

A Documentation Excellence Strategy to Improve Cardiovascular Service Line Performance

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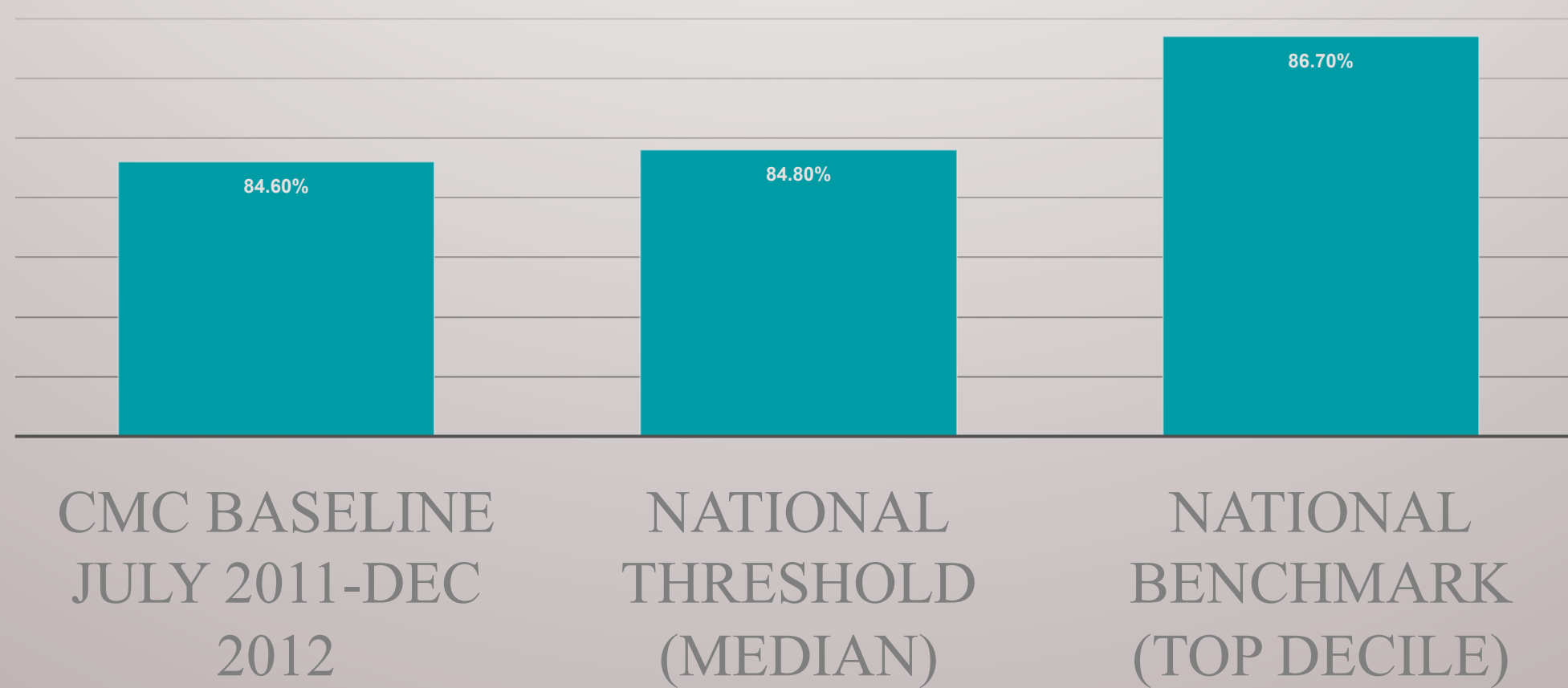
Carolinah HealthCare System
Sanger Heart & Vascular Institute

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Project Selection

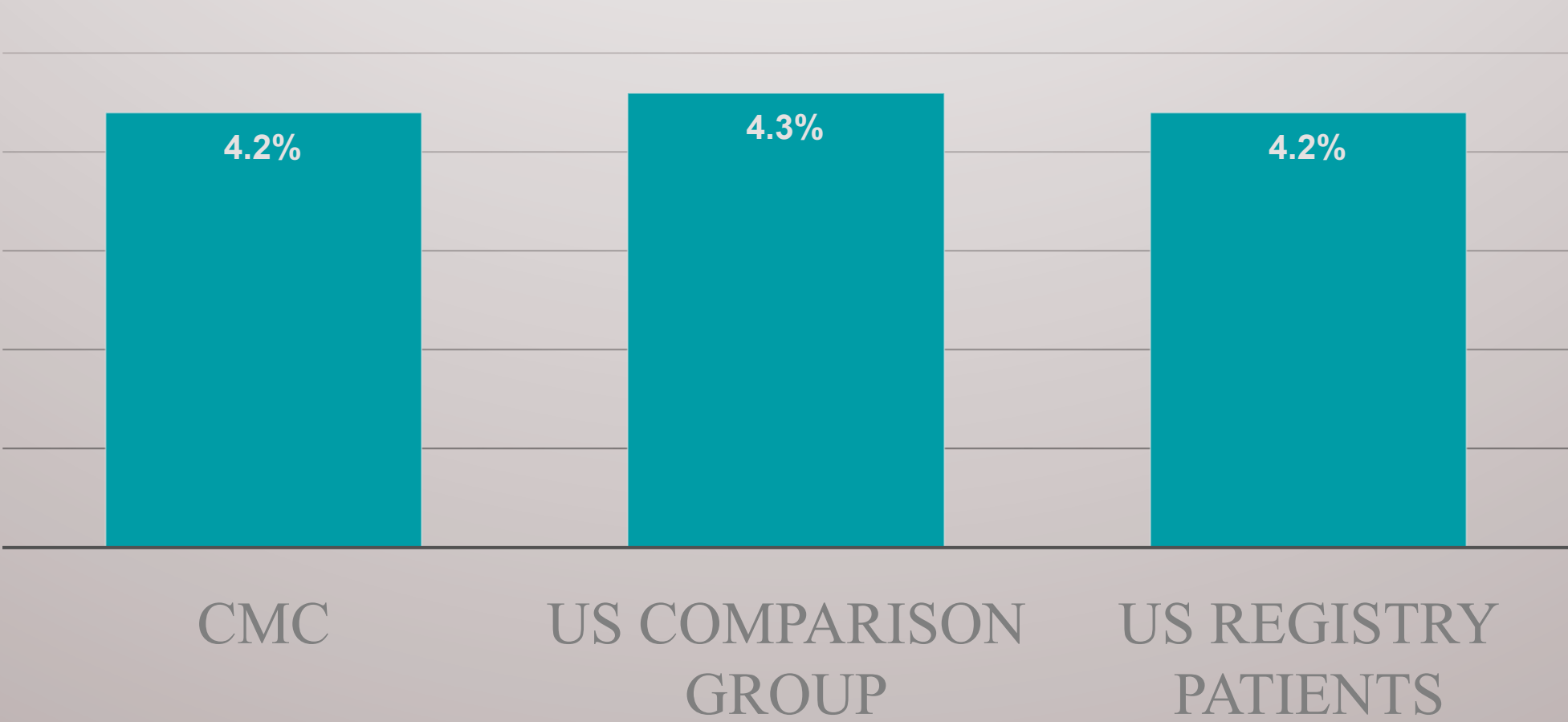
The 2014 CMS Value Based Purchasing (VBP) data reported an unexpectedly high rate for 30-day Acute Myocardial Infarction (AMI) mortality at Carolinas Medical Center (CMC). These results were unexpected in that they differed significantly from abstracted clinical data: as part of our quality program, SHVI regularly reports abstracted AMI data to the American College of Cardiology National Cardiovascular Data Registry (NCDR) ACTION Registry. Benchmarked results from the NCDR registry have consistently demonstrated outcomes for CMC's AMI patients superior to national mean values.

Value Based Purchasing AMI Survival Rate



2014 VBP reflects performance from 2011-2012. Data shown reflects AMI Survival Rate. Performance below achievement and benchmark results in financial penalty for CMC.

ACTION Registry Qtr 4 2012 Risk Adjusted Deaths



Data shown reflect CMC's risk adjusted AMI mortality for ACTION Registry in Qtr4 of 2012

To identify the root cause of this variance, during the first quarter of 2014 the team reviewed the records of 236 patients, 32 of which were classified as having sustained an AMI mortality. The review identified that in ~30% of the cases, AMI should not have been designated as the principal diagnosis for the inpatient admission. Had these cases been properly excluded from the AMI mortality dataset, CMC would instead have achieved top decile VBP performance for AMI mortality in 2014.

To rectify this discrepancy between clinically coded data and chart abstracted data, the team developed a multi-phased Clinical Documentation Excellence strategy. The aim of the project was to improve clinical documentation primarily for AMI patients, with the secondary aim to apply learnings to all cardiovascular (CV) diagnoses. The project was implemented at CHS' highest volume CV centers: CMC, CHS-Pineville, and CHS-Northeast.

Goal

There were three main goals of the Clinical Documentation Excellence project: (1) Improve outcome reporting (mortality and readmissions) (2) Identify accurate patient risk profiles (capture all co-morbidities) (3) Identify appropriate expected length of stay.

Improvement Process

The Clinical Documentation Excellence project used the PDSA methodology.



PLAN

After reviewing the 2014 VBP Results and identifying Root Cause for variance, we proposed that a clinical documentation excellence strategy would improve outcome reporting for AMI. We implemented 2 key strategies:

Strategy 1: develop a "hard stop" process so that records from all patients with a principal diagnosis of AMI would be reviewed prior to final billing. This would ensure that documentation and coding supports the most appropriate principal diagnosis.

Strategy 2: develop a concurrent coding process. This would allow coders and the Clinical Documentation Improvement (CDI) team to collaborate with providers while the patient is still in the hospital.

DO

The hard stop process was initiated at all primary enterprise sites in September of 2015.

- For all patients (1) coded with a principle diagnosis of AMI and (2) suffering in-patient mortality, the team initiated a "Hard Stop" for chart review.
- The chart was sent to the CDI team as well to the Cardiology Physician Review (CPR) team for review.
- The CPR team reviewed the chart within 48 hours of the "Hard Stop" to determine if further clarification from the attending provider was needed.
- If clarification was needed, a member of the CPR team initiated Physician-to-Physician communication to resolve any issues.
- The CDI team monitored the patients chart for addendum as a result of the physician to physician communication.
- If no further clarification was required or after an addendum was dictated, the CDI Team finalized the coding and billing.

The concurrent coding process was initiated October 2016:

- An Advanced Clinical Coder assigned ICD-10-CM and ICD-10-PCS codes to a patient record on the day after admission.
- A CDI RN reviewed the record after coding initiation.
- Using the 3M 360 tool, the Coder and RN communicated and shared findings to ensure coding accuracy. When necessary, they determined when necessary to ask physicians for clarification with the patient in-house.
- Upon discharge, the Coder completed final coding of the account
- In addition to the processes above, monthly monitoring and discussion of outcome reports was performed by a CV Clinical Documentation Excellence Steering Committee. This team included clinical coders, CDI teammates, key CV MD/ACP providers, and members of SHVI's quality and administrative teams.
- AMI mortality data from Premier's Quality Advisor served as proxy for improvement in outcome results. We reasoned that improvement in Premier AMI mortality O/E, which reflects inpatient AMI mortality for all patients, would mirror an improvement in VBP results, which reflect risk adjusted 30-day AMI risk for Medicare patients.

STUDY

The hard stop and concurrent coding strategy have led to early improvement, but further opportunities to improve and sustain results were identified:

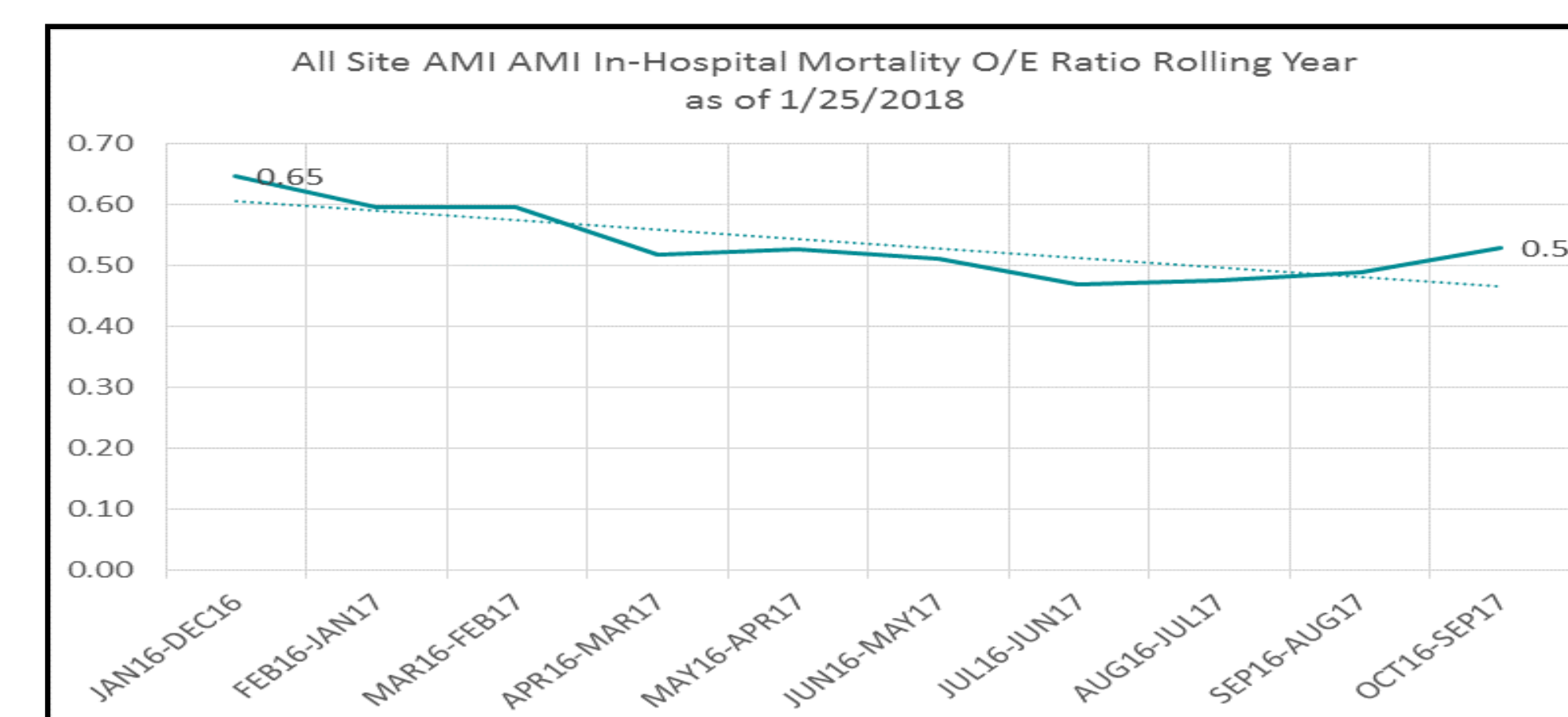
- Focusing only on cardiovascular providers did not cover all the stakeholders who are needed to be involved in this process. Hospitalists and Internal Medicine providers are the primary providers for many CV patients; linking them to these efforts was determined to be an important next step.
- Aligning performance goals across provider disciplines was considered vital. For the CV providers, improving AMI mortality was an area of focus, but this was not a shared goal with the hospitalists or Internal Medicine providers.
- Improving communication amongst all providers as to the reasons for these initiatives as well as the details of the action plans was identified as critical for sustaining provider buy-in to the project.

ACT

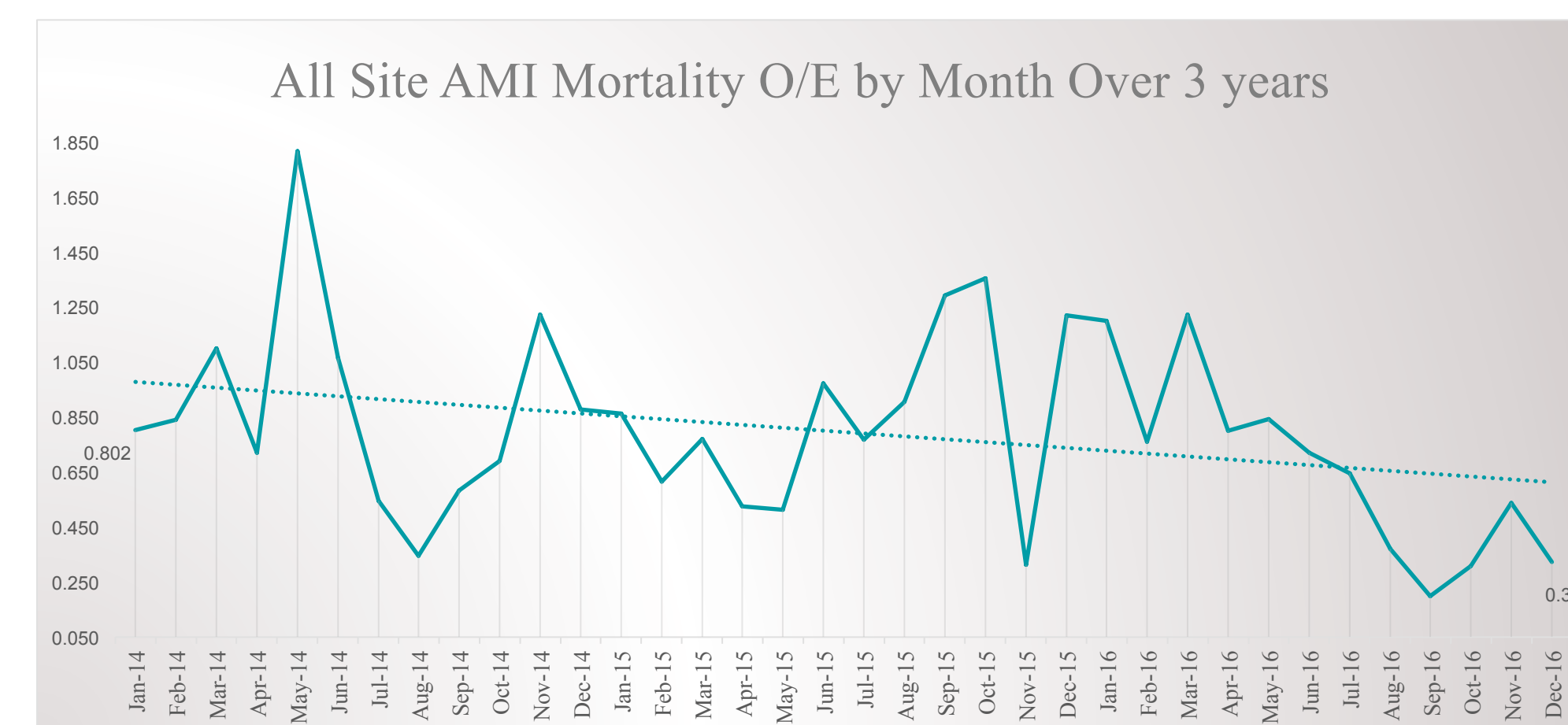
- Continuing with the hard stop AMI mortality process at all primary enterprise sites.
- Expanding the Cardiac Concurrent Documentation Excellence process to all primary enterprise facilities.
- Developing a strategy for aligning CV goals with hospitalist/internal medicine goals.
- Continuing with quarterly meetings of the CV Clinical Documentation Excellence Steering Committee.
- Developing a method to quantify the effect of Clinical Documentation Excellence on other metrics including risk profiles and length of stay.

Results/Outcomes

AMI Mortality O/E results showed continuous improvement throughout the study period. In 2015, the O/E results for AMI mortality was 0.79 and through December 2016 the O/E had decreased to 0.66 and has shown continued improvement to 0.53 (through Sept 2017). It is expected that we will see improvement in CMS VBP results, although it will take time to reflect present performance, as CMS performance data lags below results by 2-3 years.



Source- Premier Quality Advisor- Total SHVI includes all nine Primary Enterprise Facility Roll-Up Results.



Source- QCC Dashboard - Total SHVI includes all nine Primary Enterprise Facility Roll-Up Results.

The improvements in measured AMI mortality O/E were accomplished through the development of key documentation excellence strategies (e.g., the hard stop and concurrent coding processes) as derived and implemented from the PDSA process. A multi-disciplinary team comprising providers, administrators, coding and documentation excellence specialists, and quality and data analytics teammates worked in concert to develop this improvement model. All members were stakeholders: all were deeply engaged in all facets of the project, and all were held accountable for the project results.

Achieving excellence in Documentation and Coding is integral to any value-based care strategy. All publicly reported data, including VBP results, are benchmarked to regional and/or national performance. True comparisons of performance can only be drawn if the reported data are accurate and complete. In addition, an organization cannot determine where/how to target further efforts to improve care until the most complete and accurate assessment of baseline performance is understood.