale Group Health Periodicals Database; HSELINE: Health and Safety; Incidence & Prevalence; International Pharmaceutical Abstracts; King's Fund; MEDLINE; National Technical Information Service; Public Affairs Information Service International; PsycINFO; SciSearch; Social SciSearch; ProQuest; and Web of Science.

To examine the limitations, if any, in the effectiveness of CMS transparency tools in providing cost and quality information about providers to consumers, we identified five CMS transparency tools that provide comparative cost or quality information about providers: Hospital Compare, Nursing Home Compare, Dialysis Facility Compare, Home Health Compare, and Physician Compare. We then reviewed each tool to determine the extent to which it had characteristics of effective transparency tools, using the list we identified in our second objective. We interviewed CMS officials responsible for planning, developing and testing the HHS transparency tools, and reviewed HHS documentation on the process for developing the tools and HHS's future plans for improving the tools.

To examine CMS efforts to expand cost and quality information available to consumers through transparency tools, we interviewed CMS and HHS officials with oversight and involvement in public reporting and CMS transparency initiatives, including officials who develop and maintain CMS's Compare websites. We also reviewed HHS strategic planning documents related to health care quality and public reporting, and reviewed relevant criteria from the Government Performance and Results Act Modernization Act of 2010 (GPRAMA) as incorporated in our guidance on assessing performance.<sup>10</sup> We then interviewed consumer transparency experts, as noted above, and officials representing privateand state-sponsored organizations that use CMS data in their transparency tools to identify CMS and other HHS agency actions that could help to expand information available to consumers. Because our study focused on CMS's efforts to promote transparency for consumers, we did not examine other factors affecting access to cost and quality information, such as barriers to obtaining information on payment rates negotiated between individual providers and private sector payers.<sup>11</sup>

We conducted this performance audit from December 2013 to October 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to

<sup>&</sup>lt;sup>10</sup>See Pub. L. No. 111-352, 124 Stat. 3866 (2011). GPRAMA amends the *Government Performance and Results Act of 1993*, Pub. L. No. 103-62, 107 Stat. 285 (1993); GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act,* GAO/GGD-96-118 (Washington, D.C.: June 1996).

<sup>&</sup>lt;sup>11</sup>See GAO-11-791 for more information on these other factors affecting access to cost and quality information.

	obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.
Background	Transparency tools are a way to make information on health care cost and quality transparent to consumers and others, and are a key part of HHS's strategy to improve the quality and affordability of health care.
Information on Health Care Cost and Quality	There are multiple ways to assess the cost of health care. For example, cost can be measured based on the amount of money providers set as a "charge" for various individual services, but these charges typically do not represent the actual amounts paid by insurers or consumers. The cost that an insured consumer is responsible for paying to receive services is called an out-of-pocket cost, which depends on the consumer's individual provider choices and insurance benefit design. <sup>12</sup> In addition, any given episode of care usually involves payments to multiple providers (e.g., surgeons, anesthesiologists, pathologists, etc.), facility fees, and other ancillary fees, and any given cost figure may or may not represent the total costs for an episode of care by including all of these expenses. There also are a variety of different types of clinical quality measures—standard, evidence-based metrics used to assess the performance of health care providers—that address different aspects of quality. According to HHS's Agency for Healthcare Research and Quality's (AHRQ) National Quality Measures Clearinghouse, types of quality measures include, (1) structure, (2) process, (3) outcome, and (4) patient experience of care. <sup>13</sup> (See table 1 for a description of types of quality measures.)
	<sup>12</sup> For insured consumers, out-of-pocket payment typically includes copayments, coinsurance, and deductibles, which are affected by a number of variables such as the use of out-of-network providers.
	<sup>13</sup> For a description of the quality measure categories, see Agency for Healthcare

Research and Quality, National Quality Measures Clearinghouse, http://www.qualitymeasures.ahrq.gov/tutorial/varieties.aspx, accessed August 5, 2014. The National Quality Measures Clearinghouse also includes other types of clinical quality measures, such as access measures, which measure a patient's ability to attain timely and appropriate care.

Measure type	Description	Examples
Structural	Reflect the conditions in which providers care for patients.	Measures about staffing levels or the volume of procedures performed by a provider.
Process	Show whether steps, or processes of care, that have been proven to benefit patients are followed correctly.	Measures that indicate whether an action was completed—such as writing a prescription, administering a drug, or having a conversation.
Outcome	Report the actual results of care.	Measures that indicate a change in patient health status, such as lower blood pressure for a patient who is hypertensive.
Patient experience	Record patients' perspectives on their care.	Measures based on patient reports on their care, often obtained through surveys, such as patient responses to a question about whether their pain was always well controlled during a hospital stay.

#### Table 1: Types of Health Care Quality Measures

Source: National Quality Measures Clearinghouse and National Quality Forum. | GAO-15-11

Quality measures of each type vary greatly in their breadth. Some focus on overarching assessments of quality, such as asking patients if they would recommend a hospital where they had recently been treated, while other quality measures have a much more narrow focus, for example, addressing a single step in a process of care. Researchers have developed techniques for consolidating information from many separate but related narrowly focused quality measures into broader assessments. These are called summary measures or composite measures.

The data used to apply these different types of cost and quality measures can come from a number of sources. Clinical data extracted from medical records can provide important clinical details needed to more fully adjust provider performance assessments for differences in the severity of illness of the patients that they treat-a process known as risk adjustment-but such data are typically costly and time-consuming to collect. By contrast, claims data-also known as billing or administrative data-are already collected to process provider payments, and therefore are more readily available for a large number of patients. However, because claims data are collected for payment purposes, they contain only a limited set of information relevant for quality measures or for making risk adjustments. Finally, patients can be asked directly to report on their experiences of the care they received and the outcomes of their care that relate to their functional abilities, such as their ability to descend stairs. Outcome measures based on these reports are known as patientreported outcomes.

HHS's National Quality Strategy	In March 2011, HHS first published its National Strategy for Quality Improvement in Health Care (the National Quality Strategy), as required by the Patient Protection and Affordable Care Act (PPACA). <sup>14</sup> The National Quality Strategy builds on priorities HHS previously identified in its strategic plan for fiscal years 2010-2015, which emphasize the need for transparent information to give consumers the means to make more informed choices about their health care. Two of the National Quality Strategy's overarching goals—better care and affordable care—relate to health care cost and quality transparency. According to the strategy, to achieve better care, patients must be given access to understandable information and decision support tools that help them manage their health and navigate the health care delivery system. To achieve affordable care, systems must be created to make health care cost and quality more transparent to consumers and providers, so they can make better choices and decisions. The strategy also focuses on coordinating and aligning efforts across the public and private sectors, for example by establishing an aligned set of common cost and quality measures by which to assess how well providers and programs support effective care.
HHS's Role in Establishing Transparency Tools	As part of its efforts to foster greater transparency of information, HHS developed transparency tools for consumers focused on quality, some of which predate PPACA and the development of the National Quality Strategy. Between 1998 and 2010, HHS—through CMS—launched five Compare websites to publicly report certain information, including quality information, based on data submitted by different types of providers participating in the Medicare program (see table 2). For some, but not all,

<sup>&</sup>lt;sup>14</sup>Section 3011 of PPACA required the Secretary of the Department of Health and Human Services to establish a national quality strategy, including a comprehensive strategic plan and the identification of priorities to improve the delivery of health care services, patient health outcomes, and population health. PPACA requires that the strategy be developed using a transparent and collaborative process and must include provisions for: (1) agencyspecific plans and benchmarks; (2) coordination among agencies; (3) strategies to align public and private payers; and (4) alignment with meaningful use of health information technology (IT).

of these provider types, HHS is required to publicly report certain information about provider performance.<sup>15</sup>

## Table 2: Existing and Expected Future Transparency Tools of the Centers for Medicare & Medicaid Services (CMS)

Tool name	Date launched
Nursing Home Compare	1998
Dialysis Facility Compare	2001
Home Health Compare	2005
Hospital Compare	2005
Physician Compare	2010 <sup>a</sup>
Hospice Quality Reporting	Under development
Inpatient Rehabilitation Facility (IRF) Quality Reporting	Under development
Long-term Acute Care Hospital Quality Reporting	Under development

Source: HHS. | GAO-15-11

<sup>a</sup>Physician Compare currently provides quality information related to management of diabetes and heart disease for 66 physician groups and 141 Accountable Care Organizations. CMS has plans to add additional information to that tool by 2015.

HHS—primarily through AHRQ—also plays a role in research and dissemination of information on consumer-focused public reporting. AHRQ has supported the research and publication of numerous papers that lay out best practices for public reporting of cost and quality information to consumers and has widely shared the expertise contained

<sup>&</sup>lt;sup>15</sup>HHS's reporting programs and responsibilities vary, including whether specific information is required to be posted on the Compare websites. In some cases, PPACA either created the reporting program or required the establishment of the website, but in other cases, the reporting program or website was preexisting. For example, section 3001 of PPACA established the Hospital Value Based Purchasing Program under which valuebased incentive payments are made to hospitals that meet performance standards. Section 3001 requires that HHS post information regarding the performance of individual hospitals under the program on the preexisting Hospital Compare website. The Medicare Plan Finder is another CMS transparency tool that allows consumers to compare Medicare health, prescription drug, and supplemental health insurance policies based on various characteristics, including some information about the costs and quality of the plans. Similarly, CMS launched the Health Insurance Marketplace tool in 2013, which compares costs for commercial insurance plans with plans to add quality ratings starting in 2016. These tools are not included in our report, because they compare insurance products rather than comparing the cost and quality of health care providers.

in that research through various forums, such as conferences and webinars that support wider transparency efforts.<sup>16</sup>

Other Entities?		
Other Entities' Transparency Tools	A variety of private sector entities have developed transparency tools that provide cost and quality information to consumers, including health insurance carriers, third-party vendors, and regional collaboratives. These private-sector tools allow consumers to obtain personalized cost estimates, compare different providers, or estimate their out-of-pocket costs before receiving a service. For example, many health plans offer tools that provide cost estimates to enrolled members. <sup>17</sup> Researchers calculated that approximately 70 percent of the privately insured population had access to cost transparency tools in 2013. <sup>18</sup> In addition to	
	tools provided directly by health plans, employers may contract with third- party vendors to provide transparency tools for their employees. <sup>19</sup> Health plans and third-party vendors frequently offer some quality information along with cost estimates to their enrolled members. Often this information is derived from data reported by CMS on its Compare sites and may be combined with additional quality information obtained from a variety of sources that collect and report data on provider quality. <sup>20</sup>	

<sup>18</sup>See Westhealth Policy Analysis, *Healthcare Price Transparency: Policy Approaches and Estimated Impacts on Spending* (Washington, D.C.: Westhealth Policy Center, 2014), 6.

<sup>19</sup>Castlight, Change Healthcare, and Health Care Blue Book are examples of third-party vendors.

<sup>20</sup>For example, Castlight reported that some of its quality information comes from LeapFrog, another private entity that collects quality information primarily on hospitals.

<sup>&</sup>lt;sup>16</sup>See for example, Agency for Healthcare Research and Quality, *Best Practices in Public Reporting No. 1: How To Effectively Present Health Care Performance Data To Consumers*, AHRQ Pub. No. 10-0082-EF, (Rockville, Md.: June 2010). AHRQ also has several programs designed to support states, private entities, and others that provide cost and quality information to consumers, and funds research on public reporting.

<sup>&</sup>lt;sup>17</sup>For example, Aetna, Cigna, Humana, and UnitedHealthcare, as well as the Blue Cross plans Anthem and Health Care Services Corp., among others, all have cost transparency tools either developed internally or contracted through a third-party vendor.

	Several states also have developed transparency tools. <sup>21</sup> Unlike health plans and third-party vendors, state tools can be accessed by the general public and are not restricted to members who pay or enroll for services, giving the uninsured access to cost and quality information. Like the private-sector tools, state tools generally draw on quality information from CMS in combination with information from other sources.
Information from Two Selected Consumer Transparency Tools Consistently Demonstrated Substantial Cost Variation Regardless of Quality for Certain Services	The two selected consumer transparency tools we reviewed show that some providers are paid thousands of dollars more than others for the same service in the same geographic area, regardless of the quality of such services. Specifically, we found this variation in cost to be present across multiple services, settings, and geographic areas in the information provided by the transparency tools of two different entities (a health insurer and Castlight) that we reviewed. For example, the health insurer reported that in the Denver area, the estimated total cost of a laparoscopic gallbladder surgery in selected ASCs ranged between \$3,281 and \$18,770 (consumers would pay between \$3,281 and \$6,954 in estimated out-of-pocket costs) in July 2014. Meanwhile, for the same time period, the health insurer reported that the estimated total cost for the same service in selected hospital outpatient departments in the Denver area ranged from \$17,791 to \$40,626 (consumers would pay between \$6,758 and \$11,325 in estimated out-of-pocket costs). <sup>22</sup> Similarly, Castlight reported, in May 2014, that for an MRI of the lower back at selected acute care hospitals in the Indianapolis, Indiana area, the estimated total cost ranged between \$277 and \$2,637 in

<sup>&</sup>lt;sup>21</sup>For example, 11 states have developed tools using data collected through all-payerclaims databases (APCD), and 6 additional states have plans to launch similar efforts. APCDs are large-scale databases that systematically collect medical, pharmacy, and in some cases, dental, claims, and eligibility and provider files from private and public payers to be used for multiple purposes, such as to assess the impact of health care reforms or to report cost and quality information to consumers.

<sup>&</sup>lt;sup>22</sup>The estimated total costs provided by the health insurer include facility, physician, and anesthesia fees. The estimated out-of-pocket costs provided by the health insurer are what a consumer would pay if enrolled in one of its self-insured point-of-service, high deductible health plan—a common benefit plan for the insurer.

estimated out-of-pocket costs).<sup>23</sup> (See app. I for more examples of the variation in information we obtained from selected consumer transparency tools.)

Information from the two selected transparency tools indicates that the observed cost variation is not tied to variations in guality, regardless of the treatment and geographic area. For example, according to information obtained from Castlight, the estimated total cost of maternity care at selected acute care hospitals in the Boston area that rated more highly on several guality indicators ranged between \$6,834 and \$21,554 (consumers would pay between \$2,967 and \$5,000 in estimated out-ofpocket costs).<sup>24</sup> Likewise, information from the health insurer for a laparoscopic gallbladder surgery showed that a number of hospital outpatient departments in the Denver area that rated more highly on several quality indicators had lower total costs than other hospital outpatient departments that rated less highly on quality.<sup>25</sup> These examples are particularly relevant as researchers have found that many consumers assume that all providers offer good quality care, while others have the misconception that higher-cost providers will provide higher guality of care than lower-cost providers.

Without these transparency tools, which we selected based on their ability to provide consumer-relevant cost and quality information, it would not be easy for consumers to obtain this information directly from providers. Specifically, our effort to gather cost and quality information by calling selected providers directly—as an average consumer might—demonstrated the difficulty of obtaining this type of information without the

<sup>&</sup>lt;sup>23</sup>The estimated total costs provided by Castlight include a standard MRI, radiologist's fee, facility fee, reading and interpretation of the MRI. The estimated out-of-pocket costs provided by Castlight are what a consumer would pay if enrolled in a health plan with a \$2,000 deductible, \$5,000 out-of-pocket maximum, 100 percent coverage for preventive services, and 80 percent in-network coverage after application of the deductible—a common benefit plan for employers that use this third-party vendor.

<sup>&</sup>lt;sup>24</sup>The quality indicators provided by Castlight for maternity care include the percent of pregnancies for which the baby is delivered at the appropriate developmental age, using an appropriate delivery method, and recommended processes of care.

<sup>&</sup>lt;sup>25</sup>The quality measures provided by the health insurer for a gall bladder surgery include hospitals overall performance in keeping patients safe from preventable harm and medical errors and patients experiences with the hospital overall. These measures apply to inpatient care overall, and none are based on information relating to outpatient care or specifically to gall bladder surgery.

assistance of consumer transparency tools.<sup>26</sup> Of the 24 ASCs and hospitals we contacted to inquire about the cost of an inguinal hernia repair and diagnostic colonoscopy for an uninsured patient in the Portland, Oregon, and Minneapolis, Minnesota health care markets locations selected because they have initiatives to promote transparency—we received limited cost information from 54 percent (13) and quality information from 29 percent (7) (see table 3).

### Table 3: Information Obtained through Telephoning Selected Ambulatory Surgical Centers and Hospital Outpatient Departments

Information obtained from telephoning selected providers	Number of providers
Only cost information	9
Only quality information	3
Both cost and quality information	4
No cost and quality information	8
Total	24

Source: GAO. | GAO-15-11

Note: We contacted 24 providers between May and July 2014 to obtain cost and quality information for an inguinal hernia repair and diagnostic colonoscopy for an uninsured patient at their facility.

Only 5 of the 13 ASCs and hospitals that provided cost estimates were able to estimate the total cost, including all of the facility, physician, anesthesia and other costs involved. The quality information we received was highly disparate across the providers, which precluded making valid comparisons among providers on the basis of quality. Therefore, despite receiving both cost and quality information from some of the ASCs and hospitals we contacted, it was not possible to assess these providers in terms of both cost and quality. Our experiences receiving limited cost and quality information in two locations that have adopted specific initiatives to promote cost and quality transparency—as well as researchers' experiences in different locations—suggest that consumers in other locations would face similar difficulties when calling providers for such

<sup>&</sup>lt;sup>26</sup>The results of anonymously calling selected providers in Portland, Oregon and Minneapolis, Minnesota, yielded similar results to our efforts to obtain cost information from selected hospitals and primary care physicians for selected services in Denver, Colorado, which we reported in our 2011 report. See GAO-11-791.

from calling selected providers.) Transparency tools are most effective if they both provide information Effective relevant to consumers and convey that information in a way that **Transparency Tools** consumers can readily understand. Provide Cost and **Quality Information** That Is Relevant and Understandable to Consumers Effective Transparency The information on cost and quality that consumers find relevant makes **Tools Provide Information** up just a portion of the information available for inclusion in transparency tools. For example, research shows that most consumers do not find the Relevant to Consumers information derived from many specific process-of-care measures that clinicians have developed and used to guide guality improvement efforts useful. Rather, consumers are most likely to respond to information that applies to their personal circumstances, including, for example, information on the specific procedures consumers are considering, on providers who would be available to perform those procedures, and on cost estimates that take account of their particular insurance coverage. Consumers also seek information that helps them to make meaningful distinctions among providers in terms of cost and quality. The research we reviewed has found that consumers value quality measures that show differences in clinical outcomes and patient experiences, and cost measures that show differences in out-of-pocket expenses. In addition, consumers want to know the source of cost and quality information

information.<sup>27</sup> (See app. 1 for more examples of the variation we obtained

<sup>&</sup>lt;sup>27</sup>See GAO-11-791, 31-37. For other researchers' attempts to obtain cost information by calling selected providers, see J. A. Rosenthal, X. Lu, P. Cram, "Availability of Consumer Prices from US Hospitals for a Common Surgical Procedure," *JAMA Internal Medicine*, vol. 173, no. 6 (March 25, 2013): 427-432.

because this source information helps them determine their level of confidence in that information.  $^{\mbox{\tiny 28}}$ 

Eight of the 15 characteristics of effective transparency tools we identified address the extent to which a tool provides substantive quality and cost information of relevance to consumers. Specifically, the research we reviewed shows that more effective transparency tools:

- Review a broad range of services so that more consumers' particular needs are included. The more services that are covered by a transparency tool (or set of tools), the more likely it is that the tool will have information relevant to the particular services of interest to any given consumer. It is especially important to include services that are predictable and non-urgent in a transparency tool, because these services are most likely to afford consumers the opportunity to evaluate cost and quality information before receiving the service.
- 2. Cover a broad range of providers. Transparency tools that provide information for all or most of the available providers in a given geographic area, regardless of network status or practice setting, give consumers more information about their full range of options. For example, for procedures that can be conducted in either a hospital outpatient department or ASC, it helps consumers to provide comparable information for both settings, so that consumers can choose from a larger number of providers that offer those procedures.
- 3. Describe key differences in clinical quality of care, particularly patient-reported outcomes. Assessments of the clinical quality of care that have been shown to have particular relevance to consumers are those that relate to long-term outcomes of the care experienced by other patients. Often this is best addressed by patient-reported outcomes, which tell consumers the eventual outcome of treatments, as reported by previous patients of a particular provider. For example, patients receiving hip replacements can be asked, through such patient-reported outcomes, to rate their ability to climb stairs both before and after their procedures, which enables assessments of the procedures' effects on patients' mobility.

<sup>&</sup>lt;sup>28</sup>For example, the research we reviewed shows that consumers have greater confidence in information that comes from a source that they perceive to be independent and objective. They treat more skeptically information coming from organizations, such as health plans or the providers being assessed, that might have a vested interest in how different providers are rated.

- 4. **Describe key differences in patient experiences with providers**. Another outcome that matters is patients' assessment of their interactions with providers. Effective transparency tools include information on how past patients evaluated providers in terms of dimensions such as how well nurses communicate with patients, or the responsiveness of clinicians to patients' needs.
- 5. Describe key differences in costs, particularly patient out-ofpocket costs. The cost information of greatest relevance to consumers is finding out what they will have to pay for a given service before it occurs. For example, a tool that provides information on the average cost of a selected procedure in a given geographic location may be less relevant to consumers than one that takes into account the specific costs for that procedure and location given that consumer's specific health insurance coverage.
- 6. **Describe other information related to quality, where appropriate**. There may be other quality indicators that could have major significance to consumers for certain types of services. For example, facility inspection results and staffing levels are of particular relevance to nursing home care.
- 7. **Provide timely Information**. More recent data are intrinsically more relevant than data that are several years old. Because consumer transparency tools necessarily rely on past data to assess likely cost and quality performance in the future, some lag in collecting, analyzing, and providing data is inevitable. Data that are no more than two years old are generally considered timely.
- 8. Describe key strengths and limitations of the data. Although the research we reviewed shows that few consumers are inclined to delve into the many methodological issues that concern appropriate techniques for collecting, checking, and analyzing cost and quality data, transparency tools can provide both summary assessments of strengths and limitations for most consumers, and links to more complete explanations for those wanting to pursue these issues in greater detail. Such information, along with identification of the organization responsible for the tool, provides consumers a basis to judge the credibility of the cost and quality information provided.

### Effective Transparency Tools Take Steps to Make Cost and Quality Information Understandable to Consumers

Regardless of its potential relevance to them, consumers only can respond to information about cost and quality if they understand it. Although cost and quality information can be inherently difficult to understand, research suggests ways that transparency tools can make it easier for consumers to do so. One factor that increases the difficulty of understanding such information is the prevalence of misleading preconceptions about the cost and quality of care. For example, researchers find that many consumers incorrectly assume that all hospitals and physicians provide good quality care, while others assume that higher-cost providers will provide higher quality of care than lowercost providers. As a result, transparency tools that address these misleading preconceptions can better help consumers to understand the information they present.

Other challenges identified by researchers that consumers face include absorbing and evaluating large amounts of information about multiple providers across different measures of cost and quality, assessing a provider who does relatively well on some measures of quality and less well on others, and interpreting complex numerical information.<sup>29</sup> Therefore, it is important that transparency tools limit the amount of information that consumers need to pay attention to and make it easy for them to discern overall patterns. One experiment demonstrated that improving the organization and presentation of quality information in transparency tools led to an increased proportion of consumers who could identify the best-performing providers for a given dimension of quality. Specifically, with the improvements, the proportion of consumers who could identify the best-performing providers increased from 18 percent to 76 percent.<sup>30</sup>

Seven of the 15 characteristics of effective consumer transparency tools we identified focus on the extent to which a tool presents its information in a way that enables the consumer to grasp and interpret it. Specifically, the research we reviewed shows that more effective transparency tools:

<sup>&</sup>lt;sup>29</sup>E. Peters, et al., "Less Is More in Presenting Quality Information to Consumers," *Medical Care Research and Review*, vol. 64, no. 2 (April 2007).

<sup>&</sup>lt;sup>30</sup>K. Carman, "Improving Quality Information in a Consumer-driven Era: Showing Differences Is Crucial to Informed Consumer Choice," presentation at the 10<sup>th</sup> National Consumer Assessment of Healthcare Providers and Systems User Group Meeting, (Baltimore, Md.: Mar. 31, 2006).

- 1. Use plain language with clear graphics. Effective consumer transparency tools use labels and descriptions that make sense to consumers who typically are unfamiliar with clinical terminology and who often have difficulty interpreting numerical information. Graphics, including symbols, can help to readily convey information on relative provider performance, especially when they are designed to display a summary assessment of that performance as part of the symbol itself, for example one that incorporates the words "superior" or "poor".
- 2. Explain purpose and value of quality performance ratings to consumers. Effective consumer transparency tools address prevalent misleading preconceptions by providing consumers coherent explanations of how different quality measures relate to the aspects of quality that consumers find relevant. These explanations work best when they link individual measures to overarching categories indicating what is being achieved, such as effectiveness of care, safety, or patient-focused care.
- 3. Summarize related information and organize data to highlight patterns and facilitate consumer interpretation. Two techniques that consumer tools can use to help consumers make sense of large amounts of information are (a) combining information from multiple related measures into summary or composite scores, and (b) structuring presentation of the data in ways that make patterns evident. For example, listing providers in rank order on selected cost and quality dimensions greatly simplifies identification of high and low performers.
- 4. Enable consumers to customize information selected for presentation to focus on what is most relevant to them. Consumers differ in the priority they assign to different aspects of quality. Tools that enable consumers to customize which quality information is presented help consumers filter out information of lesser consequence to them, and hone in on the information that they find most compelling. For example, one consumer may choose to focus on providers' capacity to communicate well with patients, while another may focus on providers' rates of complications and infections.
- 5. Enable consumers to compare quality performance of multiple providers in one view. Transparency tools are most effective when they present side-by-side assessments of providers' performance on a given aspect of cost or quality, so consumers can most easily compare providers.

	6.	. Enable consumers to assess cost and quality information together. Consumers cannot make judgments about the value of the care offered by providers unless they can consider both cost and quality in relation to each other. For example, transparency tools can enable consumers to rank order available providers first on selected measures of quality, and then, within the high-quality group, show those with lower costs.		
<ol> <li>Enable easy use a quickly find informa dismiss the potenti on. Extensive testin entities providing tr</li> </ol>	<b>Enable easy use and navigation of the tool</b> . Unless consumers can quickly find information of interest to them, they are likely to quickly dismiss the potential utility of a consumer transparency tool and move on. Extensive testing with consumers can help public and private entities providing transparency tools to develop intuitive, user-friendly approaches to website navigation and for manipulating how the data are presented.			
CMS Transparency Tools Are Limited in Their Provision of Relevant and Understandable Cost and Quality Information for Consumers	an	e CMS transparency tools we evaluated are limited in the relevance d understandability of cost and quality information they provide to nsumers.		

CMS Transparency Tools Lack Certain Relevant Information Needed to Make Meaningful Distinctions about the Cost and Quality of Providers

Based on the characteristics we identified concerning information provided to consumers by effective transparency tools, we found that CMS's tools demonstrate a number of the characteristics of effective transparency tools, such as timeliness of data; however, the tools lack relevant information on cost and key differences in quality of care.<sup>31</sup> These limitations hinder their relevance and usefulness by consumers, particularly consumers' ability to make meaningful distinctions among providers. (See Appendix 2 for our assessment of how CMS tools fare on all 15 characteristics of effective tools identified through our literature review and interviews with experts.)

With respect to cost information, none of the tools contain information on the specific costs that patients would incur under Medicare—such as the out-of-pocket costs to a consumer for a full episode of care. Therefore, they do not allow consumers to combine cost and quality information to assess the value of health care services, or anticipate and plan for expenses related to non-emergency procedures. For example, a consumer may wish to compare the costs of similar high-quality providers. Depending on the service a consumer is planning to receive, a consumer may be able to find some indications of provider quality in CMS transparency tools, but would not find relevant information on cost. One CMS official stated that CMS does not provide expected patient out-ofpocket costs because the agency does not have information on what beneficiaries would pay when they have coverage other than, or in addition to, traditional fee-for-service Medicare, as many beneficiaries have.<sup>32</sup> However, CMS has the information necessary to create estimates of what Medicare beneficiaries likely would pay for different treatments and procedures, based on payment levels the program has set for each provider and the cost-sharing provisions that apply under the traditional fee-for-service Medicare program. For some Medicare beneficiaries, this information would provide an estimate of their out-of-pocket costs. For those with supplemental insurance coverage, it would not provide full out-

<sup>&</sup>lt;sup>31</sup>One of the five tools—Physician Compare— offers very limited information on cost and quality to consumers. Specifically the tool offers information about physicians including name, practice specialty, gender, and educational qualifications, as well as quality measures related to management of diabetes and heart disease for 66 physician groups and 141 Accountable Care Organizations. Therefore we focused our review on the remaining four tools.

<sup>&</sup>lt;sup>32</sup>This includes beneficiaries who purchase Medigap policies or are covered under Medicare Advantage plans.

of-pocket costs, but could be useful as an indicator of the maximum amounts they would have had to pay without supplemental coverage.

We found that all of the CMS transparency tools provide some clinical quality information relevant to consumers, but they often lack condition-specific information for the type of non-urgent procedures that consumers can most readily plan for in advance.<sup>33</sup> For example, some information on hip and knee replacements is included in Hospital Compare, but limited information is available in Hospital Compare for many other common medical procedures such as a colonoscopy. In addition, with the exception of Hospital Compare, none of CMS's transparency tools currently provide information on patient-reported outcomes, which have been shown to be particularly relevant to consumers considering common elective medical procedures, including hip and knee replacements.<sup>34</sup>

CMS officials stated that the department plans to expand over time the cost and quality information reported in the CMS transparency tools. For example, CMS officials described their efforts to develop patient-reported outcome measures to include in Hospital Compare, beginning with hip and knee replacements. They also plan to expand the information in Hospital Compare on costs to the Medicare program to cover a number of specific conditions, such as heart attacks, pneumonia, and stroke. However, CMS officials stated that the department has no plans to add estimated consumer out-of-pocket costs related to specific medical procedures to any of its transparency tools.

Cost and Quality Information in CMS's Transparency Tools May Not Be Understandable to Consumers

Based on the characteristics we identified regarding how effective transparency tools make cost and quality information understandable to consumers, we found limitations in how CMS transparency tools present information about comparative provider performance. Specifically, the tools have substantial limitations in their use of clear language and symbols, in summarizing and organizing information to highlight patterns for consumers, and in enabling consumers to customize how information

<sup>&</sup>lt;sup>33</sup>The Dialysis Facility Compare tool represents a notable exception because it focuses on providing specific information for a single chronic condition.

<sup>&</sup>lt;sup>34</sup>Two of the CMS transparency tools, Hospital Compare and Home Health Compare, provide information on patient experience of care, such as their perspectives on their interactions with physicians and nurses.

is presented. Although the CMS tools demonstrate other characteristics of effective transparency tools, such as explaining the purpose and value of the performance information reported in the tools, and providing the capacity to compare up to three providers side by side, the limitations we identified may hinder consumers' ability to understand and use the information provided. (See Appendix 2 for our assessment of how CMS tools compared to the 15 characteristics of effective tools identified through our literature review and interviews with experts.)

The tools generally do not use clear language and symbols. Although consumers can follow links to a separate page to obtain plain-language explanations of quality measures, the labels for the actual results of the tools often use fairly technical terms. For example, one quality measure for heart attack patients is labeled "heart attack patients given fibrinolytic medication within 30 minutes of arrival." In addition, many of the quality measures are reported in numerical form, most often as percentages. With the exception of the "five-star" ratings currently limited to Nursing Home Compare, none of the other CMS tools use symbols to help consumers interpret the meaning of the information provided.

Additionally, the CMS tools also generally do not summarize results for consumers—with the exception of Nursing Home Compare—or organize data to highlight patterns. The Nursing Home Compare tool's five-star rating system provides overall assessments of performance in three major categories—health inspections, quality measures, and staffing—each of which summarizes a set of individual measures in those categories that the tool also reports. CMS officials told us that the agency plans to expand this five-star rating system to its other tools by 2015.<sup>35</sup> In addition, CMS generally has not structured the presentation of the information in its tools in a way that helps consumers detect patterns in provider performance. For example, consumers may choose up to three providers to compare, but must do so from lists in which the providers are sequenced in alphabetical order or by distance from a geographic

<sup>&</sup>lt;sup>35</sup>In GAO-12-390, we recommended that CMS use strategic planning to establish how four planned efforts to improve the five-star system would help achieve its goals to inform consumers and improve provider quality, and that CMS develop milestones and timelines for the efforts. In August 2013, CMS released a strategic plan that outlines how one of its four efforts—evaluating the usability of Nursing Home Compare—aligns with the goals.

location, not in rank order according to provider performance.<sup>36</sup> Therefore, consumers have to sort through the information themselves if they want to identify the top performing providers.

In addition, the CMS tools provide consumers very limited ability to customize what information is presented, which may not be sufficient to allow consumers to focus on information most relevant to them.<sup>37</sup> Instead, the CMS tools typically allow consumers to filter providers for consideration based on their geographic location and whether the provider offers one or more of a particular set of services. Expanding the options available to consumers to customize the information presented on cost and quality according to their individual situations and priorities would allow them to reduce the amount of information that they must review to identify providers that meet their needs.

CMS, in conjunction with other HHS agencies, has made efforts to address limitations in the understandability of information on cost and quality, such as by supporting research on the topic, and conducting consumer testing of the CMS tools over multiple years.<sup>38</sup> CMS is also developing a single web page to serve as a point of entry for all the CMS transparency tools and revising the tools to achieve a "unified look and feel". CMS officials told us that, while they expect to continually make updates to the tools over time, they do not have specific plans to change the way that the tools display information beyond implementation of the five-star rating system. In particular, they do not plan to organize information to facilitate identification of high-performing providers or expand customization options for consumers. CMS officials told us that making changes to the tools is complex and resource-intensive, and that they have received feedback from providers that are strongly opposed to

<sup>&</sup>lt;sup>36</sup>Unlike the other Compare sites, according to CMS officials, Nursing Home Compare does provide the ability to sort providers by performance according to the star ratings on several summary measures covering inspections, staffing, quality measures, and the facility's overall rating.

<sup>&</sup>lt;sup>37</sup>For the purposes of our review, customizing information refers to the ability of consumers to select from the quality measures offered in the tool those that are relevant to their personal situation.

<sup>&</sup>lt;sup>38</sup>See for example, L&M Policy Research, *Quality Reporting on Medicare's Compare Sites: Lessons Learned from Consumer Research, 2001-2013,* a report prepared at the request of the Centers for Medicare & Medicaid Services, Washington, D.C.

organizing the tools' information in rank order according to provider performance.

CMS Has Taken Limited Steps to Expand Access to Cost and Quality Information, but Has Not Established Procedures to Ensure This Information Meets Consumer Needs	CMS has taken limited steps in three key areas to expand information on cost and quality and increase transparency to consumers and others. Although both HHS, through its department-wide strategy, as well as CMS, through agency-specific plans, have clearly articulated the goal of enhancing cost and quality transparency, these plans lack the procedures and performance metrics needed to ensure that the particular needs of consumers will be met.
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CMS Has Taken Limited Steps in Three Key Areas to Expand Cost and Quality Information Available to Consumers and Others

CMS has taken steps to expand cost and quality information in three key areas, although we identified some limitations in each step based on the research we reviewed and experts we interviewed.

**Developing and selecting measures**. CMS funds and directs, primarily through contracts, the development of new cost and quality measures that can then be reported in both CMS and state and private sector transparency tools. It also selects among available measures for reporting information in its own tools. Through these two activities CMS influences the extent to which relevant cost and quality information are made available to consumers.

Although CMS's transparency tools are intended to provide consumers with the cost and quality information that they need to assess their health care options, the tools also serve a different role for providers. According to research conducted to support CMS public reporting efforts, CMS uses the tools to create an incentive for providers to improve the quality of care they deliver. By publically reporting how providers compare to their peers, CMS intends providers to be able to identify shortcomings in their performance that can be improved. However, research we reviewed demonstrates that information used to motivate providers can be different from information needed by consumers. Consequently, researchers who have assessed CMS's tools have raised the question of whether CMS can ensure that tools intended to influence provider quality can also provide consumers with the cost and quality information they need.

According to consumer transparency experts we interviewed and research we reviewed, CMS's processes for measure development and selection do not adequately address consumer needs. For example, according to a summary of CMS-sponsored consumer testing conducted between 2001 and 2013 for the development and support of the CMS Compare websites, consumer involvement generally comes late in the measure development process. Moreover, CMS's consumer testing has focused on assessing the ability of consumers to interpret measures developed for use by clinicians, rather than to develop or select measures that specifically address consumer needs.<sup>39</sup>

CMS officials report several ways that they have recently begun to incorporate consumer input into the agency's measure development and selection process, although it is not yet clear if these efforts will ensure that measures are focused on consumers. For example:

In 2013, CMS updated its requirements for measure development contracts to address the needs of consumers. Specifically, contractors are required to include patient or caregiver participation on technical expert panels, which are a part of the measure development process.<sup>40</sup> According to one CMS official, the requirements do not specifically dictate how contractors must involve these consumers, but rather asks contractors to consider meaningful ways to include them. They also do not specify how contractors will be evaluated on their ability to meet consumer needs or specifically define expected results. According to the CMS official, only two measure contracts have taken effect since the requirements were updated, so it will take time to

<sup>&</sup>lt;sup>39</sup>See L&M Policy Research, *Quality Reporting on Medicare Compare Sites: Lessons Learned from Consumer Research, 2001-2013*, a report prepared at the request of the Centers for Medicare & Medicaid Services, Washington, D.C.

<sup>&</sup>lt;sup>40</sup>The requirements also state that when developing measures, contractors should consider their ability to be useful to intended audiences, including consumers, for the purpose of public reporting and transparency. See Department of Health & Human Services, Centers for Medicare & Medicaid Services, *Measure and Instrument Development and Support Indefinite Delivery, Indefinite Quantity, Umbrella Statement of Work*, Washington, D.C., 2013.

determine the extent to which they may improve the development of cost and quality measures of particular relevance to consumers.

 CMS also has begun to solicit consumer input in the selection of measures included in its transparency tools. In 2011, HHS convened the Measure Applications Partnership (MAP), a consensus-based group that includes representatives of consumer as well as provider and other stakeholder organizations, to furnish CMS with input on the selection of measures to include in its transparency tools and payment programs. Although the inclusion of consumer organizations in the MAP gives consumers an opportunity to influence measure selection, both a CMS official and a MAP member said that the concerns of provider organizations, which command greater technical expertise on measurement methodology and therefore are better prepared to advocate for their own selection preferences, tend to take priority.

**Aligning cost and quality measurement**. CMS, along with several other HHS agencies, collaborates with multiple consumer organizations, state and private sector entities that also collect and report cost and quality data, to work toward agreement on an aligned core set of cost and quality measures.<sup>41</sup> According to HHS's National Quality Strategy, providers are often asked to submit quality and other information to multiple payers, including Medicare, and having a consistent, or aligned, set of measures can help facilitate the collection of this information. Transparency experts have indicated that such alignment could not only reduce the providers' reporting burden, but it could also lead to more consistent information on provider performance.<sup>42</sup> However, according to a CMS official and an

<sup>&</sup>lt;sup>41</sup>In October 2012, CMS and AHRQ began meeting with a group of large employers who purchase health care services and other health care purchaser representatives through the *Buying Value* initiative, to reach agreement on a common set of measures to be reported and used by health plans and others. In addition, according to a CMS official, CMS is participating in discussions with America's Health Insurance Plans, a national trade association representing the health insurance industry, to similarly identify a set of common measures.

<sup>&</sup>lt;sup>42</sup>According to a summary report based on discussions among 125 participants in the 2011 AHRQ Summit on Public Reporting for Consumers, experts who support greater measure alignment cite the benefits of reduced provider burdens, efficiencies of scale, comparability of measures, more uniform deployment of evidence-based report designs and practices which lead to a more credible reporting enterprise that produces ratings useful to consumers. See P. Hussey, H. Luft, and P. McNamara, "Public Reporting of Provider Performance at a Crossroads in the United States: Summary of Current Barriers and Recommendations on How to Move Forward," *Medical Care Research and Review*, vol. 71, no. 5 suppl., October 2014, 5S-16S, e-published May 27, 2014.

expert involved in the alignment efforts, the extent to which this promise is fulfilled remains to be seen, both in terms of the number and breadth of the measures for which an agreed alignment is reached, as well as how effectively the agreement ensures uniform application of the aligned measures. In addition, according to experts we interviewed, the extent to which this movement toward measure alignment benefits consumers will depend on the extent to which the agreed-upon set of measures are relevant to consumer concerns.

**Releases of claims data**. In addition to the quality data published through the Compare sites, CMS has begun to publicly report information on provider costs based on Medicare fee-for-service claims data.<sup>43</sup> Specifically, beginning in 2013, CMS began releasing large data sets containing partially aggregated payment data on individual physicians and hospitals. According to experts we interviewed, the release of these data help to promote the concept of transparency. However, these experts noted that the lack of patient-level information in the files prevents even rudimentary risk adjustment—adjustments based on differences in patients—which precludes using these data to supply cost and claims-data-based quality information for state and private sector transparency tools.

CMS has released more detailed patient-level claims data to CMSapproved qualified entities (QE). Established under PPACA, QEs are organizations that are given access to Medicare claims data to enable evaluation of the performance of providers and suppliers.<sup>44</sup> According to CMS officials, by having access to more detailed patient-level data, QEs—selected based in part on their expertise in analyzing complex claims data—could help make available to consumers information on quality measures that use claims data, such as mortality and readmissions for specific conditions or procedures. HHS has begun to

<sup>&</sup>lt;sup>43</sup>CMS has shared Medicare fee-for-service provider claims data through other programs in the past, such as through the Research Data Assistance Center (ResDAC), a free service provided by CMS to assist academic and non-profit researchers interested in using Medicare and Medicaid data for research. Data obtained through ResDAC is limited to use for pre-determined research applications, and according to CMS officials, cannot be used more generally for public reporting.

<sup>&</sup>lt;sup>44</sup>Use of the Medicare data provided to QEs is limited to the purposes specified in section 10332 of PPACA and to uses in accordance with the Privacy Act of 1974. QEs also must have an Information Exchange Agreement or contract with CMS.

	share these data with 13 organizations that have been approved to become QEs, according to CMS officials, but the organizations have only just begun to publicly share new cost or quality information based on these data. <sup>45</sup> Therefore, it is too early to tell to what extent the QE program will expand the cost and quality information available to consumers.
CMS Has Not Established Procedures to Ensure the Cost and Quality Information It Collects and Reports Meets Consumer Needs	Although HHS has included transparency as part of its strategic plan, and set a specific goal to report on measures that meet consumer needs, it has not established specific procedures or performance metrics to ensure that the cost and quality information that it collects and publicly reports accomplish this goal. A key part of HHS's strategic plan to ensure optimal health care is to give the public the means to make more informed health care choices by improving transparency and providing public access to HHS's data on provider performance, among other things. <sup>46</sup> Furthermore, HHS has set a specific goal to report on measures that are important to consumers and other key audiences in ways that can be easily understood and readily acted upon. <sup>47</sup>
	However, despite this goal, neither HHS, through its department-wide strategy, nor CMS, through its agency-specific strategic plans, have established specific procedures or performance metrics to clarify how they will ensure that the particular needs of consumers are met, in the midst of competing demands from providers. In particular, they have not specified how the particular needs of consumers, as distinct from those of providers, should be determined, and how to assess progress in addressing those needs:

http://www.hhs.gov/secretary/about/priorities/strategicplan2010-2015.pdf.

<sup>&</sup>lt;sup>45</sup>On August 26, 2014, the Oregon Health Care Quality Corporation released the first public reports on provider quality of care that incorporated Medicare claims data obtained through the QE program.

<sup>&</sup>lt;sup>46</sup>See Department of Health and Human Services, "Strategic Goal 4, Objective C: Use HHS Data for the health and well being of the American people," *HHS Strategic Plan 2010-2015*, accessed February 24, 2014,

<sup>&</sup>lt;sup>47</sup>Department of Health and Human Services, *Prioritizing the Public in HHS Public Reporting: Using and Improving Information on Quality, Cost, and Coverage to Support Health Care Improvement* (Washington, D.C.: December 2013).

- In an analysis conducted for HHS of its public reporting efforts, researchers proposed that HHS develop and adopt processes and criteria to select measures for reporting to consumers as well as for reporting to more specialized audiences.<sup>48</sup> HHS subsequently released a framework to guide its public reporting activities in December 2013. Although the framework acknowledged gaps in available measures relevant to consumers and made the task of addressing these gaps a priority, it did not outline a process for integrating consumer needs into developing or selecting measures, nor did it define criteria HHS planned to use in selecting measures for reporting to consumers.<sup>49</sup>
- In November 2012, CMS also produced a draft strategic plan that outlines the agency's public reporting strategy. One of three goals contained in the plan is to better meet consumer and other audience needs, but the plan does not contain any procedures to address how consumer needs should be determined or metrics to assess whether identified needs are met. According to CMS officials, the draft plan is under ongoing review by CMS officials and has not been finalized.
- Similarly, CMS's policies with respect to collaborating with other entities to align cost and quality measures and its programs to publicly report Medicare cost information, through its own public releases and via QEs, have not included procedures or performance metrics that address the particular needs of consumers.

Establishing procedures to implement goals and performance metrics to monitor progress is important for accomplishing agency goals, according to our guidance to federal agencies on effectively implementing GPRAMA, which describes leading practices for how federal agencies should assess their performance.<sup>50</sup> According to the guidance, procedures and metrics are particularly important when a government agency must respond to multiple priorities and competing demands, such

<sup>50</sup>GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/GGD-96-118 (Washington, D.C.: June 1996).

<sup>&</sup>lt;sup>48</sup>Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, *Public Reporting of Health Quality and Efficiency Data under the U.S. Department of Health and Human Services* (Washington, D.C.: Jan. 31, 2013), 70.

<sup>&</sup>lt;sup>49</sup>Department of Health and Human Services, *Prioritizing the Public in HHS Public Reporting: Using and Improving Information on Quality, Cost, and Coverage to Support Health Care Improvement* (Washington, D.C.: December 2013).

as CMS faces in meeting the demands of both consumers and providers in the development and selection of cost and quality measures and in the reporting of information through its transparency tools. Without such specific procedures and performance metrics, CMS cannot ensure that its efforts to make cost and quality information publicly available will meet consumer needs or help them to make meaningful distinctions among providers.

### Conclusions

Health care costs vary widely without being related to quality. For some services, the differences in consumers' out-of-pocket costs between providers can be thousands of dollars. However, as transparent information on both cost and quality is difficult for consumers to obtain—either through transparency tools or calling providers directly—consumers often do not realize they could obtain better value in their health care decisions, for example by utilizing high-quality, low-cost providers. With consumers paying greater shares of their health care costs, it is particularly important that they have access to relevant and understandable cost and quality information to make value-based decisions about services that can be planned in advance, as well as to better anticipate and plan for their expenses.

Through HHS's National Quality Strategy, which builds on HHS's strategic plan, the department has made health care cost and quality transparency a priority for itself and its component agencies, including CMS. CMS's transparency tools—five Compare websites—are one way the agency has provided cost and quality information to consumers. However, CMS addresses multiple strategic aims with these tools, including both informing consumers and incentivizing providers to improve the quality of their care. Partly as a result, the tools exhibit critical weaknesses when assessed in terms of the characteristics that would make them most effective for consumers. For example, the tools lack information on topics of considerable relevance to consumers, such as patient-reported outcome measures and patient out-of-pocket costs. Additionally, the tools do not organize cost and quality information in a way that may enable consumers to readily understand and compare provider performance, or customize how the information is presented to enable consumers to identify the best providers for aspects of care that they may find most relevant. While providing relevant and understandable information on cost and the ability to compare it with provider quality is inherently complex, consumers need this information to determine if different providers or settings provide a greater overall value for care they

expect to receive and to determine what their health care expenses will be in advance.

	Although HHS has set goals to promote transparency for consumers, and, largely through CMS, has taken steps to expand available cost and quality information, CMS has not established procedures or performance metrics to ensure that this information is relevant and understandable to consumers. Furthermore, each of the steps CMS has taken has limitations that may prevent consumer needs from being met. In particular, CMS's process for developing and selecting cost and quality measures for its tools has been heavily influenced by the concerns of providers rather than consumers, which helps to account for the relative lack of cost and quality information in CMS's tools that consumers would find relevant. Especially in such situations where agencies are responding to multiple priorities, leading practices for strategic planning call for establishing specific procedures and performance metrics to ensure that each of those priorities receives due attention. Until CMS establishes such procedures and performance metrics with respect to implementing their goals for promoting health care transparency, the agency is likely to continue to have limited effectiveness in conveying relevant and understandable information on cost and quality to consumers.
Recommendations for Executive Action	To improve consumers' access to relevant and understandable information on the cost and quality of health care services, we recommend that the Secretary of HHS direct the Administrator of CMS to take four actions:
	<ol> <li>Include in the CMS Compare websites, to the extent feasible, estimated out-of-pocket costs for Medicare beneficiaries for common treatments that can be planned in advance;</li> </ol>
	2. Organize cost and quality information in the CMS Compare websites to facilitate consumer identification of the highest-performing providers, such as by listing providers in order based on their performance;
	3. Include in the CMS Compare websites the capability for consumers to customize the information presented, to better focus on information relevant to them; and
	4. Develop specific procedures and performance metrics to ensure that CMS's efforts to promote the development and use of its own and others' transparency tools adequately address the needs of consumers.

As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies of this report to the Secretary of the Department of Health and Human Services, the Administrator of the Centers for Medicare & Medicaid Services, and other interested parties. In addition, the report will be available at no charge on GAO's website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-7114 or at kohnl@gao.gov. Contact points for our Office of Congressional Relations and Office of Public Affairs can be found on the last page of this report. Other major contributors to this report are listed in appendix IV.

Luisa T. Kohre

Linda T. Kohn Director, Health Care

#### List of Requesters

The Honorable Tom Coburn, M.D. Ranking Member Committee on Homeland Security and Governmental Affairs United States Senate

The Honorable Amy Klobuchar United States Senate

The Honorable Jeanne Shaheen United States Senate

The Honorable Pat Toomey United States Senate

### Appendix I: Examples of Variation in Cost and Quality Information Available to Consumers for Selected Procedures

We obtained examples of cost and quality information that were available to certain consumers in specific circumstances by obtaining information from selected transparency tools and by contacting providers, acting in the role of a consumer, to ask for cost and quality information. The examples we obtained from two selected transparency tools (a health insurer and Castlight) and from contacting selected providers in two health care markets by telephone illustrate the variation in cost and quality information that are available to consumers in specific situations, such as those who are members of a particular health plan or uninsured. Specifically, the examples showed variation in cost, but often did not include enough information on quality for it to be considered alongside cost (see tables 4-7 below).

### Table 4: Cost and Quality of a Laparoscopic Gallbladder Surgery at Ambulatory Surgical Centers (ASCs) and Hospital Outpatient Departments in the Denver, Colorado-Area

		Information related to cost		Information related to quality		
Provider	Setting <sup>ª</sup>	Estimated total actual cost <sup>a</sup> (in dollars)	Estimated out-of-pocket cost <sup>b</sup> (in dollars)	Leapfrog Hospital Safety Score <sup>°</sup>	HCAHPS overall rating <sup>d</sup> (percent high)	Complications index <sup>e</sup> (100=average)
Provider 1	ASC	\$3,281	\$3,281	N/A	N/A	N/A
Provider 2	ASC	4,205	4,041	N/A	N/A	N/A
Provider 3	ASC	4,575	4,115	N/A	N/A	N/A
Provider 4	ASC	4,716	4,143	N/A	N/A	N/A
Provider 5	ASC	18,770	6,954	N/A	N/A	N/A
Provider 6	Hospital outpatient	18,185	6,837	А	68	55
Provider 7	Hospital outpatient	20,260	7,252	А	81	N/A
Provider 8	Hospital outpatient	29,420	9,084	В	69	123
Provider 9	Hospital outpatient	30,079	9,216	В	63	104
Provider 10	Hospital outpatient	32,788	9,758	С	69	153
Provider 11	Hospital outpatient	34,515	10,103	А	72	69
Provider 12	Hospital outpatient	40,626	11,325	А	73	N/A

Source: Health Insurer. | GAO-15-11

<sup>a</sup>The estimated total actual cost is the health insurer's negotiated rate with the provider for an uncomplicated laparoscopic gallbladder surgery performed on an outpatient basis as of July 2014. It includes typical associated imaging procedures done in conjunction with the procedure, anesthesia for 135 minutes, as well as typical associated facility, surgeon, and other professional charges.

<sup>b</sup>The estimated out-of-pocket costs are what a member of the health insurer would pay of the estimated total actual cost with a health plan of a \$4,000 deductible, and 20 percent coinsurance. The estimated out-of-pocket costs assume that the member has not yet paid any money towards the deductible.

<sup>c</sup>The Leapfrog Hospital Safety Score is an A, B, C, D, or F letter grade reflecting how safe hospitals are for patients. The grades used in this score are derived from expert analysis of publically available data using national evidence-based measures of patient safety. The Leapfrog Hospital Safety Score program grades hospitals on their overall performance in keeping patients safe from preventable harm and medical errors.

<sup>d</sup>The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is published by the Centers for Medicare & Medicaid Services on Hospital Compare. Patients are surveyed to provide information about their hospital experiences. The percentages reflected in this column represent patients who gave a "high" score, a rating of 9 or 10 (out of a 10 point scale) to the question, "How do patients rate the hospital overall?"

<sup>e</sup>The Complications Index is a point score based on the frequency and severity of each complication at each hospital. The area average is 100. Therefore, a Complications Index of less than 100 indicates better performance on quality than the average of the hospitals in the area. A Complications Index of more than 100 indicates worse performance on quality than the average of the hospitals in the area.

### Table 5: Cost and Quality of MRI of the Lower Back at Stand-Alone Imaging Centers and Acute Care Hospitals in the Indianapolis, Indiana Area

		Information	related to cost	Information related to quality	
Provider	Setting	Estimated total actual cost <sup>a</sup> (in dollars)	Estimated out-of-pocket cost <sup>b</sup> (in dollars)	MRI of the lower back <sup>c</sup>	HCAHPS Hospital Patient Experience Measure <sup>d</sup>
Provider 1	Stand-alone imaging center	\$450	\$450	N/A	N/A
Provider 2	Stand-alone imaging center	541	541	N/A	N/A
Provider 3	Stand-alone imaging center	575	575	N/A	N/A
Provider 4	Stand-alone imaging center	1,033 – 3,162	1,033 – 2,233	N/A	N/A
Provider 5	Acute care hospital	277 – 5,184	277 – 2,637	Average	3 star
Provider 6	Acute care hospital	910 – 3,905	910 – 2,381	Above average	5 star
Provider 7	Acute care hospital	1,579 – 2,571	1,579 – 2,115	Below average	5 star
Provider 8	Acute care hospital	2,030	2,006	Average	5 star
Provider 9	Acute care hospital	2,523	2,105	Average	4 star
Provider 10	Acute care hospital	3,756	2,351	Below average	1 star

Source: Castlight Health. | GAO-15-11

<sup>a</sup>The estimated total actual cost is what a plan that utilizes Castlight negotiated with the provider for a standard magnetic resonance imaging (MRI) of the lower back performed at stand-alone imaging centers and acute care hospitals as of May 2014. Services include the MRI, radiologist's fee, facility fee, and reading and interpretation of the MRI.

<sup>b</sup>The estimated out-of-pocket costs are what a member of the plan that utilizes Castlight would pay of the estimated total actual cost. The estimated out-of-pocket cost is based on a health plan with a \$2,000 deductible, \$5,000 out-of-pocket maximum, 100 percent coverage for preventive services, and 80 percent coverage in network after application of the deductible.

<sup>c</sup>This quality measure is from Hospital Compare and evaluates the appropriateness of doing an MRI.

<sup>d</sup>The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is published by the Centers for Medicare & Medicaid Services on Hospital Compare. Patients are surveyed to provide information about their hospital experiences. This score represents the patient experience rating for a hospital based on the percentage of patients who said that they would "definitely" recommend that hospital to family and friends.

#### Table 6: Cost and Quality of Maternity Care at Acute Care Hospitals in the Boston, Massachusetts Area

		Information related to cost		Information related to quality		
Provider	Setting	Estimated total actual cost <sup>a</sup> (in dollars)	Estimated out of pocket cost <sup>b</sup> (in dollars)	Patient experience measure for physician <sup>°</sup> (number of ratings)	Leapfrog delivery care rating for facility <sup>d</sup>	HCAHPS for facility <sup>e</sup>
Provider 1	Acute care hospital	\$3,969	2,394	5 star (1)	Average	1 star
Provider 2	Acute care hospital	5,412	2,682	5 star (29)	Average	3 star
Provider 3	Acute care hospital	5,900	2,780	5 star (8)	Below average	5 star
Provider 4	Acute care hospital	6,834	2,967	5 star (27)	Above average	3 star
Provider 5	Acute care hospital	8,744	3,349	5 star (20)	Average	5 star
Provider 6	Acute care hospital	9,026	3,405	5 star (2)	Above average	3 star
Provider 7	Acute care hospital	20,776	5,000	5 star (17)	Above average	5 star
Provider 8	Acute care hospital	21,554	5,000	Not rated	Above average	5 star

Source: Castlight Health. | GAO-15-11

<sup>a</sup>The estimated total actual cost is what a plan that utilizes Castlight negotiated with the provider for maternity care performed at acute care hospitals as of May 2014. The cost includes prenatal office visits, required ultrasounds, delivery, and one visit after delivery. It does not include tests, elective ultrasounds, imaging, medicine, and anesthesia.

<sup>b</sup>The estimated out-of-pocket costs are what a member of the plan that utilizes Castlight would pay of the estimated total actual cost. The estimated out-of-pocket cost is based on a health plan with a \$2,000 deductible, \$5,000 out-of-pocket maximum, 100 percent coverage for preventive services, and 80 percent coverage in network after application of the deductible.

<sup>c</sup>The "patient experience measure for physician" rating is a summary measure of how patients view their doctor. The data is collected from Castlight users and aggregated with patient experience information from external websites, such as Angie's List.

<sup>d</sup>The "Leapfrog delivery care rating" for the facility represents the percent of pregnancies for which the baby is delivered at the appropriate developmental age, using an appropriate delivery method, and recommended processes of care.

<sup>e</sup>The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is published by the Centers for Medicare & Medicaid Services on Hospital Compare. Patients are surveyed to provide information about their hospital experiences. This score represents a patient experience rating for each hospital based on the percentage of patients who said that they would "definitely" recommend that hospital to family and friends.

# Table 7: Cost and Quality Information Obtained for an Inguinal Hernia Repair or Diagnostic Colonoscopy at Ambulatory Surgical Centers (ASC) and Hospital Outpatient Departments in Two Health Care Markets Based on Telephoning Selected Providers

Procedure	Setting	Information provided on cost <sup>a</sup> (in dollars)	Information provided on quality
		Minneapolis, Minnesota	
Inguinal Hernia Repair	ASC	Estimated total cost – \$2,970	None
		(includes facility fee <sup>b</sup> and mesh <sup>c</sup> ).	
Inguinal Hernia Repair	ASC	Estimated total cost – \$3,100	Representative said that infection
		(includes facility, nurse anesthetist, surgeon, and anesthesiologist fees).	rates of facility are less than 1 percent. Representative anecdotally recalled one surgery complication related to blood thinners, but no other complications.
Inguinal Hernia Repair	Hospital outpatient	Estimated total cost – \$6,750 – \$9,625	None
	department	(includes facility, physician, and anesthesia fees).	
Colonoscopy	ASC	Estimated total cost – \$1,733	Representative referred to provider's
		(includes facility and professional fees <sup>d</sup> ).	website which has patient satisfaction scores and quality measures, such as the completion rate, adenoma detection rates, and withdrawal times, with benchmarks to understand the scores provided.
Colonoscopy	ASC	Estimated total cost – \$3,700 – \$5,500	None
		(includes facility, physician, anesthesia, and professional fees).	
Colonoscopy	Hospital outpatient department	Estimated total cost – \$1,825 (includes facility fee).	Representative referred to provider's website which reported that the hospital scored in the top 3 percent nationwide in surgical care improvement process of care measures in 2009.
		Portland, Oregon	
Inguinal Hernia Repair	ASC	Estimated total cost – \$3,139 – 3,739	None
•		(includes facility and anesthesiologist fees and mesh).	
Inguinal Hernia Repair	Hospital outpatient	Estimated total cost – \$6,000 – \$12,000 (includes facility fee).	None
Inguinal Hernia Repair	Hospital outpatient	Estimated total cost – \$6,400	None
		(includes facility fee).	
Colonoscopy	ASC	Estimated total cost – \$800 (adjusted pricing for uninsured)	None
		(includes facility, anesthesia, and physician fees).	

Procedure	Setting	Information provided on cost <sup>a</sup> (in dollars)	Information provided on quality
Colonoscopy	ASC	Estimated total cost – \$2,074.74 (includes facility fee).	None
Colonoscopy	Hospital outpatient	Estimated total cost – \$3,500 – \$4,000 (includes facility and anesthesia fees).	None
Colonoscopy	Hospital outpatient	Estimated total cost – \$5,000 (includes facility and physician fees).	Representative referred to provider's website which has patient experience metrics.

Source: GAO. | GAO-15-11

Notes: These results represent the 13 ASCs or hospital outpatient departments that were able to provide us with any information about the costs of getting either an inguinal hernia repair or diagnostic colonoscopy for an uninsured patient at their facility. Overall we contacted 24 providers to obtain such information. 11 providers did not provide cost information. Representatives from these providers did not provide cost estimates because they needed additional information, such as the specific procedure code or personal information about the patient (date of birth and contact information) which we did not provide, or were unavailable.

<sup>a</sup>The cost information provided by selected providers represents what the providers would charge an uninsured patient, less any discounts for charity care for uninsured patients, if applicable.

<sup>b</sup>Facility fees include all fees that would be charged by the facility, such as a hospital, for the procedure.

<sup>c</sup>Mesh is a medical device that may be used in hernia repair surgery to provide additional support to weakened or damaged tissue.

<sup>d</sup>Physician and professional fees include the fees that would be charged by the physician or other health care professionals involved in the procedure.

### Appendix II: Assessment of CMS Transparency Tools

We assessed the extent to which the Centers for Medicare & Medicaid Services' transparency tools include the 15 characteristics of effective tools we identified through our literature review and interviews with experts.<sup>1</sup> (See Table 8.)

#### Table 8: Assessment of CMS Transparency Tools on Relevance and Understandability of Information for Consumers

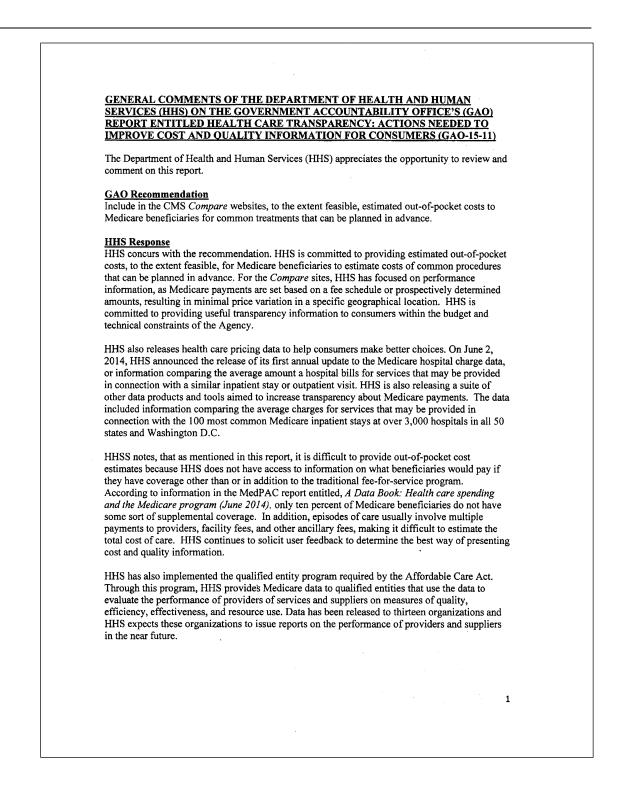
	Hospital Compare	Nursing Home Compare	Home Health Compare	Dialysis facility Compare
Relevance criteria				
Review a broad range of services	Yes	Yes	Yes	Yes
Cover a broad range of providers	Yes	Yes	Yes	Yes
Describe key differences in clinical quality of care	Limited	Limited	Limited	Yes
Describe key differences in patient experiences	Yes	No	Yes	No
Describe key differences in costs	No	No	No	No
Describe other information related to quality, if appropriate	Yes	Yes	Yes	Yes
Provide timely Information	Yes	Yes	Yes	Yes
Describe key strengths and limitations of the data	Yes	Yes	Yes	Yes
Understandability criteria				
Written in plain language with clear graphics	No	No	Yes	No
Explains purpose and value of quality performance ratings	Yes	Yes	Yes	Yes
Summarizes related information and organizes data to highlight patterns	No	Yes	No	No
Enables consumers to customize information	Very limited	Very limited	Very limited	Very limited
Enables comparison of multiple providers in one view.	Yes	Yes	Yes	Yes
Enables consumer to assess cost and quality information together.	No	No	No	No
Enables easy use and navigation of the tool.	Yes	Yes	Yes	Yes

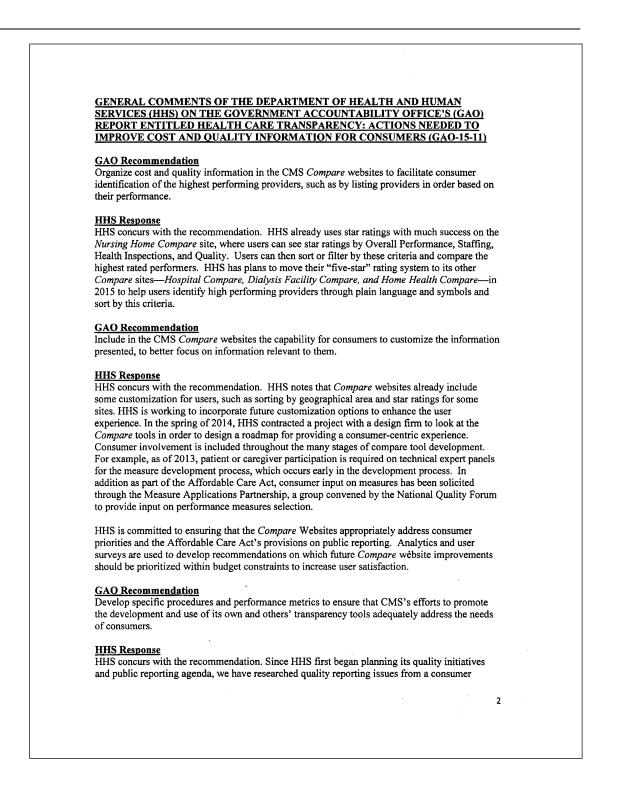
Source: GAO (analysis). | GAO-15-11

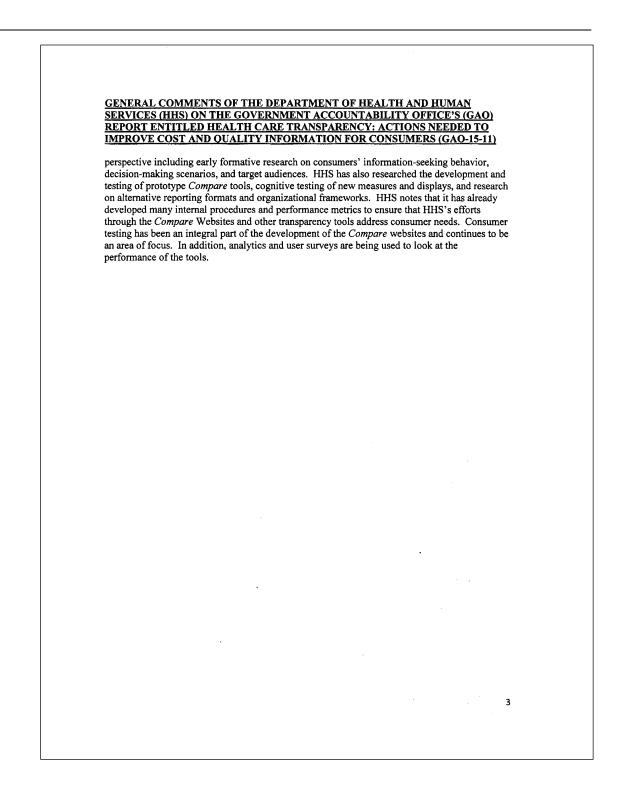
<sup>&</sup>lt;sup>1</sup>Based on our initial review of the compare tools we determined that one of the five tools—Physician Compare—offers very limited information to consumers. Specifically the tool offers information such as the physician's name, practice specialty, gender, and educational qualifications, as well as quality measures related to management of diabetes and heart disease for 66 physician groups and 141 Accountable Care Organizations. Therefore we focused our review on the remaining four tools.

# Appendix III: Comments from the Department of Health and Human Services

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CCT 1 2014 CCT 1 2014 Linda T. Kohn Director, Health Care U.S. Government Accountability Office 441 G Street NW Washington, DC 20548 Dear Ms. Kohn: Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "Health Care Transparency: Actions Needed to Improve Cost and Quality Information for Consumers" (GAO-15-11). The Department appreciates the opportunity to review this report prior to publication. Sincerely, Jim R. Esquea Assistant Secretary for Legislation Attachment	Linda T. Kohn Director, Health Care U.S. Government Accountability Office 441 G Street NW Washington, DC 20548 Dear Ms. Kohn: Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, "Health Care Transparency: Actions Needed to Improve Cost and Quality Information for Consumers" (GAO-15-11). The Department appreciates the opportunity to review this report prior to publication. Sincerely, Jim R. Esquea Assistant Secretary for Legislation Attachment		RTMENT OF HEALTH & HUMAN SERVICES	OFFICE OF THE SECRETARY
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## Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contacts	Linda T. Kohn, (202) 512-7114 or kohnl@gao.gov
Acknowledgments	In addition to the contact named above, Will Simerl, Assistant Director; N. Rotimi Adebonojo; Jennie Apter; Rebecca Hendrickson; Monica Perez-Nelson; Eric Peterson; and Elise Pressma made key contributions to this report.

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