

May 27, 2022

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Submitted via: [https://acumen.qualtrics.com/jfe/form/SV\\_b11XfyMnL5VsVoy](https://acumen.qualtrics.com/jfe/form/SV_b11XfyMnL5VsVoy)

**RE: Episode-Based Cost Measure Comprehensive Reevaluation**

To Whom it May Concern:

The Society for Cardiovascular Angiography and Interventions (SCAI) appreciates this opportunity to provide our comments on the episode-based cost measures for elective outpatient coronary intervention (PCI) and ST-elevation myocardial infarction (STEMI) with percutaneous coronary intervention. SCAI is a non-profit professional association with over 4,500 members representing interventional cardiologists and cardiac catheterization teams in the United States. SCAI promotes excellence in interventional cardiovascular medicine through education, representation, and the advancement of quality standards to enhance patient care. SCAI appreciates that the measures are discrete episodes with clear triggers and 30 day accountability. However, SCAI does have concerns that are detailed below.

**Elective PCI:**

In 2018, the American College of Cardiology National Cardiovascular Data CathPCI Registry (which collects data from about 85% of US cath labs ) registered 260,827 coronary interventions in outpatients that would fit the triggers for this bundle. Generally about half of percutaneous coronary interventions (PCIs) in this registry are of Medicare age, and only 60% of Medicare patients have fee-for-service Medicare, so this suggests that this bundle will apply to about 78,000 Medicare patients per year. Averaged over 5000 interventional cardiologists, this leads to the conclusion that the average cardiologist participating in this bundle will have their quality assessed on just 15 PCIs. We are concerned this may not reliably distinguish high-quality physicians from low-quality physicians. In contrast, about 800,000 Americans have a heart attack every year. SCAI has previously suggested that CMS should focus on more common diseases such as acute MI, or more common procedures.

Furthermore, SCAI has pointed out that while 50,000 cardiologists in the US treat heart attacks, only 5000 perform PCI. SCAI has questioned whether responsibility for performance should be focused on the 10% of US cardiologists performing PCI. We believe this is an unfair burden to place on a small fraction of practicing cardiologists.

**List of Triggers:** Code numbers and descriptors are flipped: descriptor listed for 92920 is for really 92921 and the descriptor for listed for 92921 is really for 92920. The same mistake was made for 92928-92929.

After an interventionalist performs a PCI, care is provided to the patient most commonly by other physicians, often physicians from other groups, and often by physicians from other specialties. So it is unfair to attribute care provided after the PCI to the cardiologist performing the PCI, who often has no control over the services assigned to this bundle.

Service Assignment: Many of the disorders “attributable” to a PCI have no obvious connection to the procedure. Some of the more inappropriate include the following:

Excel Spreadsheet Line	Code	Explanation
872	H81	Disorder of vestibular function
940	R50	Fever of unknown origin
942	E86	Volume depletion
1087	D50	Iron deficiency anemia
1412	D65	DIC
1517	K55	Vascular disorder of the intestine

Overall Benefit of the Bundle: In Sandhu’s analysis of this bundle cited below, the lowest cost quintile of physicians produced a cost of \$10,920.<sup>1</sup> The highest quintile produced a cost of \$11,017. The difference, \$97 or 0.9%, was enough for an academic publication but begs the question of whether these differences are clinically significant. Studies such as this usually show regression to the mean: the highest and lowest performers seldom occupy those positions two years in a row. Thus we question whether this methodology distinguishes consistently high-cost physicians from low-cost physicians.

Reporting to Participants: Participants noted that their assigned risk score was provided with little context. More decile context to risk score would be helpful along with more transparency on score derivation for NPI/TIN.

Clinical subthemes (complications, readmissions, ancillary testing, SNF/DME) in this episode and the cost decile of each subtheme were not easily accessible to participants. Without these, participants had no “actionable data “ to focus on for local appropriate cost savings.

Additionally, many physicians that work in hospitals or as a part of larger groups had not seen a cost report and therefore had no idea about their score or needed improvement. Ensuring scores are easily accessible and understandable by all participants is essential for future improvement.

## **STEMI PCI**

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<sup>1</sup> Sandhu AT, Do R, Lam J, Blankenship JC, VanDecker W, Rich J, Gonzales O, Wu L, Pershing S, MaCurdy TE, Bhattacharya J, Nagavarapu S. Development of elective outpatient percutaneous coronary intervention episode-based cost measure. *Circ Cardiovasc Qual Outcomes* 2021;14e006461. DOI: 10.1161/circoutcomes.119.006461.

In 2018, the ACC NCDR CathPCI Registry reported 127,824 STEMI PCI patients, of which half are presumably Medicare age. Thus it appears that 64,000 Medicare patients per year would be eligible for this bundle. The American Medical Association Relative Value Update Committee database lists 36,067 claims for STEMI PCI, suggesting the NCDR estimate may be high. Furthermore, these bundles apply to only the 60% of Medicare patients that are not in Medicare Advantage plans, further reducing the number of patients to which this bundle will apply. A bundle for which only 21,000 to 38,000 persons per year are eligible seems of little value. Distributed over 5000 interventional cardiologists, it is likely that the average cardiologist will perform STEMI PCI on just 4-7 eligible patients per year. A typical medical group has 4 interventional cardiologists – so that group’s quality assessment will be based on just 16-28 patients. That seems too small to reliably distinguish high-quality/cost from low-quality/cost groups. As noted above, small data sets inherently include large amounts of variability over time. We suspect that these will fail to reliably identify consistently high performers and would ask that Acumen review the data received since 2019 to confirm our suspicions.

Are STEMI quality measures used to adjust the cost score in any way?

List of Triggers: The triggers for this are DRGs 246-251 coupled with 71 ICD-10 codes. It would be much simpler to simply use CPT code 92941 (“Percutaneous transluminal revascularization of acute total/subtotal occlusion during acute myocardial infarction, coronary artery or coronary artery bypass graft, any combination of intracoronary stent, atherectomy and angioplasty, including aspiration thrombectomy when performed, single vessel”).

Attribution: Attribution is based on who provides E/M services after the procedure. CMS’ Quality Payment Program brochure for STEMI PCI lists an example where 8 clinicians provide an E/M service to the patient. The bundle is attributed to the group that provides 5 of the 8 E/M services. The current average length of stay for STEMI is 2-3 days, so E/M services typically include a history/physical, 1 progress note, and a discharge summary. How will attribution be assigned if 3 persons with 3 different TINs each see a patient once? A breakdown of attribution by specialty should be reviewed to ensure the measure is being attributed appropriately.

Service Assignment: Some of the disorders “attributable” to a PCI have no obvious connection to the procedure. Some of the more inappropriate include the following:

Excel Spreadsheet Line	Code	Explanation
276	R78	Findings of drugs in blood
314	D50	Fe deficiency anemia

Reporting to Participants: Participants noted that their assigned risk score was provided with little context. More decile context to risk score would be helpful along with more transparency on score derivation for NPI/TIN.

Clinical subthemes (complications, readmissions, ancillary testing, SNF/DME) in this episode and the cost decile of each subtheme were not easily accessible to participants. Without these, participants had no “actionable data “ to focus on for local appropriate cost savings.

Additionally, many physicians that work in hospitals or as a part of larger groups had not seen a cost report and therefore had no idea about their score or needed improvement. Ensuring scores are easily accessible and understandable by all participants is essential for future improvement.

### **Summary**

We note that these two bundles have 1100 – 1600 services assigned to each bundle to calculate cost, with about 240 exclusions and 115 risk adjustors. We are concerned that any construct this complicated may be poorly understood by physicians or administrators, may be difficult to administrate, may have administrative costs that outweigh its benefits, and may rapidly become obsolete as technology and practice evolve.

We calculate that both measures will yield about 15 patients to each individual (NPI) or group (TIN). We question whether 15 measures per year will reliably distinguish high-quality from low-quality providers, and whether performance will be consistent from year to year versus regressing to the mean. Now that data has been collected for these measures, we ask for confirmation that the numbers have exceeded these estimates to be proven significant.

A "patient who is more than 1-year post-acute MI" would be more of a heterogenous and inclusive grouping. It has been our experience that most outcomes measures and treatments are best validated in the post revascularization grouping as opposed to the medically managed group. We suggest these measures be evaluated and incorporated in place of elective PCI and STEMI PCI.

Thank you for the opportunity to comment on the episode-based cost measures for elective outpatient coronary intervention (PCI) and ST-elevation myocardial infarction (STEMI) with percutaneous coronary intervention. If you have any questions, please contact me at [mlwright@scai.org](mailto:mlwright@scai.org).

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Wright', followed by a long horizontal line extending to the right.

Monica Wright, MHA, CPC, CPMA, CPCO  
Manager, Coding and Reimbursement