

Medicare's Value-Based, Physician Payment Modifier: Improving the Quality and Efficiency of Medical Care

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Genesis of this report.

The Affordable Care Act of 2010 mandated the federal government's development of a mechanism to allow Medicare to make differential payments to fee-for-service physicians based on the relative quality and costs of care they provide. The Centers for Medicare and Medicaid Services must phase in Medicare's budget-neutral, value-based physician payment modifier between January 1, 2015, and January 1, 2017.

To discuss the development and implementation of Medicare's new physician payment modifier, the Robert Wood Johnson Foundation, under its Changes in Health Care Financing and Organization (HCFO) initiative, hosted a meeting in Washington, D.C., on March 29, 2012. Meredith Rosenthal, Ph.D., of the Harvard School of Public Health moderated the meeting.

Economists, researchers, analysts, and federal policymakers as well as representatives of physician groups and the insurance industry engaged in a moderated discussion of the functioning and implementation of the modifier and associated methodological issues. This report highlights key points of the discussion and is intended to faithfully capture the essence of the discussion without endorsing any one position. Given that the discussion was "off the record," comments are not attributed to specific individuals.

Medicare's Value-Based Physician Payment Modifier: Improving the Quality and Efficiency of Medical Care

The Affordable Care Act of 2010 (Public Law 111-148 and Public Law 111-152) (ACA) is a once-in-a-generation law intended to transform the U.S. health care system by expanding health insurance coverage, making care more patient-centered, promoting the adoption and use of electronic health records, and offering financial and other incentives to health care providers to improve the quality and value of the health care they deliver.^{1,2}

The 2010 law charged the U.S. Department of Health and Human Services (HHS) with undertaking several bold initiatives aimed at recasting Medicare from a passive payer to an active purchaser of higher quality, more efficient health care. Given that Medicare covers 47 million elderly and disabled beneficiaries, engaging in value-based purchasing has enormous potential not only for ensuring that Medicare provides beneficiaries with high-quality care and remains solvent but also for catalyzing changes in the entire health care system.

One of the value-based purchasing initiatives authorized by the ACA pertains to services delivered by physicians receiving fee-for-service payments from Medicare. Section 3007 of the law mandates the Secretary of HHS to develop a mechanism based "upon the quality of care furnished as compared to cost," that provides for differential payment to physicians and physician groups receiving compensation under the Medicare Physician Fee Schedule. The ACA requires the application of Medicare's value-based payment modifier (VBPM) to be "budget neutral" when applied to fee-for-service physicians and, as appropriate, to promote "systems-based care." Moreover, the Centers for Medicare and Medicaid Services (CMS) must take into account the special circumstances of physicians or groups of physicians in rural areas and other underserved communities.

CMS's development and implementation of Medicare's VBPM will be an iterative process. In 2013, the ACA requires HHS to publish in the *Federal Register* the measures of resource use and quality and the analytic measures that CMS will use to determine Medicare's payment modifier. Beginning on January 1, 2015, the law requires CMS to apply Medicare's VBPM to payments of selected fee-for-service physicians and physician groups. In 2017, CMS is directed to apply the VBPM to payments to all (or nearly all) physicians paid under Medicare's fee schedule.

"It is well established now that one can in fact improve the quality of health care and reduce the costs at the same time."

Health Affairs Editor-in-Chief Susan Dentzer

CMS faces several challenges in the design and implementation of Medicare's VBPM. One is likely to be a lack of agreement among key stakeholders on priorities, measurement, and other design elements. CMS is collaborating with stakeholders inside and outside government, reaching out to physician groups and specialty societies, holding public listening sessions, using the Medicare Physician Fee Schedule rule-making process to develop equitable performance measures, and relying on meaningful and actionable feedback reports.³

On March 27, 2012, the Robert Wood Johnson Foundation's Changes in Health Care Financing and Organization (HCFO) program convened a meeting in Washington, D.C. for a moderated discussion on the development and implementation of Medicare's VBPM. Participants included representatives of physician groups, representatives of large commercial health insurers, health care researchers, health economists, and federal policymakers. The meeting topics included (1) the functioning of Medicare's VBPM in the

U.S. health care system; (2) the selection of costs and quality measures for the value modifier; (3) methodological issues related to the value modifier, and (4) factors to consider in phasing in the modifier in 2015 and beyond.

At the outset of the meeting, the moderator Meredith Rosenthal, Ph.D., from the Harvard School of Public Health, emphasized that the discussion was to focus on pragmatic issues related to the design and implementation of Medicare's payment modifier for fee-for-service physicians. Meeting ground rules specified that the discussion would not address stakeholder agendas and that problems were not to be raised without proposing solutions. Moreover, in the interest of time, the discussion was limited to issues related to payment rather than to public reporting of the information that will be used in Medicare's VBPM.

This report highlights some of the observations, concerns, and suggestions expressed by participants at the meeting with respect to the design and implementation of Medicare's VBPM for physicians. Noting that the ACA requires CMS to phase in Medicare's VBPM for some physicians beginning in 2015 and for virtually all physicians in 2017, attendees remarked that time is growing short and that near-term actions will lay the foundation for an iterative process of improvement to the VBPM in the coming years.

Meeting participants emphasized that clear, actionable, and timely guidance from CMS is essential for all physicians who strive to comply with the application of Medicare's VBPM. The challenge in effectively reaching a national audience of physicians and clearly explaining the components of Medicare's VBPM will require a variety of communication approaches.

Moreover, meeting participants underscored the importance of ongoing efforts at the federal level aimed at aligning HHS and CMS health quality and efficiency measures. They recommended aligning Medicare's

VBPM with measures used by other HHS and CMS programs as well as measures used in quality improvement and pay-for-performance initiatives undertaken by other public and private entities.

I. Issues Related to the Functioning of Medicare's Value-Based Modifier for Physician Payment

A. Issues Related to the Functioning of Medicare's VBPM in Need of Clarification

At the March 2012 meeting, physicians and other stakeholders expressed considerable uncertainty about the ultimate goals of Medicare's VBPM and how CMS will interpret the ACA's provisions related to the VBPM. Such uncertainty, they suggested, underscores the need for CMS to make clarifications related to the following:

- **Goals.** Do HHS and CMS intend to implement the VBPM for purposes of both improving health care quality and reducing costs, or is their primary goal to save money for the Medicare program? Is one goal to have Medicare's VBPM serve as a core for the evolution of performance-based payment across the country and to contribute to transformational change in U.S. health care? Will Medicare's VBPM for physicians align with the goals of the HHS National Strategy for Quality Improvement developed under Section 3011 of the ACA? Will Medicare's VBPM be applied in a way that reduces disparities in health and health care or at least does not exacerbate them?
- **Support for quality improvement among physicians.** Do HHS and CMS intend to rely on Medicare's VBPM program to measure and compensate physicians on the basis of quality and efficiency or, beyond that, to provide support for physicians' quality improvement initiatives and the transformation of the U.S. health care system? Section 10322 of the ACA requires the Secretary of HHS to establish a process that permits qualified public and private entities

to use standardized extracts of Medicare Parts A, B, and D claims data to evaluate the performance of providers of services and suppliers.⁴ If providing support for quality improvement does not come from CMS, would it be possible to identify some type of support either to foster learning collaboratives at the regional level or to engage other qualified entities in using a hybrid of Medicare data and data from private payers?

- **Budget neutrality.** How does CMS interpret "budget neutral" with respect to the effect of Medicare's VBPM? Is the modifier supposed to be budget-neutral with respect to Medicare Part B (Medical Insurance) expenditures only, or is it supposed to be budget-neutral across Medicare Parts A (Hospital Insurance) and B? What about expenditures under Medicare Part D (Prescription Drug Insurance)?
- **Systems-based care.** How does CMS interpret "systems-based care," in the context of the ACA's mandate for Medicare's VBPM to be applied, as appropriate, in the service of promoting such care?
- **Physician group.** The ACA stipulates that Medicare's VBPM is to be applied to all physicians and physician groups serving Medicare beneficiaries on a fee-for-service basis. Currently, CMS provides feedback data to physician groups under Medicare's Physician Feedback Program, but Medicare does not contract with physician groups. Will CMS be able to use Medicare's VBPM program to measure and pay physician groups rather than individual physicians? If so, what criteria will CMS use to determine what constitutes a physician group and what the group—as opposed to the individual physician—is accountable for?

B. Aligning Measures Used for Medicare's VBPM with Other Public and Private Measures

Several public and private health care programs use health care quality and cost measures. Representatives of physician organizations and others at the March 2012 meeting underscored the need for ongoing efforts to align the VBPM's health quality and efficiency measures with measures used by other public and private payers.

The standardization and alignment of performance measures and methodology (and reporting formats) for public and private quality improvement and pay-for-performance initiatives would send consistent signals to health care providers and move the health care system in the desired direction of improved quality of care and greater value. It would also ensure that busy physicians and other health care providers are not overwhelmed with confusing, contradictory information and requirements.

In discussing the challenges of alignment, participants raised several issues, including whether new measures should align with established measures, whether the alignment of measures should differ from the alignment of targets, and whether an overly prescriptive framework would limit actionable measures. Even with a common set of measures, targets for the Medicare population may not be suited to the commercial, privately-insured population.

1. Existing Measures Used by Public and Private Entities

Physicians and other stakeholders at the March 2012 meeting recommended ongoing efforts to align the health quality and efficiency measures used by HHS and CMS for Medicare's VBPM with the measures used by other HHS and CMS programs, including those authorized by the ACA. In addition, they recommended that CMS consider aligning measures used by Medicare with at least some of the measures used in quality improvement and pay-for-performance initiatives undertaken by other public and private entities (e.g., physician organizations, large commer-

cial health insurers, regional initiatives to improve the quality and value of health care, health care quality organizations, and health care accrediting/certifying entities).

- Federal programs. Examples of federal programs whose measures used in quality improvement and pay-for-performance initiatives might lend themselves to alignment include several Medicare programs authorized under the ACA, the Health Information Technology for Economic and Clinical Health Act (HITECH) Act, and other federal statutes.
 - Medicare programs authorized by the Affordable Care Act of 2010. ACA provisions with measurement and reporting functions include the following:^{5,6}
 - Section 3001 (Hospital Value-Based Purchasing Program). Medicare is the largest single payer for hospital payments, and hospital payments account for the largest share of Medicare spending. Medicare's hospital-oriented: value-based purchasing program, established in Section 3001 of the ACA, links a percentage of hospital payments to hospitals' performance on quality measures related to common and high-cost conditions such as cardiac, surgical, and pneumonia care. Starting in fiscal year 2013 (which begins on October 1, 2012), CMS will offer incentives to acute care hospitals based on either how well the hospital performs on certain quality measures or how much the hospital's performance improves compared to its performance during a baseline period.⁷
 - Section 3002 (Improvements to the Physician Quality and Reporting System). Medicare's Physician Quality and Reporting System (PQRS), established under another name in 2007 and broadened under Section 3002 of the ACA, is a voluntary reporting initiative under Medicare that allows physicians to earn a bonus on their total Medicare Part B charges paid under the physician fee schedule if they report to CMS on a minimum of three quality measures.⁸ For 2012, physicians and other caregivers in hospitals or physician practices may report 208 quality measures and 22 measures groups in the PQRS.⁹ By reporting on a minimum of three measures on a specified group of patients, physicians may earn a bonus payment of 0.5 percent on all Medicare bills for 2012.
 - Section 3003 (Physician Feedback Program). Medicare's Physician Feedback Program, first established in 2008 and extended and enhanced by Section 3003 of the ACA, involves CMS's provision of confidential Quality and Resource Use Reports (QRUR) to physicians and physician groups to permit them to compare their performance with that of similar physicians practicing in the same specialty.
 - Section 3022 (Shared Savings Program for Accountable Care Organizations). Section 3022 of the ACA authorizes Medicare's new Shared Savings Program for Accountable Care Organizations (ACO). ACOs are groups of health care providers who volunteer to take responsibility for providing the full spectrum of care provided to at least 5,000 Medicare beneficiaries and for meeting specified quality benchmarks (including a mix of process, outcome, and patient experience measures. They share in savings if medical expenditures per capita for Medicare Parts A and B fall below a certain benchmark.¹⁰ A variety of provider-led entities may opt to become Medicare ACOs, including integrated deliv-

ery systems, physician-hospital organizations, hospitals with a primary care physician network, and large, multispecialty group practices.

- Section 3023 (Bundled Payment Pilot). By January 13, 2012, Section 3023 of the ACA requires the Secretary of HHS to develop and subsequently evaluate a national savings program to encourage hospitals, doctors, and post-acute care providers to improve patient care and achieve savings for the Medicare program through bundled payment models.¹¹ Under the program, Medicare will offer a bundled payment for acute, inpatient hospital services, physician services, outpatient hospital services, and post-acute care services for an episode of care that begins three days before a hospitalization and extends for 30 days following discharge.
- Initiatives authorized by the Health Information Technology for Economic and Clinical Health Act (HITECH) Act. The HITECH Act, enacted as part of the American Recovery and Reinvestment Act of 2009, included \$22 billion to accelerate physicians' and other health care providers' adoption and meaningful use of health information technology—that is, the use of electronic health records to achieve significant improvements in the quality of care as specified in CMS regulations (e.g., entering data essential to creating an electronic health record, using clinical decision support tools, incorporating clinical laboratory results into electronic health records, and using electronic health records to support patient transitions between care settings or personnel).¹¹
- **Regional collaboratives for health improvement.** CMS might consider aligning Medicare's VBPM measures with measures used by regional health improvement initiatives, such as those located in the far West, the Midwest, the Northeast, and Louisiana.¹³ Regional collaboratives provide actionable information on the cost and quality of health care services, the health of the population, and/or the extent to which a community has adopted state-of-the-art methods of delivery, payment, and health promotion. To foster regional systems-level change, regional collaboratives aggregate data across payers and common performance measures.
- **Physicians and physician organizations.** Measures of health care performance best succeed when physicians and others involved in health care support such measures and, in turn, report them to the public continuous improvement efforts.¹⁴ Many physician organizations and state medical societies have undertaken initiatives to define quality and implement quality improvement initiatives. Given the vital importance of physicians' acceptance of performance measures adopted by Medicare and to ensure that Medicare's measures improve quality of care, CMS may want to consider aligning Medicare's VBPM with the evidence-based measures of quality backed by a consensus of physician organizations.
- **Health care quality organizations and accrediting/certifying entities.** It may be useful to establish collaborations that align Medicare's VBPM with measures used by the National Quality Forum (NQF), a public/private partnership created in 1999 that relies on a consensus process among a diverse group of stakeholders to endorse national standards for measuring and publicly reporting on health care quality measures. The NQF maintains a portfolio of endorsed performance measures that may be used to measure and quantify health care processes, outcomes, patient perceptions, and organizational structures and/or systems associated with the ability to provide high-quality care.¹⁵ CMS also might consider aligning its measures with those used by accrediting entities such as the National Committee for Quality Assurance (NCQA), which operates accreditation, certification, recognition, and evaluation programs for a broad range of health care entities.¹⁶
- **Large commercial health insurers.** Many large commercial insurers such as BlueCross BlueShield, UnitedHealth Group, and WellPoint serve Medicare beneficiaries on a fee-for-service basis and have instituted quality improvement and pay-for-performance initiatives. For four or five years, UnitedHealth has been operating a transparency program that covers 245,000 physicians across 20 specialties. It contracts with physicians in many geographic areas, some areas more densely populated than others, and deals with solo physicians as the unit of measurement. UnitedHealth Group has built programs analogous to Medicare's VBPM and is experienced in addressing the challenges that accompany the development and implementation of such programs. Because commercial insurers serve children, some of their quality measures would differ from those selected by CMS for the Medicare population, but other measures could be closely aligned.

2. Framework for Aligning Measures Established Under the Affordable Care Act

Congress included several provisions in the ACA aimed at fostering the establishment of a framework for aligning federal measures used in health care quality and efficiency measurement:

- **Section 3011 (National Strategy for Quality Improvement).** Section 3011 of the ACA requires the Secretary of HHS, through a transparent collaborative process, to develop a national strategic plan to improve the delivery of health care services, patient health outcomes, and population health by 2011.¹⁷ HHS released the first strategic plan—the National Strategy for Quality Improvement in Health Care—in March 2011. The plan is to be updated annually and submitted to Congress no later than January 1 of each year.¹⁸
- **Section 3012 (Federal Interagency Working Group on Health Care Quality).** As a means to ensure alignment and coordination across federal efforts and with the private sector, Section 3012 of the ACA requires the Secretary of HHS to establish an Interagency Working Group on Health Care Quality for the purpose of providing a platform for collaboration, cooperation, and consultation among 23 federal agencies with major responsibility for health care quality and quality improvement regarding quality initiatives.¹⁹ The working group began meeting in March 2011.
- **Section 3013 (Quality Measure Development).** Section 3013 of the ACA requires HHS, the Agency for Healthcare Research and Quality, and CMS to identify (1) quality measures that need improvement, updating, or expansion and (2) gaps in health care quality measures relative to the National Strategy for Quality Improvement in Health Care.²⁰

- **Section 3014 (Federal Pre-Rulemaking Process for Quality Measurement).** Section 3014 of the ACA requires the Secretary of HHS to establish a federal pre-rule-making process for the selection of health care quality and efficiency measures in HHS and CMS programs.²¹

In 2011, pursuant to Section 3014 of the ACA, the NQF launched the public/private Measure Applications Partnership (MAP) to advise HHS on the selection of performance measures for public reporting and performance-based payment programs. MAP is to be guided by the goals and priorities of HHS's National Strategy for Quality Improvement in Health Care.²² The NQF's diverse membership—consumer organizations, public and private health care purchasers, health care providers, and others—makes the organization well positioned to encourage the alignment of measures across a variety of public and private quality improvement efforts.

In 2011, CMS submitted a list of health care performance measures under consideration for use in 2012 to MAP for its review and comment. In a subsequent report, MAP outlined a coordination strategy for HHS on federal clinician performance measurement,²³ in which MAP evaluated measures published for Medicare's VBPM in the July 1, 2011, *Federal Register* against the ideal characteristics and criteria for such a measure.

An issue related to measure alignment is the utility of aggregating data from all payers.

- Aggregating data at the regional or national level by using a hybrid of Medicare data and private-payer data could yield more reliable measures of health care providers' performance. Large commercial health insurers, however, have expressed concern about Medicare's aggregation of data for all payers, noting that insurers have adequate sample sizes to measure and

reward performance and fearing that competitors might "reverse engineer" all-payer statistics.

- Distributed data models for dealing with payer confidentiality issues have recently become available. In 2011, with support from the Robert Wood Johnson Foundation, the Data Aggregation Pilot of the America's Health Insurance Plans Foundation undertook pilot studies in Colorado and Florida to demonstrate the feasibility of using a distributed data approach to aggregate data on individual physicians from several health plans and to report aggregated data to physicians on the quality of care they provide to their respective patients.²⁴

C. Gaining the Support of Physicians and Physician Groups for the Measures Used for Medicare's VBPM

It is essential that physicians accept the measures of health care quality and cost used by CMS in Medicare quality improvement and pay-for-performance initiatives such as Medicare's VBPM. Physicians have indicated that they need a common set of trusted, timely, and actionable measures—rather than several reports with varying results—in order to improve their performance. Many physician organizations and state medical societies have undertaken initiatives to define quality and implement quality improvement initiatives. Actively involving these groups in discussions on the selection of measures of performance improvement could foster stronger alliances and consistent messages.

1. Engaging Physicians in the Selection and Application of Measures for the VBPM

Physicians paid under Medicare's fee schedule range from solo practitioners in underserved areas who may serve as many as 8,000 patients in a county to physicians in large, multispecialty medical groups and ACOs with large staffs, significant

resources, and sophisticated, interoperable electronic health records that support quality improvement initiatives.

The ACA requires HHS, when applying the VBPM, to account for the special circumstances of physicians or groups of physicians in rural areas and other underserved communities. Thus, CMS must strive to develop and apply Medicare's value-based physician payment modifier in such a way that it is acceptable to all fee-for-service physicians serving Medicare beneficiaries across the country without imposing an undue burden on solo physicians in underserved communities.

The challenge in selecting and applying quality measures for Medicare's VBPM lies in supporting the needs of small offices that struggle to provide care but without encouraging them to engage in outdated management practices, such as the use of paper records that could impede innovation and efficiency.

- Following an approach adopted by BlueCross BlueShield, CMS could select performance measures for the VBPM that are meaningful for solo practitioners and practices with no more than 50 physicians and staff.
- Another approach could use a vertically integrated family of measures for the VBPM that could operate at the individual level as well as at higher levels (ACOs). Participants at the March 2012 meeting noted that interactions between Medicare's VBPM fee-for-service physicians and quasi-prospective payment systems such as ACOs have received insufficient attention.

Representatives of physician organizations in attendance at the meeting emphasized that, regardless of the measures selected, the following factors are important to physicians: (1) transparency and the ability to drill down into the data used to measure a physician's performance; (2) an opportunity for physicians to review the data

before the data's release to the public; and (3) an appeals process for physicians who disagree with their evaluations.

2. Supporting Physicians' Quality Improvement Processes

Unlike physicians in entities such as ACOs in Medicare's Shared Savings Program, many physicians in solo, small, or medium-sized practices who receive Medicare compensation on a strictly a fee-for-service basis lack the knowledge, staff, and resources to undertake ongoing quality improvement initiatives or develop learning health care systems. Participants at the March 2012 meeting suggested that perhaps CMS could provide financial incentives and/or consider one or more of the following approaches to help physicians in solo, small, and medium-sized practices participate in collaborative learning initiatives:

- Even though Medicare does not contract with physician groups, CMS could set regional or national standards for performance targets and allow physicians in solo, small, and medium-sized practices to create "virtual" peer groups that engage in collaborative efforts for performance improvement and thus "rise and fall together." Small practices in Arkansas, for example, could be encouraged to join a quality improvement collaborative to participate in a program to reduce overimaging for lower back pain under Medicare's VBPM program.
- CMS could enlist the help of the Quality Improvement Organizations (QIO) with which Medicare contracts in each state to support the participation of solo, small, and medium-sized practices in collaborative quality improvement initiatives related to Medicare's VBPM. Medicare's 10th statement of work for QIOs emphasizes transformational change in health care and the creation of topic-specific learning and action networks to spread best practices and spark change through peer-to-peer learning and sharing of solutions.²⁵

- CMS could encourage physicians in solo, small, and medium-sized practices to participate in learning collaboratives at the regional level, perhaps in collaboration with private payers, local initiatives, or the Center for Medicare and Medicaid Innovation Center or perhaps by using a hybrid approach that involves Medicare data and data from private payers or other qualified entities. Section 10322 of the ACA requires the Secretary of HHS to establish a process that allows qualified public and private entities' use of standardized extracts of Medicare claims data to evaluate and report on the performance of service providers and suppliers on measures of quality, efficiency, and effectiveness of resource use.²⁶

II. Issues Related to the Selection of Quality and Cost Measures for Medicare's Value-Based Modifier for Physician Payment

As of 2013, the ACA requires publication in the *Federal Register* of measures of resource use and quality and the analytic measures that CMS will use to determine Medicare's VBPM. The law does not specify the manner in which quality of care and costs are to be compared but does stipulate the following with respect to how quality and costs are to be evaluated for purposes of Medicare's VBPM:²⁷

- Quality of health care is to be evaluated "to the extent practicable" on the basis of a composite of appropriate outcomes or other measures established by the Secretary of HHS and is to reflect quality of care.
- Costs of health care are to be evaluated "to the extent practicable" on the basis of a composite of appropriate measures of costs established by the Secretary of HHS. The composite is to eliminate the effect of geographic adjustments in payment rates and to take into account risk factors such as socioeconomic and demographic characteristics, ethnicity, the health status of individuals, and other factors deemed appropriate by the Secretary of HHS.

CMS's selection of quality and cost measures for use in Medicare's VBPM is a matter of great concern and interest to physician organizations, commercial health insurers, and other stakeholders. CMS has indicated that Medicare's Physician Feedback Program and Medicare's VBPM will operate in a complementary manner. The Medicare Improvements for Patients and Providers Act of 2008 authorized Medicare's Physician Feedback Program for the purpose of providing physicians with confidential feedback on the resources used to provide care to Medicare beneficiaries. Section 3003 of the ACA reauthorized and expanded the program. CMS has used an iterative approach under the program to measure and provide confidential feedback to physicians on their comparative performance in terms of resource use and quality of care.²⁸

In Phase I of Medicare's Physician Feedback Program in 2009, CMS sent a small sample of physicians in 12 metropolitan areas prototype feedback reports focusing on measures of resource use. In Phase II in 2010, CMS sent QRURs—featuring per capita resource use measures and quality-of-care measures to 36 medical groups and to the approximately 1,600 individual physicians affiliated with those groups in the same 12 metropolitan areas. In Phase III in 2011 and 2012, CMS is sending confidential QRURs to 20,000 physicians serving Medicare beneficiaries in Iowa, Kansas, Missouri, and Nebraska to enable them to compare their performance to the average care and costs of Medicare patients of other physicians in their specialty in the four states.²⁹

As of January 1, 2015, Section 3007 of the ACA requires CMS to apply Medicare's VBPM to payments of selected fee-for-service physicians and physician groups serving Medicare beneficiaries. CMS has indicated that, in 2015, it plans to link Medicare's VBPM to Medicare claims-based and other data from the 2013 QRURs sent to physicians under Medicare's Physician Feedback Program.³⁰ CMS is continuing to test the design, con-

tent, and performance indicators used in the QRURs. As CMS moves expeditiously to respond to the ACA, it will phase in the modifier through 2017, although the structure now undergoing development may prove less than optimal over the long term. The phased approach will help signal a proposed course of action with allowances for the possibility of adjustments between 2015 and 2017.

A. Selecting Quality Measures for Medicare's VBPM

To send a consistent message to physicians about priorities, the quality measures that CMS selects for Medicare's VBPM in 2015 and beyond should be aligned with the goals and priorities of the National Strategy for Quality Improvement in Health developed by HHS under Section 3011 of the ACA. The three broad aims of the strategy submitted to Congress in March 2011 follow:³¹

1. **Better care.** Improve overall quality of care by making health care more patient-centered, reliable, accessible, and safe.
2. **Healthy people/healthy communities.** Improve the health of the U.S. population by supporting proven interventions that address behavioral, social, and environmental determinants of health in addition to delivering higher quality care.
3. **Affordable care.** Reduce the cost of high-quality health care for individuals, families, employers, and government.

To advance these three broad aims, the 2011 National Strategy for Quality Improvement in Health specifies that public and private partners should initially focus on the following six priorities:

- Making care safer by reducing harm caused in the delivery of care
- Ensuring that each family and each person is engaged as a partner in his or her care

- Promoting effective communication and coordination of care
- Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease
- Working with communities to promote wide use of best practices to foster healthy living
- Making high-quality care more affordable for individuals, families, employers, and governments by developing and disseminating new health care delivery models

According to the Agency for Healthcare Research and Quality, the primary issues for consideration when selecting measures of the quality of health care are whether the measures are “good” and whether they are appropriate for the intended audience.³² A good measure demonstrates attributes such as standardization, comparability, availability, timeliness, relevance, validity, experience, stability, and evaluability. One option for categorizing a measure as good is its endorsement by the NQF or the MAP. To promote transparency and quality improvement among health care providers, CMS could select quality measures for Medicare's VBPM that are timely, valid, and important to health care providers. To resonate with consumers, measures of health care quality must capture aspects of health care valued by consumers.

1. Selection of Quality Measures for the VBPM in 2015

Donabedian's well-known paradigm for the evaluation of the quality of health care identifies the following three basic types of measures:³³

- Process measures of quality, which indicate what processes a health care provider has adopted to maintain or improve a patient's health (e.g., the percentage of patients up to age 75 who

receive LDL-C screening, the percentage of patients who receive B-blocker treatment after a heart attack)

- Structural measures of quality, which indicate the available capacity, systems, and processes for providing high-quality health care (e.g., whether an organization uses electronic health records, the ratio of providers to patients)
- Outcome measures of quality, which indicate the impact of health care interventions on patients' status (e.g., the rate of surgical complications)

Clinical outcome measures of the effects of health care interventions on patients' health status are often considered the "gold standard" in measuring quality. Such measures require risk adjustment for different characteristics within a population (e.g., patients' health status) that are beyond health providers' control³⁴ as well as a high degree of adoption of electronic health records. For that reason, clinical outcome measures of quality are much more challenging to implement than process or structural measures of quality. Moreover, some participants at the March 2012 meeting questioned the feasibility of attributing outcome measures, as opposed to process measures, to specialists.

The vast majority of quality measures available for use under Medicare's VBPM are process measures. The 2010 QRURs under Medicare's Physician Feedback Program provided confidential information on physicians' quality of care by using a core set of 12 broadly applicable process measures for ambulatory care—a subset of the NCQA's according to NCQA HEDIS stands for Healthcare Effectiveness Data and Information Set (HEDIS®) measure set—that could be calculated with Medicare claims data.^{35, 36}

The 2012 QRURs provide confidential information to fee-for-service physicians on similar types of measures based on 2010 Medicare claims data and enhanced claims-based quality information submitted by physicians to the PQRS.³⁷

In 2015, data for quality measures supporting Medicare's VBPM will likely be drawn from a subset of the 2013 QRURs data.³⁸ One outcome measure of quality that CMS could consider for the VBPM, though not currently in the QRURs, is a measure of patient experiences. Unlike clinical outcome measures, measures of patient experiences and satisfaction do not require risk adjustment; instead, they emphasize the importance of "patient-centered" care that is applicable to all types of medical practices and specialties. In addition, patients will appreciate and find it easy to understand measures of patient experiences.

CMS could test the viability of patient experiences as a quality measure by incorporating the measure into the initial phases of modifier implementation. NCQA has developed an optional patient experience reporting program to help medical practices capture data on patients' experiences (related to access, information, communication, coordination of care, self-management support, and shared decisionmaking).³⁹ This year, NCQA gave credit to physicians (including some particularly small physician practices) for voluntarily reporting on patient experiences. CMS could adopt a similar approach for Medicare's VBPM.

NCQA expects to incorporate its patient experiences measure into its algorithm for the patient-centered medical home (PCMH).⁴⁰ The PCMH is a model for primary care that has drawn the endorsement of the American Medical Association, American College of Physicians, and numerous specialty societies as a means to attract and retain primary care physicians, improve quality, and lower overall costs. As of 2010, the adoption of PCMH processes was far greater among the largest medical groups (those with more than 140 physicians) and practices owned by large entities such as hospitals, all of which are likely to have the resources required to institute PCMH processes; small or medium-sized practices do not command the staff and resources needed to support the implementation of such processes. CMS's adoption of patient experiences as an outcome

measure for Medicare's VBPM would be consistent with CMS's future adoption of PCMH-related measures.

2. Selection of Next-Generation Quality Measures for the VBPM

- With each year, the measures of health care quality become more precise and more complex, and the next generation of measures will span health care settings and present a more complete picture of care.⁴¹
- Medicare's VBPM may increasingly rely on clinical data submitted via electronic health records. CMS is exploring ways to improve the collection of clinical data and to encourage the adoption and use of electronic health records.⁴²
- Medicare's use of risk-adjusted clinical outcome measures of health care quality is an important future target. As noted earlier, clinical outcome measures require risk adjustment and a high degree of adoption of electronic health records. Several physician specialty organizations—including the American Academy of Ophthalmology, American College of Cardiology, and Society of Thoracic Surgeons—are committed to the development of patient registries that will help them monitor clinical outcomes of care. Electronic health records linked to patient registries offer the means for active surveillance and early detection and reporting of adverse outcomes in real time and thus hold enormous potential for improving the quality and value of health care in a way never before possible.
- Section 3003 of the ACA requires CMS to develop Medicare-specific episode grouping software for Medicare's Physician Feedback Program in order to address the limitations of proprietary episode groups, which have limitations when applied to people with several chronic conditions. Many Medicare beneficiaries live with several chronic conditions (e.g., cardiovascular disease, diabetes, chronic obstructive pulmonary disease).

- Episodes of care represent a group of health care services for a health condition (e.g., hip fracture, diabetes) over a defined period. Episodes of care may occur in a single setting, may include both hospital and physician services, or may involve the continuum of health care services. The hope is that Medicare's episode-based approaches to performance measurement, accountability, and payment will foster greater coordination of care, reducing fragmentation and costs associated with the overuse and duplication of services.⁴³
- Nonetheless, episodes are often difficult to define because of different opinions as to which services should be grouped together. Many Medicare beneficiaries live with several chronic conditions such that questions arise over which physician has primary responsibility for a patient's care.⁴⁴
- CMS requested proposals from contractors to develop a prototype Medicare-specific episode grouper for six of nine conditions and has since selected one of the episode groupers for use. It intends imminently to provide more information about the episode grouper in a national provider call and plans to test and validate the initial grouper software in 2012.

B. Selecting Cost Measures for Medicare's VBPM

The New England Healthcare Institute has defined waste in health care as "healthcare spending that can be eliminated without reducing the quality of care."⁴⁵ When selecting cost measures for Medicare's VBPM, policymakers will need to address the use of health care services that increase expenditures without improving patients' or populations' health outcomes.

The Institute of Medicine's (IOM) seminal 2001 report *Crossing the Quality Chasm* identified the following three dimensions of health care quality:

- **Overuse** (i.e., the provision of tests and interventions that have no clinical benefit yet carry associated risk)
- **Misuse** (e.g., medical errors such as adverse reactions to drugs, hospital-acquired infections, surgical injuries)
- **Underuse** (e.g., lack of access to preventive care for leading chronic diseases such as cardiovascular disease and diabetes or the failure to administer beta-blocking drugs to people experiencing a heart attack)

Eliminating the overuse of tests and treatments that may harm patients' health could potentially translate into safer and higher-quality care while reducing health care costs. Jack Wennberg of Dartmouth's Center for the Evaluative Clinical Sciences has estimated that up to one-third of the over \$2 trillion spent annually on health care is expended on unnecessary or redundant tests and procedures.⁴⁶

One approach to calculating costs associated with overuse could involve matching the 45 tests and procedures that the American Board of Internal Medicine (ABIM) Foundation's *Choosing Wisely*[®] initiative has identified as overused per physician utilization data. The initiative is part of a multiyear effort undertaken by the ABIM Foundation to help physicians become better stewards of finite health care resources.⁴⁷ At a widely publicized press conference on April 4, 2012, the ABIM Foundation, *Consumer Reports*, and nine physician organizations released an evidence-based list of 45 tests or procedures that have no proven benefit for many patients and sometimes cause more harm than good.⁴⁸

Each of the following nine physician organizations participating in the *Choosing Wisely*[®] initiative identified five tests or procedures that patients and their physicians should question: the American College of Radiology; American College of Physicians; American Academy of Allergy,

Asthma, and Immunology; American Academy of Family Physicians; American College of Cardiology; American Gastroenterological Association; American Society of Clinical Oncology; American Society of Nephrology; and American Society of Nuclear Cardiology. In fall 2012, eight additional physician organizations that have joined the *Choosing Wisely*[®] initiative will release similar evidence-based lists of five common tests or procedures that have no proven benefit.⁴⁹

"Estimates suggest that as much as \$700 billion a year in healthcare costs do not improve health outcomes."

Peter Orzag, Director of White House Office of Management and Budget, May 2009 interview with National Public Radio

In a related discussion at the March 2012 meeting, one participant noted the complexity of differentiating and rewarding physicians' inactivity versus activity, particularly when patients expect certain services. For example, a physician could receive a payment bump under Medicare's VBPM for *not* ordering an unnecessary procedure.

1. Selection of Cost Measures for the VBPM in 2015

As noted, CMS is engaging in an iterative process to develop the modifier structure and its application. The process involves an evaluation in 2015 of the quality and per capita costs of care for Medicare's VBPM that will rely on Medicare claims-based and other data from the 2013 confidential QRURs developed under Medicare's Physician Feedback Program.⁵⁰

- The confidential 2010 QRURs in Phase I of Medicare's Physician Feedback Program provided comparative information to fee-for-service physicians on their resource use in terms of (1) average annual costs per capita (risk-adjusted and price-standardized) attributable to the physician's Medicare patients and (2) per capita costs for specific

categories of services. The data for the cost measures were all Medicare Part A and B claims submitted by all providers who treated patients attributed to a given physician, including providers not part of the given physician's medical practice group.

- The confidential 2012 QRURs in Phase III of Medicare's Physician Feedback Program provide information to physicians in Iowa, Kansas, Missouri, and Nebraska on (1) per capita spending for various types of services; (2) average Medicare spending per patient (total per capita cost) in 2010; and (3) average Medicare spending per patient for patients with several chronic conditions.⁵¹ All cost data in the 2012 QRURs have been payment-standardized and risk-adjusted to account for differences in patients' age, gender, Medicaid eligibility, and history of medical conditions. Cost information is shown for each physician's Medicare patients in various categories (i.e., total patients for whom the physician filed any claim, patients whose care the physician directed, patients whose care the physician influenced, and patients to whose care the physician contributed).
- One option discussed by meeting participants is for per capita cost measures for Medicare's VBPM to include total Medicare (or health care) expenditures, including Part D expenses.

2. Selection of Next-Generation Cost Measures for the VBPM

- One possible approach to the selection of next-generation cost measures for the VBPM could identify key drivers of cost in different specialties (e.g., using a method such as that pioneered by Howard Beckman at Focused Medical Analytics) and then determine the best practices related to those key drivers. Data from the evidence base of key drivers could be used to improve the quality and reduce the cost of care.

- As noted, CMS has begun development of a Medicare-specific episode grouper for Medicare's Physician Feedback Program (as mandated by Section 3003 of the ACA) and plans to test and validate the initial grouper software in 2012.⁵²
 - Especially in the case of Medicare beneficiaries living with several chronic conditions, questions arise with respect to attributing responsibility to a provider and the costs to be included or excluded. The broader a cost measure, the greater is the variance and the larger is the required sample.
 - Participants at the March 2012 meeting suggested that CMS might have to use different episode groupers for each medical specialty to ensure valid cost data. They noted the various subspecialties (e.g., eight subspecialties within ophthalmology) and pointed out physicians' enormous variation in resource use depending on the types of patients who make up their case mix.
- The cost and utilization of health care resources vary tremendously among health care providers across the United States.⁵³ At present, it is impossible to know whether such regional variation is attributable to health care practices that constitute "wasteful" spending or demographic conditions and are warranted.⁵⁴ In late 2010, at the request of the Secretary of HHS, the IOM began conducting a study to identify the factors that may explain geographic variation in health care spending across the country.⁵⁵ The committee performing the study is examining how geographic variation may or may not be related to factors such as cost of care, supply of care, quality of care, and health outcomes; diversity within patient populations, including the populations' health status, access to care, and insurance coverage; and physicians' decisions on what care to deliver.

III. Methodological Issues Related to Medicare's Value-Based Modifier for Physician Payment

Participants at the March 2012 meeting discussed a wide range of methodological issues pertaining to the development and implementation of Medicare's VBPM, particularly as related to the development of composite measures of cost and quality, risk adjustment of health care outcomes and resource use, and performance measurement (e.g., attribution of health care quality and costs, benchmarking, peer group comparisons, and sample size).

A. Composite Measures of Quality and Costs

A composite measure is a combined metric that incorporates several measures into a single score.⁵⁶ As noted, the ACA requires construction of Medicare's VBPM to be based on (1) "to the extent practicable" a composite of health quality measures and (2) "to the extent practicable" a composite of cost measures. The ACA does not specify the manner in which the composite measures of quality and costs are to be compared in Medicare's VBPM.

How might CMS construct composite measures of quality and costs in Medicare's VBPM per the ACA's mandate?

- The Medicare Physician Feedback Program's QRURs have displayed measures of quality and costs as separate measures.⁵⁷ Some participants at the March 2012 meeting suggested that the development of a composite measure of health quality and cost would be similar to the development of a composite measure of a car's styling and engine power—adding together two uncorrelated measures would just create noise. If CMS is able to separate measures of physician quality and cost in Medicare's VBPM, it could avoid the introduction of "noise" into estimates.

- Convened by the American Medical Association, the Physician Consortium for Performance Improvement⁵⁸ has created a framework for developing composite measures of health care quality that are evidence-based, patient-centered, outcome-focused, and testable. CMS could consider the framework in developing a composite measure of quality for Medicare's VBPM.

B. Risk Adjustment of Clinical Outcomes and Health Care Costs

As a necessary precursor to comparing clinical outcomes and health care costs, risk adjustment involves the use of a statistical process to adjust for differences in patient characteristics that are beyond the control of a health care provider.

- **Risk adjustment of clinical outcomes in Medicare's VBPM.** Measures of clinical outcomes are risk-adjusted to ensure that differences in patient characteristics that are beyond a health care provider's control (e.g., patient's age, medical condition, comorbidities) do not unfairly affect the provider's performance results with respect to outcome measures. From the payer's perspective, risk adjustment is essential for ensuring that physicians do not have an incentive to avoid observably high-risk patients.
 - Building on earlier work on risk-adjusting hospital mortality and re-admission rate measures,⁵⁹ CMS is planning and implementing risk-adjustment strategies for quality measures for incorporation into Medicare's VBPM. Factors used to risk-adjust these measures have included primary and secondary diagnoses from the index hospitalization and condition categories that account for co-morbidities derived from previous-year inpatient, outpatient, and physician claims. Adjustment has been by condition, and models have been validated.

- **Risk adjustment of costs in Medicare's VBPM.**

- The ACA specifies that measures of costs established by HHS for Medicare's VBPM are to eliminate the effect of geographic adjustments in payment rates and account for risk factors such as socioeconomic and demographic characteristics, ethnicity, the health status of individuals, and other factors deemed appropriate by the Secretary of HHS.
- Since 2003, CMS has used the Hierarchical Condition Categories (HCC) model to risk-adjust resources to account for the case mix of a physician practice under the Medicare Advantage program.⁶⁰ The process adjusts for differences in diagnostic history of the practice's Medicare beneficiaries but not for differences in the severity of illness; the ICD-9 coding system, which provides the foundation for the HCC model, generally does not measure severity levels reliably.

In the future, as part of its work in developing Medicare-specific episode grouping software as mandated by Section 3003 of the ACA, CMS will continue to study methods of risk-adjusting costs at the per capita level and for specific episodes of care.

C. Performance Measurement

1. Attribution of Quality and Costs of Care to Health Care Providers

Attribution is the process used to determine which health care provider or providers are to be held accountable for the quality and costs of health care.⁶¹ Attribution associated with Medicare patients' care in Medicare's VBPM will pose a challenge.

Physicians and others at the March 2012 meeting suggested that CMS might consider using different rules for the attribution of quality and cost measures in Medicare's VBPM.

- Medicare's Physician Feedback Program has set a precedent for using different rules for the attribution of quality and cost. The current group of QRURs includes two indicators of physician quality for Medicare beneficiaries: (1) measures calculated by CMS that rely solely on Medicare administrative claims and (2) Physician Quality Reporting System measures submitted to CMS by PQRS program participants. For PQRS quality measures, physicians self-identify specific Medicare beneficiaries as their patients. For claims-based quality and cost measures, the physicians' Medicare patient panel includes all Medicare beneficiaries for whom an eligible physician filed at least one professional claim in 2010. Each Medicare beneficiary's relationship with each physician to whom the beneficiary is attributed is categorized according to the amount of contact the physician had with the beneficiary (i.e., physician directed the beneficiary's care, influenced the care, or contributed to the care).

Should Medicare's VBPM use single-provider attribution or multiple-provider attribution?

- Single-provider attribution assigns the patient or episode to the provider who provides the greatest percentage of patient visits or total costs.
 - Some minimum number of contacts between the physician and patient over a specified period of time could be required.
 - One issue that may arise with attribution is how to deal with patients who are not local for long periods of time (e.g., snowbirds) but for whom a physician may be held responsible.

- Multiple-provider attribution assigns patients or episodes of care to more than one physician or to other health providers.
 - Participants at the March 2012 meeting noted that, if the goal is to encourage physicians to work as part of a team, then attribution should be at the team level rather than at the level of the individual physician. Mechanisms will need to be developed to link physicians to specific groups, possibly including self-identification (as in the ACO program).
 - One argument for multiple-provider attribution is that Medicare's elderly and disabled beneficiaries—especially those with several chronic conditions—tend to see several health care providers.⁶²

Should Medicare's VBPM rely on patient-based attribution or episode-based attribution?

- Patient-based attribution assigns per capita costs to one or more provider(s) and holds the provider(s) accountable for the entire spectrum of a patient's care. At least at the outset, as noted earlier, Medicare's VBPM will use patient-based attribution. All patient costs will be assigned to one or more physicians.
- Episode-based attribution assigns discrete episodes of care (whether in a single or multiple settings of care) to specific provider(s). As noted earlier, CMS is developing a Medicare-specific episode grouper and hopes to include episode-based costs in future QRURs in Medicare's Physician Feedback Program, but episode costs are not currently required to be a cost component of Medicare's VBPM.

2. Selecting Benchmarks for Quality and Cost Measures

Benchmarking in the health sector involves measuring and comparing the performance of health care providers or organizations against that of other providers or organizations in order to permit

continuous improvement.⁶³ For low-performing physician practices, CMS might consider linking benchmarks to improvement rather than to attainment.

Comparative benchmarks may be defined in terms of the best performers in a given peer group (e.g., the 90th percentile), low performers (e.g., 10th percentile), or peer group norms (e.g., the 50th percentile).⁶⁴ Each approach has its strengths and weaknesses.

- Average performance benchmarks for quality give health care providers deemed “worse than average” a relatively attainable goal for which to strive. In confidential QRURs recently sent to physicians in Phase III of Medicare's Physician Feedback Program, CMS designated the middle ground of mean or median performance as the benchmark for quality.
- High-performance benchmarks for quality acknowledge the best performers but may seem unattainable to low performers. Low-performance benchmarks may give low performers an incentive to improve but provide no incentives for others. Moreover, the values at the extreme upper and lower ends of peer group distributions are general less statistically reliable than values near the middle. In the confidential reports sent to physicians in Phase I of Medicare's Physician Feedback Program, CMS used high-performance benchmarks.

Variation in costs among physicians is much greater than variation in quality of care. Moreover, health care costs differ by geographic region.⁶⁵ The reasons for the variation are not entirely clear and are currently under investigation by the Institute of Medicine.

If CMS seeks to leverage Medicare's VBPM to encourage greater quality and value in the health care system, it might adopt a strategic approach to devising payment incentives for physicians affected by the modifier. Physicians' quality scores for the VBPM will likely be more impor-

tant than physicians' resource scores in changing both physician and patient behavior. There will be far less variation in physician quality measures than in cost measures. On the other hand, the dollar measures will be subject to a high degree of random variation. One approach suggested for CMS with regard to Medicare VBPM could reward (1) physicians with high quality scores but without high costs and (2) physicians with low costs but without low quality scores.

3. Defining Appropriate Peer Groups for Comparisons of Quality and Cost Measures

Benchmarking requires identifying appropriate peer groups of health care providers for comparisons. What are appropriate peer groups for comparisons in Medicare's VBPM?

- Defining specialists and subspecialists remains a challenge for CMS. In the QRURs provided in Phase II of Medicare's Physician Feedback Program in 2010, CMS used the Health Care Financing Administration (HCFA) medical specialty code submitted by a medical professional on his or her 2007 Carrier Medicare claims to determine the specialty of peers to whom performance and resource use would be compared.⁶⁶ If a medical professional listed different specialties in different claims, CMS used the medical specialty cited in the majority of the medical professional's claims.
- Determining which physicians in a particular specialty care for sicker patients is another challenge in determining appropriate peer groups for comparisons. Different specialists and subspecialists treat different types of patients, and, in some cases, the resources used to treat patients reflect physicians' case mix (e.g., cardiologists who treat a large number of patients with cardiac failure and order a large number of echocardiograms versus cardiologists whose patients are not so ill and do not require as many echocardiograms).

- For episodes of care, one possibility for creating comparisons might be the development of clusters of Episode Treatment Groups (ETGs®). ETGs®, which were introduced in the 1990s and reportedly allow adjustments for case mix, use claims-based information for measuring and comparing health care providers based on the cost of patient treatment episodes.⁶⁷

IV. Phasing in Medicare's Value-Based Modifier for Physician Payment

Beginning in 2015, the ACA requires Medicare's VBPM to be phased in over a two-year period. The Secretary of HHS may exercise discretion with respect to the specific physicians and physician groups to which the VBPM will apply in that year. In any event, CMS's actions in 2015 will serve as the foundation for the broader implementation of Medicare's VBPM in 2017. In 2017, CMS is required to apply the VBPM to payments to virtually all physicians paid under Medicare's fee schedule; therefore, CMS may elect to increase the number of physicians to whom the VBPM applies in 2016.

Participants at the March 2012 meeting offered several observations with respect to the sequencing of the phased implementation of Medicare's VBPM for physicians:

- It would be helpful to fee-for-service physicians serving Medicare beneficiaries if CMS provided them with explicit information in advance about what they could earn or would forgo under Medicare's VBPM.
- When CMS rolls out Medicare's VBPM for fee-for-service physicians in 2015, it will enjoy some flexibility with the size of the differential payment for value. Especially at the outset, given the uncertainties about the VBPM's functioning, it may be advisable to offer physicians only a small payment incentive under Medicare's VBPM. As measurement improves over time, the size

of Medicare payment incentives under the modifier could increase.

- Could CMS give physicians credit under Medicare's VBPM for reporting enriched claims or other data? Is there an option for weighting certain measures in the early years and moving toward clinical data in later years?
- Given that, at least in the short term, claims data and data reported via Medicare's PQRS will be the source of information, is it likely that other longer-term sources of data (e.g., from electronic health records, patient registries) will be available?

V. Conclusion

This report has identified some of the observations, concerns, and suggestions related to a complex program designed to promote value-based health care. While the March 2012 meeting participants described the challenges likely to emerge during implementation of the VBPM, they expressed some consistent messages.

Several public and private sector efforts are underway to improve health care quality and reduce costs. Alignment of these efforts will help minimize the associated burden and maximize the impact for all concerned.

- While CMS is mandated by law to institute the VBPM in short order, a phased approach will permit the testing of an initial structure that will lay the foundation for an iterative process of improvement of the modifier.

The message most clearly articulated by meeting participants was that CMS must provide clear, actionable, and timely guidance to all physicians committed to the application of Medicare's VBPM.

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VI Endnotes

1. Mathematica Policy Research. "Quality and Resource Use Reports (QRRs). Frequently Asked Questions" [Internet], 2010 [cited April 6, 2012]. Available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/Physician-FeedbackProgram/downloads//2010_QRUR_FAQ.pdf.
2. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "Section 1023 of the Patient Protection and Affordable Care Act: Availability of Medicare Data for Performance Measurement." Background paper for September 20, 2010, listening session [Internet], 2010 [cited April 14, 2012]. Available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched/Downloads/092010_Listening_session_backgroundunder.pdf.
3. Kaiser Family Foundation, 2011.
4. Center for Medicare Advocacy. "HealthReform: Linking Medicare Payment to Quality Outcomes" [Internet], 2011 [cited April 11, 2012]. Available at: http://www.medicareadvocacy.org/InfoByTopic/QualityOfCare/10_06.24.ReformAndQuality.htm.
5. Smith R. "CMS Finalizes ACA Hospital Value-Based Purchasing Program" [Internet] [cited April 4, 2012]. *Health Industry Washington Watch*. Available at: <http://www.healthindustrywashingtonwatch.com/2011/04/articles/regulatory-developments/cms-finalizes-aca-hospital-valuebased-purchasing-program/>.
6. Fiegl C. "Medicare PQRS: "Quality Reporting or Else" [Internet], 2012 [cited April 4, 2012]. *Amednews*, Available at: <http://www.ama-assn.org/amednews/2012/02/06/gvsa0206.htm>.
7. "Outcome. Physician Quality and Reporting System (formerly PQR)" [Internet], 2012 [cited April 4, 2012]. Available at: <http://outcome.com/pqrs.htm>.
8. McCanne D. "How Does the Affordable Care Act Define ACOs?" [Internet] [cited April 7, 2012]. Available at: <http://pnhp.org/blog/2010/10/28/how-does-the-affordable-care-act-define-acos/>.
9. Kaiser Family Foundation, 2011.
10. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "The Official WebSite for the Medicare and Medicaid Electronic Health Records (EHR) Incentive Programs" [Internet]. Available at: http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html?redirect=/EHRIncentivePrograms/10_PathtoPayment.asp.
11. Network for Regional Health Care Improvement. "Where Regional Health Improvement Collaboratives Are Located" [Internet] [cited April 7, 2012]. Available at: <http://www.nrhi.org/locations.html>.
12. National Quality Forum. "The ABCs of Measurement" [Internet], 2012 [cited April 7, 2012]. Available at: <http://www.rwjf.org/files/research/71008.pdf>.
13. National Quality Forum. "Measuring Performance" [Internet], 2012 [cited April 1, 2012]. Available at: http://www.qualityforum.org/Measuring_Performance/Measuring_Performance.aspx.

14. National Committee for Quality Assurance. "NCQA Programs: Accreditation, Certification, Distinction, and Recognition" [Internet], 2012. Available at: http://www.qualityforum.org/Measuring_Performance/Measuring_Performance.aspx.
15. Center for Medicare Advocacy, 2011.
16. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. Agency for Healthcare Research and Quality. "Working for Quality" [Internet], 2012 [cited April 4, 2012]. Available at: <http://www.ahrq.gov/workingforquality/> - nqs.
17. *Ibid.*
18. Center for Medicare Advocacy, 2011.
19. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "Multi-Stakeholder Group Input on Quality Measures" [Internet], 2012 [cited April 11, 2012]. Available at: <http://www.healthcare.gov/law/resources/reports/quality12012011a.html>.
20. Measure Applications Partnership. "Coordination Strategy for Clinician Performance Measurement" [Internet] [cited April 12, 2012]. Washington, D.C.: National Quality Forum, 2011. Available at: http://www.qualityforum.org/Setting_Priorities/Partnership/Measure_Applications_Partnership.aspx.
21. *Ibid.*
22. Quality Alliance Steering Committee. "Aggregating Physician Performance Data across Health Plans" [Internet], 2011 [cited April 7, 2012]. Available at: <http://www.rwjf.org/files/research/72031physician.pdf>.
23. Brown P, Arkansas Foundation for Medical Care. "Medicare 10th Statement of Work: New QIO Program Aims for Bold Goals, System-Level Transformation" [Internet], December 2011 [cited April 10, 2012]. Available at: <http://www.afmc.org/LinkClick.aspx?fileticket=t3RqWELsPAM%3D&tabid=683&mid=1567>.
24. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services, September 20, 2010.
25. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "Medicare FFS Physician Feedback Program: Value-Based Payment Modifier. Background" [Internet], 2011 [cited April 4, 2012]. Available at: <http://www.cms.hhs.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/index.html#redirect=/PhysicianFeedbackProgram>.
26. Mathematica Policy Research, 2010.
27. Rau J. "Medicare Moves to Tie Doctors' Pay to Quality and Cost of Care." *Washington Post* [Internet], 2012 [cited April 15, 2012]. Available at: http://www.washingtonpost.com/national/health-science/medicare-moves-to-tie-doctors-pay-to-quality-and-cost-of-care/2012/04/14/gLQAFq3IIT_story.html.
28. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "Proposed Rule: Medicare Program; Payment Policies under the Physician Fee Schedule and Other Revisions to Part B for CY 2011." *Federal Register* 75(133):40040-40709, July 13, 2010 [Internet] [cited April 4, 2012]. Available at: <http://www.gpo.gov/fdsys/pkg/FR-2010-07-13/html/2010-15900.htm>.
29. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services, 2012.
30. U.S. Department of Health and Human Services. Agency for Healthcare Research and Quality. "Selecting the Right Measures for Your Report" [Internet], 2012 [cited April 13, 2012]. Available at: <http://www.talkingquality.ahrq.gov/content/create/select.aspx>.
31. U.S. Department of Health and Human Services. Agency for Healthcare Research and Quality. "Types of Quality Measures" [Internet] [cited April 1, 2012]. Available at: <http://www.talkingquality.ahrq.gov/content/create/types.aspx>.
32. *Ibid.*
33. Mathematica Policy Research, 2010.
34. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "The Physician Feedback Program & Quality and Resource Utilization Reports (QRURs)" [Internet], 2011 [cited April 5, 2012]. Available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/QRUR_Presentation.pdf.
35. *Ibid.*
36. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services, July 13, 2010.
37. National Committee for Quality Assurance. "NCQA Distinction in Patient Experience Reporting" [Internet] [cited April 22, 2012]. Washington, D.C.: NCQA, 2012. Available at: <http://www.ncqa.org/LinkClick.aspx?fileticket=x9jnmEoT2w%3d&tabid=1429>.
38. National Committee for Quality Assurance. "NCQA's Patient-Centered Medical Home (PCMH)" [Internet]. Washington, D.C.: NCQA, 2011. Available at: <http://www.ncqa.org/tabid/631/default.aspx>.
39. Rittenhouse DR, Casalino LP et al. "Small and Medium-Size Physician Practices Use Few Patient-Centered Medical Home Processes" [Internet], June 2011 [cited April 12, 2012]. *Health Affairs* 30(8):1575-1584. Available at: <http://content.healthaffairs.org/content/30/8/1575.full?keytype=ref&siteid=healthaff&ijkey=Cq.8ITSIIscIM>
40. National Quality Forum. "Measuring Performance. How Measures Will Serve Our Future" [Internet], 2012 [cited April 2, 2012]. Available at: http://www.qualityforum.org/Measuring_Performance/ABCs/How_Measures_Will_Serve_Our_Future.aspx.
41. Mathematica Policy Research, 2010.
42. Damberg CI, Sorbero ME et al. "Exploring Episode-Based Approaches for Medicare Performance Measurement, Accountability, and Payment" [Internet], 2009 [cited May 4, 2012]. Available at: http://aspe.hhs.gov/health/reports/09/mcperform/report.shtml_-_Toc239573506.
43. National Quality Forum. "Multiple Chronic Conditions Framework" [Internet], 2012. Available at: http://www.qualityforum.org/Projects/Multiple_Chronic_Conditions_Measurement_Framework.aspx.
44. Kelley R. "Where Can \$700 Billion in Waste Be Cut Annually from the U.S. Healthcare System?" [Internet], October 2009 [cited April 15, 2012]. Available at: <http://www.factsforhealthcare.com/whitepaper/HealthcareWaste.pdf>.
45. Robert Wood Johnson Foundation. "The State of Health Care Quality in America." [Internet] [cited April 8, 2012]. Available at: <http://www.rwjf.org/files/research/currentstateofquality.pdf>.
46. Kelley R, 2009.
47. American Board of Internal Medicine (ABIM) Foundation. "Choosing Wisely®" [Internet] [cited April 8, 2012]. Washington, D.C.: ABIM Foundation. Available at: <http://www.abimfoundation.org/Initiatives/Choosing-Wisely.aspx>.
48. "Do You Need That Test?" *New York Times* (editorial) [Internet], 2012 [cited April 9, 2012]. Available at: http://www.nytimes.com/2012/04/09/opinion/do-you-really-need-that-medical-test.html?_r=2&partner=rssnyt&emc=rss.
49. American Board of Internal Medicine (ABIM) Foundation, 2012.
50. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services, July 13, 2010.
51. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services, 2011.
52. Damberg CI, Sorbero ME et al, 2009.
53. Institute of Medicine. "Geographic Variation in Health Care Spending and Promotion of High-Value Care" [Internet], 2012 [cited April 8, 2012]. Available at: <http://www.iom.edu/Activities/HealthServices/GeographicVariation.aspx>.
54. Van Ochten K. "Why Geographic Variation in Medicare Spending Matters" [Internet], 2010 [cited April 7, 2012]. *HealthLeaders Media*. Available at: <http://www.healthleadersmedia.com/page-1/FIN-259708/Why-Geographic-Variation-in-Medicare-Spending-Matters>.
55. Institute of Medicine, 2012.
56. Physician Consortium for Performance Improvement, Convened by the AMA. "Measures Development, Methodology, and Oversight Advisory Committee: Recommendations to the PCPI Work Groups on Composite Measures" [Internet], 2010 [cited May 5, 2012]. Available at: <http://www.ama-assn.org/resources/doc/cqi/composite-measures-framework.pdf>.
57. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services, 2011.
58. Physician Consortium for Performance Improvement, Convened by the AMA, 2010.
59. U.S. Department of Health and Human Services. Centers for Medicare and Medicaid Services. "Listening Session: Physician Feedback Program and Implementation of the Value-Based Payment Modifier for Fee-for-Service Medicare" [Internet], September 24, 2010 [cited May 5, 2012]. Available at: http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/downloads//092410_Listening_Session_Feedback_Program_Transcript.pdf.
60. *Ibid.*

61. Pantely Susan E. "Whose Patient Is It? Patient Attribution in ACOs." Miliman Healthcare Reform Briefing Paper [Internet], 2011 [cited May 5, 2012]. Available at: <http://www.ama-assn.org/resources/doc/cqi/composite-measures-framework.pdf>.
62. Damberg CI, Sorbero ME et al, 2009.
63. Kay JF. "Health Care Benchmarking" [Internet]. *The Hong Kong Medical Diary* [Internet], 2007 [cited May 5, 2012]; 12(2):22-7. Available at: <http://www.fmshk.org/database/articles/06mbdrflkay.pdf>.
64. Mathematica Policy Research, 2010.
65. Institute of Medicine, 2012.
66. Mathematica Policy Research, 2010.
67. Ingenix."What are ETGs?" [Internet], 2012 [cited April 14, 2012]. Available at: http://www.optuminsight.com/content/File/What_are_ETG.pdf.