PCI Within the Context of the Episode Payment Model

Change is coming in 2018—be prepared!

BY JOEL SAUER

Editor's Note: On August 15, 2017, the Centers for Medicare & Medicaid Services submitted a proposed rule to the Office of Management and Budget titled, "Cancellation of Advancing Care Coordination through Episode Payment and Cardiac Rehabilitation Incentive Payment Models; Changes to Comprehensive Care for Joint Replacement Payment Model (CMS-5524-P)." The rule would cancel the mandatory episode payment model programs for acute myocardial infarction and coronary artery bypass surgery. The public comment period for this new proposed rule ends on October 16, 2017. The decision announcement on the rule is anticipated in or around November 2017. At the time of publication, until the recommendations are implemented, the final rule on cardiac episode payment models and implications for percutaneous coronary intervention are still as described in this article.

In December 2016, the Centers for Medicare & Medicaid Services (CMS) released its final rule for introduction of the episode payment model (EPM). With nearly 2,000 pages of detail, this new payment structure effectively places hospitals in the United States at risk for the entire 90-day cost episode for two significant cardiovascular patient populations: those with acute myocardial infarction (AMI) and those undergoing coronary artery bypass grafting (CABG). Although at first glance it may appear that percutaneous coronary interventions (PCIs) dodged the EPM bullet, a closer look finds that inpatient cases are nested within the AMI diagnosis-related group (DRG) 246-251:

Included MS-DRGs:
- AMI—280-282, 246-251 principal or secondary diagnosis
- CABG—231-236 principal or secondary diagnosis

With the new presidential administration, there were questions as to whether this new model would survive. Those questions were answered on May 18, 2017, when CMS published the EPM final rule with an effective date of January 1, 2018, and little changed from the 2016 version.

The episode cost—what Medicare paid to providers—includes players well beyond our historical accountability domain, which will present significant challenges for health systems (Table 1). This broad scope of accountability also points out how much of a team sport EPM will be; the cath lab team will need to work with other cardiovascular care providers to promote overall EPM success.

Unlike some previous bundled models, such as the bundled payment for care improvement, the EPM is a mandatory program for centers within one of the 98 metropolitan statistical areas (MSAs) randomly chosen (see https://data.cms.gov/Special-Programs-Initiatives/Episode-Payment-Models-Metropolitan-Statistical-Ar/28af-bkkh for a complete list). For hospitals in one of the chosen MSAs, ready or not, EPMs are on their way!

TABLE 1. EPISODE COST

Medicare Part A Services Related to the Episode	Medicare Part B Services Related to the Episode
• Hospital inpatient • Long-term care hospital • Skilled nursing facility • Home health agency • Independent rehabilitation facility • Inpatient psychiatric facility • Hospice	• Physician services • Hospital outpatient • Clinical laboratory services • Independent outpatient therapy services • Durable medical equipment • Part B drugs

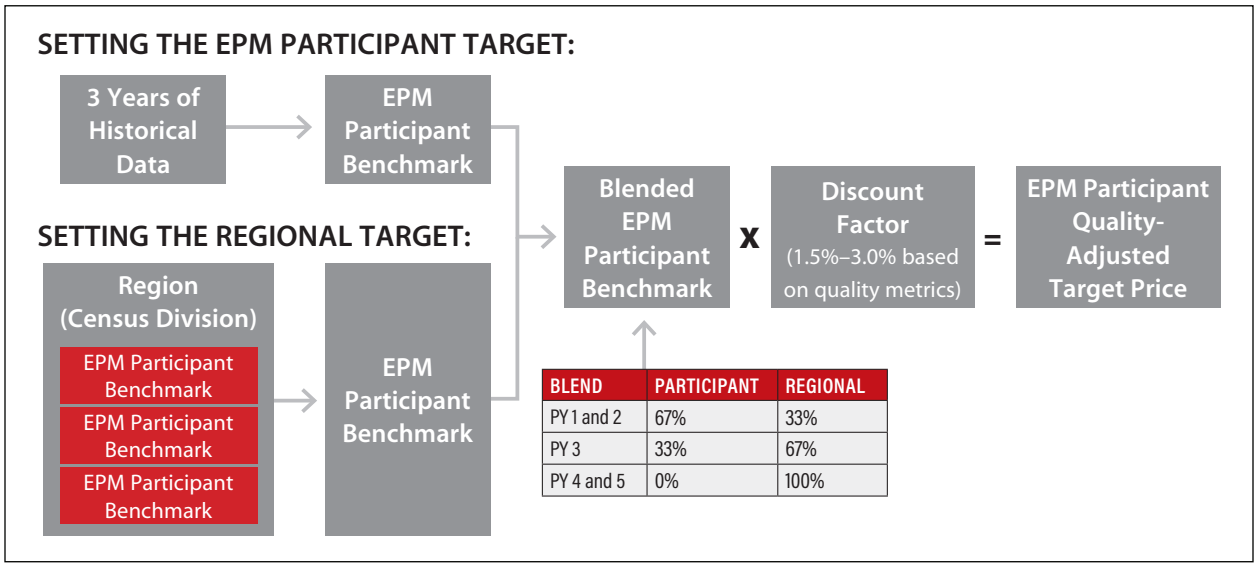

Figure 1. Setting EPM participant and regional targets. PY, program year.

OVERVIEW OF THE PROGRAM

The EPM generally works this way: for the AMI and CABG populations, an individual hospital's performance will be measured against a target group on both quality and 90-day costs. If the hospital's costs are below those of the target group—and quality scores are at least as good—the hospital will receive a reconciliation payment. If costs are above the target price, the hospital will have the difference deducted from future Medicare fee-for-service (FFS) payments. Figure 1 shows how this will work.

TABLE 2. AMI QUALITY METRICS AND PERFORMANCE SCORES

Measure	% Weight	Maximum Points
MORT-30-AMI	50%	10
AMI excess days	20%	4
Hybrid AMI mortality	10%	2
HCAHPS survey	20%	4
Total	100%	20

Performance Percentile	MORT-30-AMI (Points)	AMI Excess Days (Points)	HCAHPS Survey (Points)
≥ 90th	10.00	4.00	4.00
≥ 80th and < 90th	9.25	3.70	3.70
≥ 70th and < 80th	8.50	3.40	3.40
≥ 60th and < 70th	7.75	3.10	3.10
≥ 50th and < 60th	7.00	2.80	2.80
≥ 40th and < 50th	6.25	2.50	2.50
≥ 30th and < 40th	5.50	2.20	2.20
< 30th	0.00	0.00	0.00

Abbreviations: AMI, acute myocardial infarction; HCAHPS, Hospital Consumer Assessment of Healthcare Providers and Systems; MORT-30-AMI, 30-day mortality rate for AMI patients.

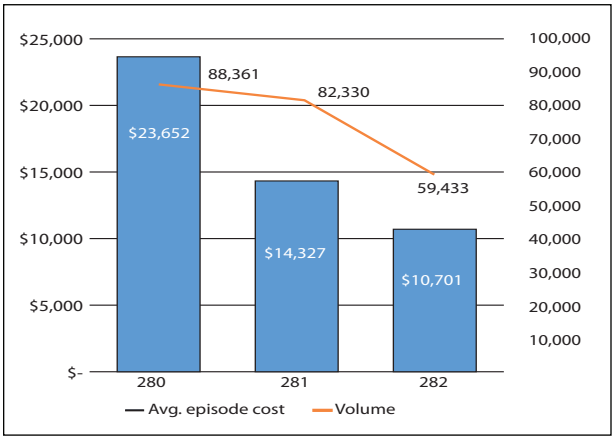

Figure 2. The 90-day cost differences between AMI DRGs.

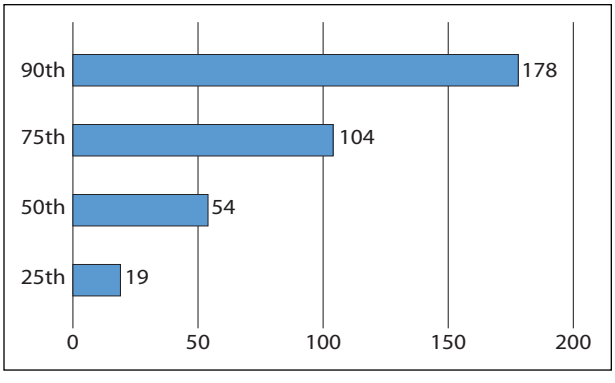

Figure 3. National percentiles of 12-month AMI EPM volumes.

TABLE 3. TOTAL CARDIOVASCULAR EPM FINANCIAL RISK FOR A MODERATELY SIZED PROGRAM								
Medicare			Total Medicare FFS Revenue Risk Schedule					Total
EPM	FFS Volume	Average EPM Cost	Year 1 0%	Year 2 0%	Year 3 5%	Year 4 10%	Year 5 20%	
AMI	250	$16,800	$0	$0	$210,000	$420,000	$840,000	$1,470,000
CABG	150	$32,500	$0	$0	$243,750	$487,500	$975,000	$1,706,250
Total of AMI + CABG	400	—	$0	$0	$453,750	$907,500	$1,815,000	$3,176,250
Abbreviations: AMI, acute myocardial infarction; CABG, coronary artery bypass graft; EPM, episode payment model; FFS, fee for service.								

What is important to point out from the illustration is how quality matters in the EPM. First, it is used to calculate a discount factor: hospitals with high quality scores will receive a low discount (1.5%), whereas those with poor quality scores will get hit with a 3% discount. Additionally, facilities with low quality scores are not eligible for reconciliation payments, regardless of how well they performed in terms of cost. The quality metrics and performance scores for AMI are shown in Table 2, where the 30-day mortality rate is half the total quality score, demonstrating the importance of appropriately and consistently identifying the right patients for medical therapy versus interventional procedures.

Although neither of these discounts may seem like much, consider that most hospitals are unable to achieve a positive financial margin on Medicare patient populations. Furthermore, this discount applies to the top-line revenue. Because hospitals operate with extremely high overhead rates (> 90%), a decrease in revenue is leveraged multiple times in terms of its impact on bottom-line margin. Medicare FFS patients are only part of a hospital's payer mix; however, they represent a significant portion of the cardiovascular population and, therefore, considerable risk. Table 3 calculates the total cardiovascular EPM financial risk for a moderately sized program, demonstrating that over the entire 5-year model, there is more than $3 million at stake. Most chief financial officers would consider this real money.

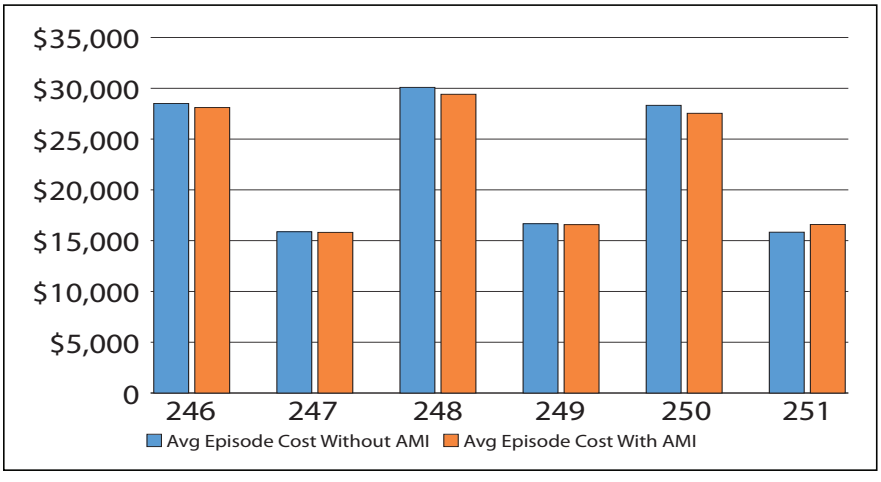

Figure 4. PCI EPM costs by DRG.

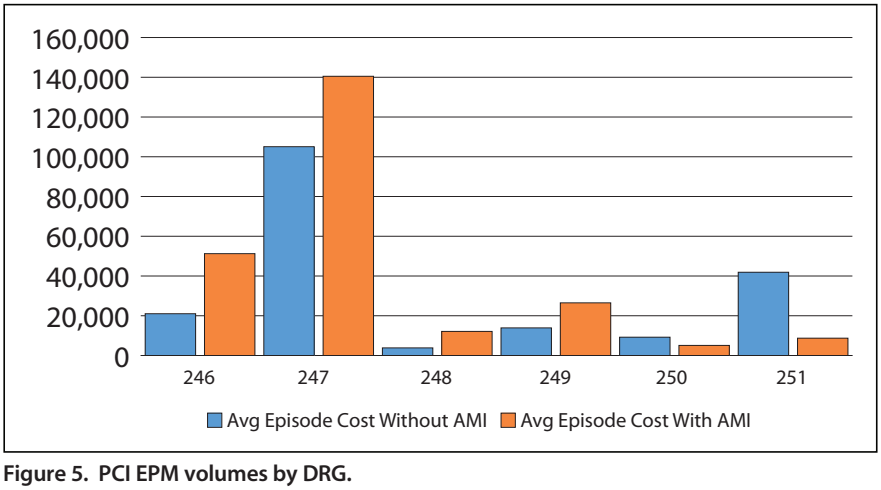

Figure 5. PCI EPM volumes by DRG.

EPM COST AND VOLUME DATA

The AMI population is particularly challenging because of the diversity it represents. This complexity can be seen in the overall 90-day cost differences between each of the AMI DRGs (Figure 2); the cost spread from the most complex AMI patients (DRG 280) to the least (DRG 282) is nearly $13,000 per patient. However, these diverse

TABLE 4. PCI DRG DESCRIPTIONS	
DRG	**Description**
246	Perc Cardiovasc Px with drug-eluting stent with MCC or 4+ vessels/stents
247	Perc Cardiovasc Px with drug-eluting stent without MCC
248	Perc Cardiovasc Px with non-drug-eluting stent with MCC or 4+ vessels/stents
249	Perc Cardiovasc Px with non-drug-eluting stent without MCC
250	Perc Cardiovasc Px without coronary artery stent with MCC
251	Perc Cardiovasc Px without coronary artery stent without MCC

Abbreviations: MCC, major complications and comorbid conditions; PCI, percutaneous coronary intervention.

groups are all medically considered as the same population (ie, AMI). Figure 2 also shows that nearly 40% of all inpatient AMI patients (as measured by DRG) are at that most complex level (DRG 280).

Figure 3 demonstrates another aspect of the AMI population that will prove menacing for programs. During the most recent 12-month time frame available,* half of all hospitals in the United States had total AMI populations of 54 patients or less. With such small volumes, quality and cost performance can swing more dramatically than for those at the upper quartiles. Programs with low annual PCI volumes have undoubtedly experienced this with the impact that just one bad outcome can have on quality scores.

What is striking about inpatient PCI within the AMI EPM environment is how little difference there is in overall 90-day cost between inpatient PCI patients who had an AMI—as measured by an AMI ICD-10 code in the first or second diagnosis positions on the Medicare claim—and those who did not have an AMI (Figure 4). There is almost no difference in the cost.

On the other hand, there are also wide swings in terms of cost between the various PCI DRGs in Figure 4, with a nearly twofold differential from highest to lowest, suggesting the importance of appropriate coding given that, for the hospital, the DRG payment (which is revenue) is significantly driven by the patient's risk-adjusted status. Juxtaposed with the AMI DRGs, the majority of the volumes are in the lower-acuity patient populations for PCI, particularly DRG 247, which represents almost 60% of inpatient PCI volumes overall (Figure 5). Table 4 provides the description for each of the PCI DRGs.

Drilling down into the AMI data, we find great variability from facility to facility and in the costs for major categories, such as skilled nursing facilities, home health, inpatient rehabilitation, and readmissions. In Figure 6, each individual bar represents a hospital within a particular MSA, along with that facility's overall average AMI EPM cost. Each bar is broken down by color, with each color representing a different cost bucket (see Figure 6 legend).

Although there is variability from facility to facility within the "Anchor IP" (inpatient hospital stay represented by the blue bars in Figure 6), this is not the primary driver of overall EPM cost differences. Rather, it is the variability in the other utilization areas, particularly skilled nursing facilities and readmissions, that drive most of the differences. These areas create the most opportunity for hospitals within the EPM.

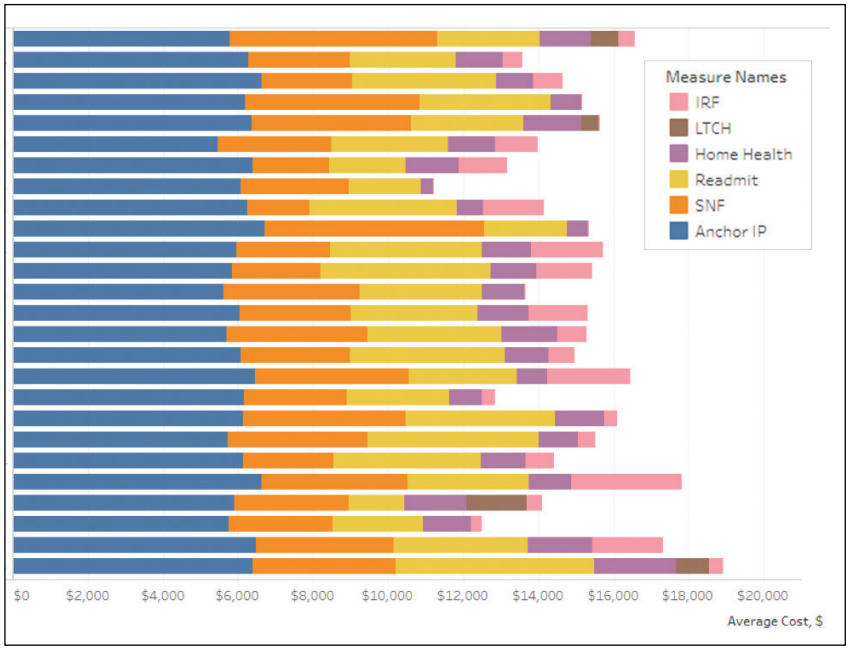

Figure 6. MSA hospitals' overall average AMI EPM cost.

As previously mentioned, cost in the EPM setting is the amount paid by Medicare to all providers (Table 1). From the providers' perspective, this cost is their revenue. Thus, the name of the game in EPM is to cut other people's revenue, not your own, particularly as the hospital (owner of the bundle). Because the majority of the variability for AMI comes from the "postacute"

*EPM cost data provided by Archway Health from the Medicare Limited Data Sets, which have 100% of claims for Medicare Part A and hospital outpatient Part B, but only 5% of Medicare beneficiaries for all other Part B services. Time frame reported is Q3 & Q4, 2016 plus Q1 & Q2, 2015.

providers, and these players typically fit the definition of "other people," hospitals are wise to concentrate the majority of their EPM efforts on managing these costs.

The exception is in readmissions. In many cases, hospitals are paid for readmissions, so reducing them could have a negative impact on revenue. However, in most cases, readmissions are considered a failure of the system and are certainly not appreciated by patients. Additionally, they are a portion of the overall AMI cost spectrum that is more directly within the control of the health system and its physicians. Because of this, readmissions should be a significant point of focus for any organization participating in a bundled payment environment. Given that complications in the cath lab are a driver of readmissions, there is a very direct connection to the PCI program.

CONCLUSION

If you are one of the chosen 98 MSAs and not a pioneer accountable care organization or other rare exception, your program will be participating in the EPM starting January 1, 2018. The AMI population is particularly challenging given the extreme variability of these patients, with some undergoing PCI and others not. Programs may be surprised to find who ends up in their AMI population because the EPM is DRG driven, and hospital grouper systems are designed to find the highest-paying, clinically supportable DRG. This too further complicates management.

For the cath lab and PCI programs in particular, the simple focus is on internal operations and internal cost structures. Quality is always critically important, but it is particularly important within the EPM given that these scores drive the discount factor and whether a hospital can participate in any positive reconciliation payments. Hospitals will be wise to engage their physicians around the quality metrics through which they will be measured (Table 2), but also in other activities that are the drivers of these outcomes.

Additional prudent focus areas for the cath lab are on physician variability and overall cost per case. Reducing variability almost always leads to improved overall quality, efficiencies, and cost savings. Although these are all good things in any reimbursement climate, they are particularly poignant with EPM participation, because even the highest-quality cohort will be hit with a 1.5% deduction in Medicare payments. Reducing the cost per catheterization case will lead to better margins not just within the EPM patient population, but for the entire lab.

Experience has shown that change is difficult and that driving results takes significant time. With 2018 just a few months away, wise programs will not wait to implement a plan. ■

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Disclosures: None.