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INVITED REVIEW

# Performance Measurement and Pay-for-Performance: The Next Wave

## Abstract

Performance measurement and pay-for-performance, otherwise known as value-based purchasing, are the current rallying cries in health care reform and politics in an attempt to improve health care quality and reduce spending. Prior to being tied to reimbursement, performance measurement was a quality improvement tool used by physicians, hospitals and health plans. Proper implementation of performance measurement is key to the success of any pay-for-performance program. Use of performance measures and pay-for-performance vary depending on the perspective of the stakeholders, which include physicians, hospitals, third-party payers, standards organizations, certifying boards and government. NASS currently plans to develop spine-related performance measures and is monitoring and advising stakeholders in the use and development of measures in the spine care environment.

**Performance measurement and pay-for-performance (P4P), otherwise known as value-based purchasing, are the current rallying cries in health care reform and politics—and they appear to be on the horizon for most, if not all, physicians in one form or another. . . Whether it's about quality improvement, economic credentialing or both, performance measurement and P4P look to be in all our futures, at least for the time being.**

Over the last decade, many attempts have been made by government, third-party payers and others to improve health care quality and reduce spending simultaneously. A variety of methods have come and gone, or in some cases, have become fixtures in specialized sectors such as managed care with its health maintenance organizations, gatekeepers and utilization review. Some players in the health care arena have suggested that nationalized health care or various forms of "cookbook medicine" would standardize the field of care and more likely achieve these goals. Performance measurement and pay-for-performance (P4P), otherwise known as value-based purchasing, are the current rallying cries in health care reform and politics. And whether the goal is quality improvement, economic credentialing or both, performance measurement and P4P appear to be on the horizon for most, if not all, physicians in one form or another. This article will introduce the basics of performance measurement and P4P, as well as the perspectives of the different stakeholders in the game today.

## The Basics

### What is a Performance Measure?

Clinical performance measures are a type of quality measure. They assess the degree to which a medical provider competently and safely delivers clinical services that are appropriate for a particular patient in an optimal time period.[1] These clinical measures can be divided into process and outcome measures. Process measures evaluate a specific indicator of care associated with quality, eg, routine cancer screening or the use of presurgical prophylactic antibiotics. Outcome measures study the final results of treatment, eg, morbidity, mortality or changes in function. Nonclinical measures may also be considered and include structural

measures (eg, the use of an electronic medical record), efficiency and productivity, and patient satisfaction.

Measures may be developed by evidence-based methods, consensus or a combination of both. Evidence-based performance measures are derived from evidence-based clinical guidelines. Evidence-based guidelines are developed with an evidence-based methodology using levels of evidence and graded recommendations. Performance measures are the next logical step in the clinical quality improvement cycle after guideline development. Evidence-based guidelines are required for the development of evidence-based performance measures. Measures can also be developed by consensus, but are not considered as scientifically sound.

The three desirable attributes of performance measures are:[1]

- Importance
  - Are the measures pertinent to stakeholders (patients, physicians, payers, etc.)?
  - Are they important to patient health?
  - Do they measure whether health care is equally distributed?
  - Are they sensitive enough to measure potential improvements in care and be influenced by the health care system?
- Scientific Soundness
  - Are measures clinically logical?
  - Are they precise and have strong evidence?
  - Are measures reliable and valid?
  - How well do they allow for individual patient variability?
  - Are the results understandable to the user who will be acting on the data?
- Feasibility
  - Are the measures clearly defined?
  - Can useful data be reasonably collected?

**How Are Quality Measures Used?**

Measures can be used for quality improvement, accountability and research.[1] In pay-for-performance or pay-for-reporting, measures are used for accountability.

> *Uses of quality measures for the purpose of accountability include purchaser and/or consumer decision-making, accreditation and external quality oversight. Although the use of quality measures for accountability may be quite similar to their use for external quality improvement, and the same set of organizations may conduct measurement for both purposes, the requirements for validity and reliability are higher…for accountability. Greater validity and reliability demand that each provider collect data in the exact same way using standardized and detailed specifications. This ensures that comparisons are fair or that predefined measure performance has…been achieved.*
>
> *The usual audiences for accountability data are entities other than those that provide care such as purchasers of health care, payers or patients. Their primary interest is in using accountability data to guide the selection of providers or set financial rewards to providers for performance.*[1]

Results may be used to "compare provider groups, select providers based on performance levels in priority areas of clinical practice and consumer service or establish financial rewards."[1]

Sometimes report cards are developed based on performance measurement, thus providing feedback to individual providers or institutions or reporting to consumers or payers.

It is hoped that widespread use of performance measurement in clinical practice will result in measurable improvements in the quality of patient care.

**Who Develops and Collects Performance Measures?**

Performance measures are developed by a variety of organizations including medical societies and their collaboratives, government agencies and private entities. Some of the most notable and widely recognized efforts include those by the American Medical Association (AMA) Physician Consortium for Performance Improvement, the National Quality Forum (NQF), the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), National Committee on Quality Assurance (NCQA) and nationally recognized medical specialties. To date, there are a limited number of evidence-based performance measures applicable to physicians.

The AMA Physician Consortium for Performance Improvement consists of physicians and methodological experts convened by the AMA representing national medical specialty and state medical societies, the Agency for Healthcare Research and Quality (AHRQ) and the Centers for Medicare and Medicaid Services (CMS).[2] It develops evidence-based clinical performance measures and clinical outcomes reporting tools to support physicians in quality improvement efforts. Performance measures for physicians are developed from evidence-based clinical guidelines for select clinical conditions. Topics selected are actionable, have established clinical recommendations and feasible data sources.[3] No performance measures developed to date by the Consortium are specifically spine-related.

Pay-for-performance is still viewed with some trepidation in the Consortium as the Consortium's goal is quality improvement, not reporting, economics or reimbursement. CMS has historically come to the Consortium when in need of performance measures. The Consortium and the NCQA are also working with a CMS contractor to develop measures for CMS on a one-year contract. It is hoped that this is another inroad for the Consortium as a measure provider to CMS.

Another widely recognized participant is the National Quality Forum. NQF is a "voluntary consensus standards-setting organization" that endorses standards including performance measures, quality indicators, preferred practices or reporting guidelines using input from a variety of stakeholders.[4] Although

the NQF process begins as evidence-based, it quickly becomes a consensus process. Measures that often do not garner provider support become NQF-endorsed as they gain support of other member groups (eg, insurance health plans and patient groups) and providers are overruled by the group majority. The NQF holds a uniquely powerful position in that any measures endorsed by NQF must be adopted by CMS, unless CMS develops its own measures. However, it must be noted that the consensus process allows for incorporation of measures that fall outside of the control of the provider. NASS is not currently a member of the NQF.

The National Quality Measures Clearinghouse (NQMC) is an online database, sponsored by the Agency for Healthcare Research and Quality and the US Department of Health and Human Services, for information on specific evidence-based health care quality measures and measure sets. It promotes widespread access to quality measures by the health care community and other interested individuals. The NQMC mission is to provide practitioners, other health care providers, health plans, integrated delivery systems, purchasers and others with an accessible mechanism for obtaining detailed information on quality measures, and to further dissemination, implementation and use to inform health care decisions.[5]

Accreditation organizations are also intimately familiar with quality measures. They develop and use them to assess quality improvement within health care organizations for the purpose of accreditation. JCAHO offers accreditation to health care facilities and requires internal quality improvement, for which it has developed sets of clinical performance measures. The National Committee on Quality Assurance does the same for managed care organizations.[1]

Quality measures are also developed and used by various medical specialties and their societies. Presently, only a few medical specialty societies have developed performance measures, most notably cardiology and the primary care specialties. However, in anticipation of P4P, most specialties are in various stages of planning and development. Most musculoskeletal specialties do not have performance measures. Even the larger specialties have only a handful of evidence-based measures at this time. Evidence-based performance measures available to date for physicians cover clinical areas that primarily affect large population bases, with large disease groups and large evidence bases. (**Table 1**)

**Table 1. Clinical areas for which evidence-based performance measures are available for physicians**

- Asthma
- Cardiac Conditions
- Community Acquired Pneumonia
- Depressive Disorder
- Diabetes
- Preventive Care and Screening (ie, immunizations, cancer screening, prenatal testing)
- COPD
- Osteoarthritis of the Knee
- Acute Gastroenteritis
- Perioperative Care
- Kidney Disease
- Hypertension

Source: http://www.ama-assn.org/ama/pub/category/3106.html. Accessed: April 4, 2006.

### What Is the Difference Between Pay-for-Reporting and Pay-for-Performance?

Although similar in concept, pay-for-reporting and pay-for-performance have some very significant differences. Pay-for-reporting provides financial incentives to providers who meet predetermined reporting goals. (The emphasis is on the reporting act). Pay-for-performance provides incentives to providers who provide care that meets predetermined goals/practices geared toward improving quality of care. Providers may be rewarded for actually meeting goals or for gains in improvement, depending on the program. In its broadest sense it is a method of health care delivery that seeks to improve the quality, safety, efficiency and outcome of care through use of evidence-based performance measures and reimbursement incentives.

Pay-for-reporting may use evidence-based or non–evidence-based measures depending on the goals. If trending or benchmarking is the desired goal, then non–evidence-based measures are adequate. However, if pay-for-reporting is being used as a step toward implementing a pay-for-performance program (as in the CMS Physician Voluntary Reporting Program), evidence-based measures are necessary. The transition from simply reporting information to actual performance measurement will be unsuccessful if evidence-based measures are not initially used because the data collection methods are different.

## The Pros and Cons

In theory, P4P is a sound idea. Pay-for-performance programs that are well-planned and implemented and done for the right reasons encourage involvement in quality improvement programs. The financial incentives may bring people to the quality improvement table who would typically not be inclined to participate or for that matter, who would have the most to gain from quality improvement. However, P4P provides very little incentive for the people who are already doing the "right" thing and are top performers, particularly if there is a punitive component. P4P works best as a carrot, rather than a stick.

The details of implementation are crucial. A poorly implemented program can hurt participants financially and taints the objective of quality care, essentially driving people away from a good concept.

**Key Elements of a Soundly Constructed Program**

There are certain key elements that signal a well-planned and constructed program. Orientation toward quality improvement, not economic credentialing is vital. Selection of high quality, evidence-based performance measures is also crucial. These measures should come from reliable sources such as those described above and be clinically important in areas where improvement will have significant impact on burden of disease/illness. Measures should be evidence-based and have a level of reliability and validity suitable to ensure that data is collected exactly the same way by providers and that comparisons are fair and goals have been achieved.[1] Measures will also typically have exclusion criteria to account for clinician judgment and patient preference. It is also desirable that measures should be specialty or disease-specific.

Finally, they should be for physician use (not facility or health plan use) and be for provisions of care within the control of the physician. Patient satisfaction measures are a prime example of measures outside the direct control of the physician. Patient satisfaction measures evaluate patient perception rather than objectively measuring quality of care provided.

User-friendly, accurate and verifiable data collection is essential. Data can be collected either prospectively or retrospectively or both. Prospective collection is the most scientifically sound, but the dearth of electronic medical records at this time makes it prohibitive on a wide scale. Retrospective is less desirable, but the most logistically feasible at this point in time. Risk adjustment of data is also crucial to make fair comparisons across populations and physicians. For example, if one provider serves a population that for cultural reasons is transient or has biases against certain treatments, it would be unfair to compare that provider to another whose patient base is stable and actively seeks medical care. Risk adjustment levels the playing field for factors outside the control of the physician and makes comparisons more equitable. Programs with unfunded mandates and heavy data collection burdens are unreasonable and discourage participation. This is particularly important for providers in underfunded or underserved communities. Measures should also be reviewed and updated, as appropriate, to reflect current clinical practice. Reward standards should also be set. These may include attainment of goals or improvement thresholds or both.

P4P programs also often result in reporting. Reporting to physicians educates them about the quality of their care individually and in comparison to colleagues and spurs further improvement. Public reporting may be done to help patients select providers based on scores, or to help government or health plans with quality measurements or economic credentialing and decision-making. In any reporting program resulting from P4P, reporting should be transparent to the participants, including the measures being assessed and the results. And before the first act of public reporting occurs, an initial report should be delivered to the provider to allow evaluation of the reports and provide an opportunity for improvement and correction.

## The P4P Environment and the Stakeholders' Perspectives

Within the US health care system, there is currently a drive to tie reimbursement to quality improvement. This movement has been spurred by the desire of third-party payers to decrease costs and improve care, and governmental pressure to reduce Medicare expenditures. Health care quality improvement within Medicare is also a "white hat" issue for legislators with their voters, who continue to work on legislation to make P4P a reality in the Medicare arena. In 2004, hospitals that participated in the Medicare program implemented performance measurement at Medicare's behest, with rewards for those that met the program's stated goals. JCAHO also uses performance measurement as a required part of their health care organization accreditation; so hospitals have been in the performance measurement game a good deal longer than providers. Finally, credentialing boards are beginning to implement performance measurement in their maintenance of certification programs.

**CMS and the Third-Party Payer Perspective**

CMS continues to move toward pay-for-performance for the Medicare program and third-party payers who do not already have their own programs are likely to follow. Third-party payers have historically followed the lead set by CMS with regard to coverage decisions and payment for services. Initiatives in the private sector have been ongoing and will most likely continue to spread with CMS' participation. At this time, legislation relative to the use of P4P in Medicare is pending and the anticipated plan is that the Medicare program will begin with pay-for-reporting, ultimately moving to pay-for-performance.

The first move toward pay-for-reporting came with the launch of the Physician Voluntary Reporting Program (PVRP) in January 2006. Under this voluntary reporting program, physicians who choose to participate capture data about the quality of care provided to Medicare beneficiaries.[6] The PVRP consists of 16 measures (**Table 2**), reduced from 36 earlier this year[6] to reduce the initial reporting burden to participants. Although most measures are evidence-based, there are some measures about which that claim has been questioned. Information is collected retrospectively using administrative databanks. Physician practices that report on these measures will receive confidential feedback in 2006.[6] CMS intends to further pursue development and refinement of the remaining 20 measures from the original 36, and as other measures are developed by medical specialty societies, PVRP is anticipated to expand to include these measures as well.[6] At this time only two of the 16 measures apply to spine specialists—thromboembolism prophylaxis in the surgical patient and assessment of elderly patients for falls. It is anticipated that this program will evolve from voluntary reporting (with no payment) to pay-for-reporting to pay-for-performance.

**Table 2.** 16 PVRP Core Starter Set Measures

- Aspirin at arrival for acute myocardial infarction
- Beta blocker at time of arrival for acute myocardial infarction
- Hemoglobin A1c control in patient with Type I or Type II diabetes mellitus
- Low-density lipoprotein control in patient with Type I or Type II diabetes mellitus
- High blood pressure control in patient with Type I or Type II diabetes mellitus
- Angiotensin-converting enzyme inhibitor or angiotensin-receptor blocker therapy for left ventricular systolic dysfunction
- Beta-blocker therapy for patient with prior myocardial infarction
- Assessment of elderly patient for falls
- Dialysis dose in end stage renal disease patient
- Hematocrit level in end stage renal disease patient
- Receipt of autogenous arteriovenous fistula in end stage renal disease patient requiring hemodialysis
- Antidepressant medication during acute phase for patient diagnosed with new episode of major depression
- Antibiotic prophylaxis in surgical patient
- Thromboembolism prophylaxis in surgical patient
- Use of internal mammary artery in coronary artery bypass graft surgery
- Preoperative beta-blocker for patient with isolated coronary artery bypass graft

Source: Centers for Medicare & Medicaid Services. US Department of Health and Human Services. *Overview. Physician Voluntary Reporting Program.* Available at: http://cms.hhs.gov/PVRP. Accessed: April 4, 2006.

CMS also has a number of demonstration projects in process to evaluate the P4P concept. Most involve hospitals, disease management organizations or adoption of information technology. The first P4P initiative for physicians under the Medicare program is the Physician Group Practice Demonstration. This demonstration project is intended to test financial incentives for improved quality and coordination in large group practices. The demonstration rewards physicians for improving the quality and efficiency of care delivered to Medicare fee-for-service beneficiaries. The three-year demonstration seeks to encourage coordination of Part A and Part B services; promote efficiency through investment in administrative structure and process; and reward physicians for improving health outcomes.[7]

Participating physician groups (10 groups representing 5,000 physicians and 200,000 beneficiaries) will continue to be paid on a fee-for-service basis. Physician groups will implement care management strategies designed to anticipate patient needs, prevent chronic disease complications and avoidable hospitalizations, and improve quality of care. To the extent they implement these strategies effectively to improve care, physician groups will be eligible for additional performance payments. Performance payments will be derived from savings expected through improvements in care coordination for an assigned beneficiary population; the demonstration itself is budget neutral. The demonstration uses 32 measures that focus on common chronic illnesses and preventive services. The demonstration project began April 1, 2005.[7] While the program hopes to reduce inpatient hospitalization, it requires increased physician office visits and services to achieve this. Many medical societies are concerned that whereas decreased hospitalization may result in savings in Medicare Part A, there are increased costs created in Medicare Part B (physician services) which has a fixed and separate budget. The current sustainable growth rate formula used for calculating the physician fee schedule balances large increases in Part B sending by an overall reduction in physician reimbursement in subsequent years. In the future, a mechanism for transfering Part A savings to Part B will needed. Medical specialties are watching.

At a Congressional level, legislation is pending regarding P4P and Medicare and to date has not yet been resolved. However, it is clear that there is a desire in Washington, DC to institute some form of P4P within the Medicare program. Many of the proposals put forth, however, have been unfunded mandates for participation without accompanying changes to the flawed sustainable growth rate. There is also a concern that these proposals (and some programs in the third-party payer realm) are less about quality of care than economic credentialing. How and whether incentives for improved care are put into place at a governmental level is still an issue playing out in the halls of our nation's capitol.

### Certifying Boards' Perspective and Plan

As certifying boards look to establish a useful and meaningful self-assessment component of their Part 4 Maintenance of Certification (MOC) program, implementation of performance measures has provided a means to do so. Part 4 of the MOC represents the boards' efforts to respond to the linear deterioration of physician performance over a lifetime, the marketplace and the public's demand for accountability. The boards hope to establish quality as their "turf" and are looking to the AMA Consortium and other evidence-based measure developers to continually expand upon and accelerate the measure development process. The boards maintain that quality is a professional responsibility and that it is not the goal of the boards to measure competence, but rather to encourage physicians to measure, reflect on and change their practice, and assess their own performance.

### Physician Perspective and Plan

As previously noted, most specialty societies do not have performance measures at this time; many do not even have

evidence-based clinical guidelines. In light of impending P4P, however, most have either begun the process of measure development or are planning to develop measures. A large number of specialties participate in the AMA Physician Consortium for Performance Improvement and plan to work within the Consortium collaborative process for the development of their measures. Even if they do not have measures to put forth on their own, they may participate in and provide input to the work groups related to topics of relevance for their specialties. Through the Alliance for Specialty Medicine, many of the specialties are also advocating for how P4P should take place at a governmental level. Many physicians view P4P with trepidation and many see it as another form of economic credentialing rather than quality improvement.

## NASS' Plan

### Guidelines Development

NASS is currently in the process of developing a guideline on lumbar spinal stenosis using an evidence-based methodology with volunteers trained in evidence-analysis. Levels of evidence and grades of recommendation have been adopted on a NASS-wide basis and a methodology established. The Guidelines Committee's goal is to finish this guideline in 2006, to be followed by development of performance measures derived from that guideline. Following completion of the stenosis guideline and training of additional volunteers, NASS anticipates re-development of the guidelines on unremitting low back pain, herniated disc, spondylolisthesis, and neck pain and associated cervical syndromes, which will also be followed by development of performance measures for each one.

NASS is also pursuing discussion with 10 specialty societies as to their interest in collaboration on the above listed guideline topics. It is NASS' intent to collaborate as widely as possible and feasible. All completed guidelines will be submitted to the National Guidelines Clearinghouse. NASS remains committed to the development of evidence-based guidelines to improve the quality of care delivered to patients. NASS' guidelines will continue to consolidate the existing evidence and provide clear, evidence-based recommendations to assist physicians in delivering this care. Additionally, it should be noted that evidence-based guidelines provide the foundation from which evidence-based performance measures are derived. Evidence-based performance measures cannot be developed without evidence-based clinical guidelines.

### Performance Measure Development

NASS will continue to develop its evidence-based clinical guidelines so that evidence-based performance measures may be derived from them. It is anticipated that NASS will develop performance measures through the AMA Physician Consortium for Performance Improvement process. The spinal stenosis guideline is being developed concurrently with the establishment of collaborative guideline relationships in order to keep NASS moving toward development of at least a baseline set of measures. The first set of measures from NASS will emanate from the lumbar stenosis guideline anticipated to be completed in the autumn; however, NASS may participate, through the Consortium, in the creation of measures from others' guidelines that will result in measures for spine care providers.

At the same time, the Interim Performance Measures Task Force is evaluating the performance measures relevant to NASS' membership in the CMS Physician Voluntary Reporting Program and preparing to comment on these and future measures.

### AMA Physician Consortium for Performance Improvement

NASS Clinical Care staff has been in attendance at the Consortium for a number of years. This fall David A. Wong, MD, MSc, was appointed as the official physician representative. The Consortium has historically been a conduit for physician performance measures to CMS and will be one of the main developers in the P4P environment because of its relationship with NQF and NCQA.

NASS has communicated to the AMA Consortium its status relative to spine guideline development. NASS, AAOS and AANS/CNS have developed a joint letter to the Consortium, at its request, indicating interest in acting as co-lead organizations for any spine work groups that may be established. In addition, NASS has indicated its interest in sitting in on any work groups related to surgery, pain management and rehabilitation. Dr. Wong has a seat on the osteoporosis work group and NASS will have a representative on the surgical/perioperative care work group.

### Education

Efforts to educate the membership and others about performance measurement and pay-for-performance continue. The impending nature of P4P and its impact on quality improvement and reimbursement make it important for all physicians to understand at least the basics of these programs.

A staff in-service is being prepared to assist in staff education and the following educational documents have been completed and distributed to the membership.

- *Pay-for-Performance Primer: Quick & Dirty Guide to Performance Measurement and P4P.* Available at: http://www.spine.org/forms/pay_performance_primer.pdf
- NASS Position Statement: Pay-for-Performance. Available at: http://www.spine.org/forms/P4PPositionStatement_FINAL%20_3_.pdf

## Conclusion

The impending nature of P4P and its impact on quality improvement and reimbursement make it important for all physicians to understand at least the basics of these programs.

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## Author Disclosures

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