Measuring and Paying for Value in Cardiovascular Care: Past, Present and Future

Changing Payment Landscape

In 2003, the Hospital Inpatient Quality Reporting (IQR) Program was mandated under the *Medicare Prescription Drug, Improvement and Modernization Act*. Hospitals were required to report quality measures to receive the full inpatient annual payment update starting in fiscal year 2005. Under the *Deficit Reduction Act of 2005*, the Hospital IQR increased the number of quality measures and applied a penalty for failure to report. The *Tax Relief and Health Care Act of 2006* mandated both the Hospital Outpatient Quality Reporting Program**,** which expanded pay for reporting to the Hospital Outpatient Prospective Payment System (OPPS) starting in calendar year (CY) 2009, and the Physician Quality Reporting Initiative, which provided bonus payments to individual physicians for voluntary quality reporting in CY 2007.

The *Patient Protection and Affordable Care Act of 2008* moved the needle and applied payment adjustments for hospitals based on performance while ramping up the Physician Quality Reporting System (PQRS) to phase in penalties for not reporting beginning in CY 2015 based on CY 2013 data as well as a Value-Based Modifier that applies payment adjustments beginning in 2015 based on CY 2013 quality and cost performance. The *American Recovery and Reinvestment Act of 2009* mandated the Electronic Health Record (EHR) Incentive Program which offered bonuses for hospitals and physicians for demonstration of "meaningful use" of a certified EHR. The *Taxpayer Relief Act of 2012* allowed for PQRS reporting of evidence-based non-PQRS measures through a Qualified Clinical Data Registry (QCDR) beginning in 2014. In 2015, the *Medicare Access and CHIP Reauthorization Act* (MACRA) eliminated the Sustainable Growth Rate formula for physician payment and implemented stable payment increases while streamlining the clinician/group-level value-based payment modifier and providing clinician/group-level incentives for alternative payment model participation and outcomes.

Moving forward under MACRA, two Medicare payment tracks will be available at the clinician/group level:

- Merit-Based Incentive Program (MIPS) – This is a fee-for-service model with a value-modifier payment adjustment. The value-modifier will be informed by four domains: meaningful use, clinical practice improvement, quality, and resource use.
- Alternative Payment Models (APMs)—These payment incentives can be either fee-for-service with opportunities for shared savings or two-sided risk (i.e., Accountable Care Organizations (ACOs) or bundled payments for defined episodes of care) or population-based payments where payment is not triggered by service, rather clinicians and organizations are paid and responsible for the care of a beneficiary for a long period of time (i.e., ≥ one year)

Merit-Based Incentive Payment System

Starting in 2019, the MIPS will be the new performance-based payment program for eligible professionals in fee-for-service Medicare. The MIPS combines the three existing quality reporting programs – Meaningful Use, PQRS, and the Value-Based Modifier – into one program where the value-modifier payment adjustment will be informed by four domains: meaningful use of EHR technology, clinical practice improvement, quality and resource use. Eligible professionals may be subject to bonuses and penalties based on their performance. In the first year (2015) of Value-Based Modifier implementation, 76 percent of eligible practices received no payment adjustment while 13 percent of practices received an upward payment adjustment (+4.89 percent) and 10 percent received a negative adjustment (-1 percent). It is likely that MIPS payment adjustments will follow a similar distribution.

The new payment system under MACRA reflects the commitment by Congress to reward value over volume and streamline programs to make it easier for clinicians to participate. Since 2019 is the first payment year under MACRA, it is likely that 2017 performance data will be applied to the MIPS. CMS will continue to focus on addressing measures gaps in the quality domain and developing the public-domain episode groupers for the resource use domain. Private payers are committed to aligning measures used in commercial programs with measures used in federal programs in order to introduce consistency of payer requirements and reduce the total number of measures by eliminating low-value measures and reinforcing the use of measures that are relevant for clinical outcomes.

Alternative Payment Models

With the January 2015 announcement by U.S. Department of Health and Human Services (HHS) Secretary Sylvia Burwell tying Medicare reimbursement to APMs (i.e., 30 percent by 2016 and 50 percent by 2018), the vision for moving from volume- to value-based payment is crystallizing. CMS through the Center for Medicare and Medicaid Innovation (CMMI) has a number of pilot programs already operational ranging from various ACO models (Shared Savings, Pioneer and Next Generation) to the Bundled Payment for Care Improvement initiative. There is momentum to apply some of the pilot payment models for national implementation based on cost savings alone or combined with improvements in quality. A complementary effort is underway for the private sector through the Health Care Transformation Task Force (HCTTF) whose membership includes payers, providers, purchasers and patient groups, to have 75 percent of payments by 2020 tied to value (i.e., incentivize and hold providers accountable for total cost, patient experience and quality of care for population of patients). Almost 17 percent of cardiologists participated in a Medicare ACO in 2013.

Federal, state and private payers are leaning toward APMs with a commitment to align methods and measurement across payers and models. CMS has funded a Health Care Payment Learning and Action Network (LAN) to support the transition to new payment models. The LAN aims to 1) establish common quality measures and metrics across payers; 2) reduce variation among payment methods such as beneficiary attribution, risk adjustment and financial models; 3) develop national standards and support local benchmarks; and 4) convene payers, providers, purchasers and consumers to share success stories and disseminate best practices. At the same time, the HCTTF is convening three workgroups—ACO, Bundled Payment, and High Cost Patients—to develop recommendations intended to inform and complement the work of the LAN.

Measure Selection and Use in PQRS

A cacophony of measures is available in the PQRS to assess cardiovascular quality at the clinician/group level. The PQRS assigns each measure available for reporting to one of six National Quality Strategy domains—effective clinical care; efficiency and cost reduction; population health; patient safety; care coordination; and experience of care. Current PQRS reporting requirements call for each provider to report nine measures covering three quality domains. PQRS-reported measures inform the quality composite of the value-based modifier (VBM). Measures currently used to inform the cost composite of the VBM are Total per Capita Cost of Care and Total per Capita Cost of Care for CAD, HF, DM, and COPD.

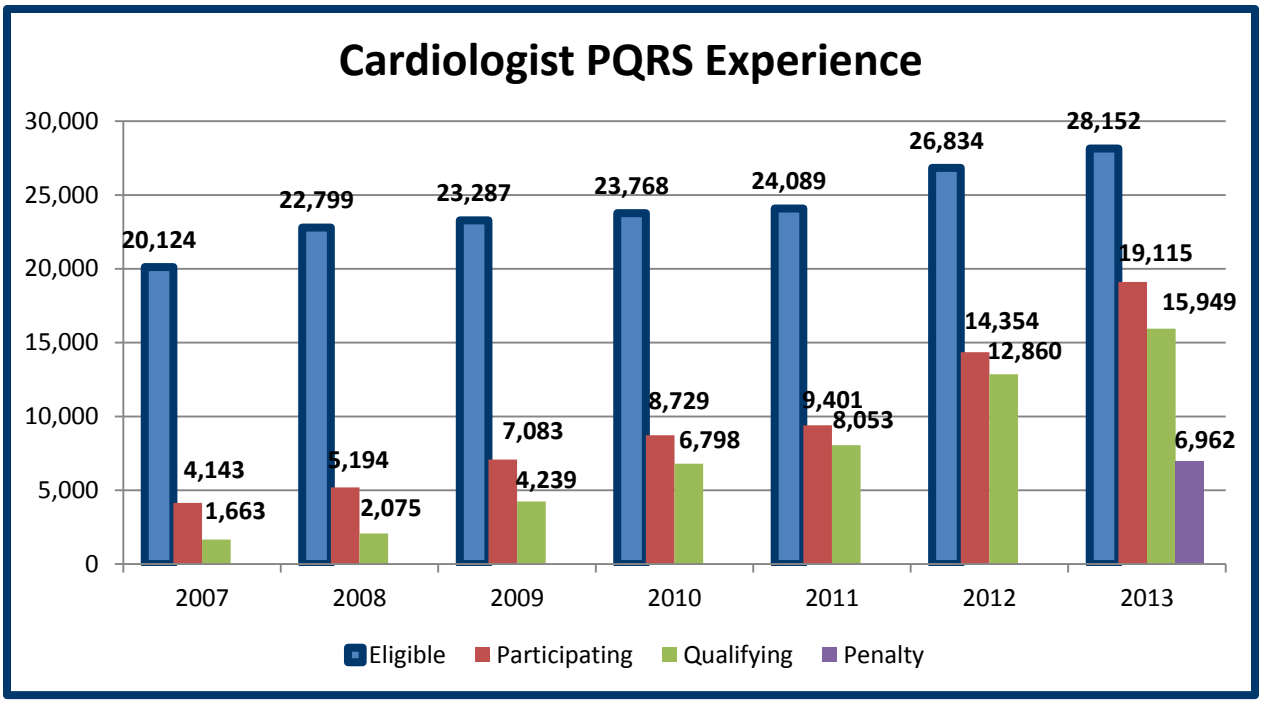
Clinicians have the option of reporting PQRS measures via claims since 2007, qualified registry since 2008, certified EHR vendors since 2012, and qualified clinical data registries (QCDRs since 2014. The ACC, with the American Heart Association (AHA) and the American Medical Association's (AMA) Physician Consortium for Performance Improvement (PCPI), works to develop evidence-based physician/ group-level performance measures to evaluate adherence to guidelines. ACC/AHA/PCPI-developed measures

have been included in the PQRS since 2007 although limited mostly to the qualified registry reporting option.

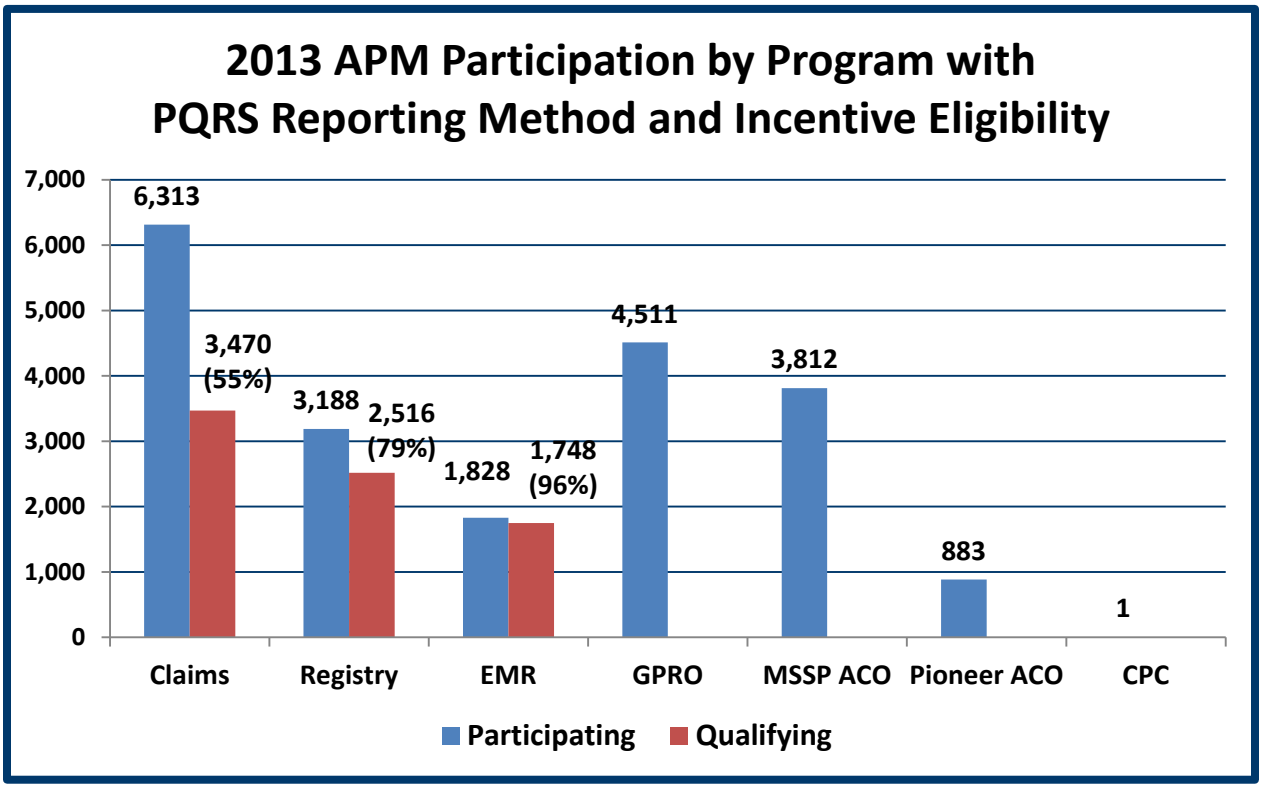
Figure1. ACC/AHA/PCPI Measures Available by PQRS Reporting Year

PQRS#	MEASURE NAME	2007	2008	2009	2010	2011	2012	2013	2014	2015
5	HF w/LVEF < 40%: ACE-I/ARB Therapy	*	*	*	*	*	*	*	*	*
6	CAD: Antiplatelet Therapy	*	*	*	*	*	*	*	*	*
7	CAD w/ prior MI or LVSD: Beta Blocker Therapy	*	*	*	*	*	*	*	*	*
8	HF w/LVEF < 40%: Beta Blocker Therapy	*	*	*	*	*	*	*	*	*
118	CAD w/ DM or LVSD: ACE / ARB Therapy		*	*	*	*	*	*	*	*
196	CAD: Symptom and Activity Assessment				*	*	*			
197	CAD: Statin Therapy>>> CAD: Lipid Control				*	*	*	*	*	
198	HF: LVEF Assessment				*	*	*	*	*	
199	HF: Patient Education				*	*	*			
200	HF: Warfarin Therapy for Patients with AF				*	*	*	*		
226	Tobacco Use: Screening and Cessation Intervention				*	*	*	*	*	*
242	CAD: Symptom Management						*	*	*	*
243	Cardiac Rehab: Referral From an Outpatient Setting						*	*	*	*
244	HTN: BP Management						*	*		
326	AF: Chronic Anticoagulation Therapy						*	*	*	*
TOTAL ACC/AHA/PCPI MEASURES		**4**	**5**	**5**	**11**	**11**	**15**	**13**	**11**	**9**

Of the 40 physician specialties eligible for PQRS participation, cardiology has consistently been among the top ten specialties participating since the program started in 2007. In 2013 68 percent of eligible cardiologists participated in PQRS; 83 percent of cardiologists who participated qualified for the incentive. The mean incentive amount per physician was equal to $1,137. Effective 2015, physicians who did not successfully participate in 2013 PQRS began receiving a 1.5 percent penalty on allowable Medicare Part B charges; 25 percent of eligible cardiologists received that negative payment adjustment.



Source: CMS 2013 Reporting Experience Including Trends (2007-2013): PQRS and eRx Incentive Programs



Source: CMS 2013 Reporting Experience Including Trends (2007-2013): PQRS and eRx Incentive Programs

While 68 percent of cardiologists participated in 2013 PQRS, 16.5 percent participated in CMS ACOs and were waived from PQRS participation. For those participating in PQRS, 22 percent reported via claims;

16 percent reported via the CMS Group Practice Reporting Option (GPRO) web interface; 11 percent reported via registry; and 6 percent reported via electronic medical record (EMR)—69 percent (1,255) of cardiologists reporting via EMR used the ACC's PINNACLE Registry. For those participating in CMS ACOs, 13.5 percent participated in the Medicare Shared Savings Program ACO; 3 percent participated in Pioneer ACO.

The top five measures reported by cardiologists in 2013 PQRS were:

- Tobacco Use: Screening and Cessation Intervention
- Documentation of Current Medications in the Medical Record
- Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic
- CAD: Antiplatelet Therapy
- IVD: Blood Pressure Management

Moving forward, National Quality Forum endorsement will carry weight, but is not a requirement for inclusion in the PQRS list of measures. MACRA provides flexibility through the rulemaking process for PQRS measures. The QCDR pathway will allow for more rapid implementation, but there needs to be a balance to ensure the rigor of measures. Commercial payers are motivated to align their performance measurement strategy with the PQRS through the Core Quality Measures Collaborative with the aim of a simplified and consistent process where physicians self-report quality measures once and have their data submitted to multiple stakeholders—payers are willing to include measures reported via PQRS qualified clinical data registries if data are available in usable format.

CMS recently released its updated vision for quality measurement:

- Align measures with National Quality Strategy measure domains– fill critical gaps in these domains
- Develop measures meaningful to patients and providers, focused on outcomes (especially patient-reported outcomes), safety, patient experience, care coordination, appropriate use and cost
- Prioritize "cross-cutting" measures that are applicable to populations– may be disease-agnostic
- Align measures across CMS programs whenever possible– also with states, private payers, boards, etc.
- Expand EHR- and Registry-based reporting
- Remove measures that are no longer appropriate (i.e., topped out, lack of performance variation)

Measure Development and Implementation

The ACC/AHA Joint Task Force on Performance Measurement (TFPM) arrives at performance measure constructs by convening workgroups and committees to review relevant guideline recommendations, assessing measures included in measure sets that may require updates, and assessing topics for new measure concepts to prioritize the development of performance measures and quality improvement metrics.

Since 2004, the TFPM has developed, updated and published the following nine measure sets and eight methodology papers:

Measure Sets	Methodology Papers
• Percutaneous Coronary Intervention (2013) • Heart Failure (2012, 2005 measure update) • Coronary Artery Disease (2011, 2005 measure update) • Hypertension (2011, 2005 measure update) • Peripheral Artery Disease (2010) • Cardiac Rehabilitation (2010, 2007 measure update) • Primary Prevention (2009) • STEMI/NSTEMI (2008, 2006 measure update) • Atrial Fibrillation (2008)	• ACC/AHA/AACVPR/AAFP/ANA Concepts for Clinician–Patient Shared Accountability in Performance Measures(2014) • ACC/AHA Statement on Cost/Value Methodology in Clinical Practice Guidelines and Performance Measures (2014) • ACCF/AHA Methodology for the Development of Quality Measures for Cardiovascular Technology (2011) • ACCF/AHA New Insights Into the Methodology of Performance Measurement (2010) • ACCF/AHA 2010 Position Statement on Composite Measures for Healthcare Performance Assessment (2010) • ACC/AHA Classification of Care Metrics: Performance Measures and Quality Metrics (2008) • ACC/AHA 2008 Statement on Performance Measurement and Reperfusion Therapy (2008) • ACC/AHA Methodology for the Selection and Creation of Performance Measures for Quantifying the Quality of Cardiovascular Care (2005)

In the past, the TFPM worked with the AMA-convened PCPI to develop some of the measure sets listed above. The AMA provided almost all of the financial resources and technical expertise for measure development, specification and testing while specialty societies and others made significant in-kind contributions, especially through their participation on committees and work groups. Recently, the AMA determined to establish the PCPI as an independent, not for profit entity, the PCPI Foundation, with its own organizational structure, governance and membership; the PCPI Foundation intends to secure funding for measure development by contracting with public and private entities. This new PCPI business model may call for a focused evaluation of ACC's business model for measure development and maintenance.

Through the NCDR, the ACC is facilitating performance measure use by integrating measures into the suite of NCDR registries, submitting physician-level data to CMS via the QCDR reporting option, publicly reporting performance on CardioSmart beginning in November 2015, and including measures in Maintenance of Certification.

Once measure sets are published, the processes for moving them into incentive programs have changed over time as stakeholders call for the use of relevant, robust measures; NQF-endorsement criteria and CMS rulemaking requirements have become onerous and resource intensive. In 2014, the QCDR method for PQRS reporting provided the opportunity to report measures used by boards or specialty societies, with or without NQF endorsement, through a CMS-approved entity, i.e., registry that collects medical and/or clinical data for the purpose of patient and disease tracking to foster improvement in the quality of care furnished to patients. The data submitted to CMS covers quality measures across multiple payers and is not limited to Medicare beneficiaries. ACC products that are CMS-designated QCDRs for 2016 are the PINNACLE Registry (14 measures), FOCUS (10 measures), and the CathPCI Registry (16 measures). Other NCDR registries are currently being analyzed for future QCDR designation though the criteria evolve each year.

Payers are moving away from claims-based measures in favor of registry-based or electronic measures (e-measures). To date, the TFPM has developed e-measures for Primary Prevention measures, Cardiac Rehab measures and Peripheral Artery Disease measures.

MACRA requires HHS to create a plan for developing measures to meet MIPS and APM quality reporting requirements and allocates $15 million per calendar year, $75 million total, from 2015-2019 to fund measure development. Patient reported outcome (experience of care) measures are a priority, as well as resource use, appropriate use and care coordination measures. Patient involvement in measure development is suggested as a way to understand what beneficiaries need.

Clinical effectiveness measures are important though payers are looking for process measures that are closely tied to outcomes and address gaps or variations in care. Measures must have buy-in from physicians; when practices report on meaningful measures that fit workflow and help drive improvement, it's not a burden. The QCDR allows for clinician-driven data collection and should facilitate buy in. Right now, clinicians can choose to report at the individual or group level though increasingly clinicians are moving toward reporting at the group level.

Burdensome regulatory requirements are being addressed; CMS is considering ways to be more nimble regarding measure selection and reduce the expenses associated with measure development and endorsement. The QCDR holds promise as an alternative to using measures that are evidence-based but not NQF-endorsed however, CMS continues to identify errors and inaccuracies in PQRS data submitted via EHR, registry and QCDR. CMS cannot use bad data for quality tiering in the VBM and is increasing its data validation efforts. The EHR certification process is under examination; e-measure standards are evolving.

Conclusion

As the new payment landscape evolves, it will be critical for the ACC to advocate to keep quality in the pay-for-value equation; keep evidence-based measures in the marketplace; and 3) monitor/influence alternative payment activity. The time is right to evaluate and inform our efforts to determine how the ACC can more efficiently and effectively contribute to meet member needs in new payment models. ACC's advocacy team will continue to scrutinize how payers are assessing and incentivizing value in cardiovascular care and how members are participating in value-based payment programs in order to inform ACC strategy on how best to position members for success. This strategy will be developed under the leadership of the ACC's newly appointed MACRA Task Force which includes members with expertise in advocacy, clinical quality measurement and alternative payment, as well as members representing the Board of Governors and NCDR. The Task Force will examine the changes coming under MACRA and develop the strategy for educating members and ensuring that ACC's resources and registries can support members under the new payment landscape.