

## The Outcomes of Accreditation: A Snapshot of Program Improvements

By Amy Newell

As the cardiovascular service line continues to be a primary focus for regulatory bodies, quality groups, and professional clinical organizations, the specialty likewise remains competitive for many hospitals in markets across the country. As a result, many hospital leaders are increasingly considering strategies for market distinction, and chief among them is program accreditation.

Gaining momentum as a differentiator, formal accreditation of either the service line or specific procedural components within cardiovascular, such as cardiac intervention, electrophysiology, peripheral vascular procedures, etc., can position a program for success. Achieving accreditation is a way to substantiate “best practice” through peer reviews, ongoing quality assurance measures, and benchmarks. Corazon believes having third-party, expert scrutiny on the quality of care provided, a critical measure of success in today’s ever-evolving healthcare landscape, can translate into a tangible positive impact on program volumes, outcomes, and finances.

External oversight offers expert validation that the highest standards of care are being met, and in many cases, exceeded. Building and maintaining an efficient, effective, and high-quality cardiovascular program can be a daunting task. Becoming a leading cardiovascular provider in the industry requires collaboration amongst experts who are proficient in evaluating, enhancing, and encouraging a cardiovascular program to excel.

Formal accreditation can result in increased public awareness — through the display of compliance with standardized performance metrics and best practices, as measured by national cardiovascular societies. This public awareness can increase a hospital’s marketability and, consequently, the bottom line. Accreditation offers a more formal platform to provide a thorough approach to quality care through the development of standardized processes as a part of continuous quality improvement (CQI) efforts, thus allowing for ongoing performance review.

Corazon began offering accreditation to facilities in states that regulate cardiovascular services by mandating third-party expert validation. Such requirements include participation in the national registries, such as the American College of Cardiology’s National Cardiovascular Data Registry (ACC-NCDR) CathPCI and Society of Thoracic Surgery (STS), as well as other procedural-specific registries offered through the ACC-NCDR. These and other national registries track outcomes regarding procedures performed within the cardiovascular specialty. The review of these registries’ outcomes data and/or specific metrics provides individualized feedback, every quarter, to each facility. Working collaboratively with programs, Corazon aims to improve patient outcomes and provide clients with a competitive advantage within their local, regional, or state-wide market. In addition to the feedback communicated to each facility, Corazon performs an in-depth look into the data trends to ensure that outcomes are continually improving.

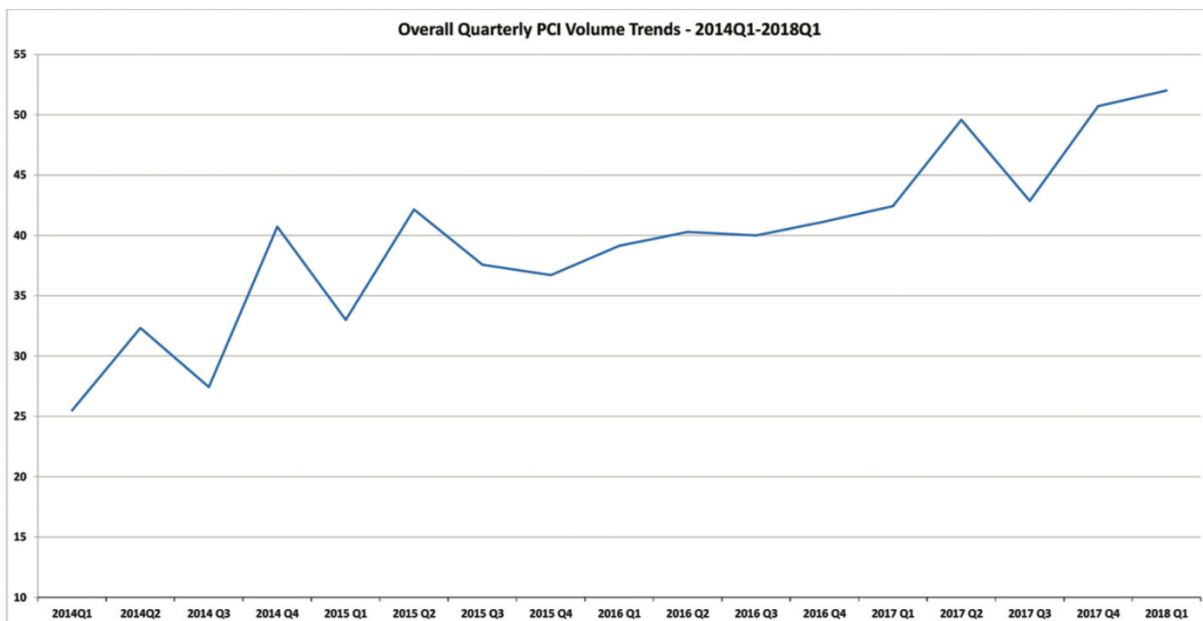


Figure 1.

Figures 1-4 track data trending over the past several years from Corazon-accredited programs. These trends are specific to the ACC-NCDR CathPCI Registry outcomes data to track whether these client hospitals have seen an improvement in the CathPCI metrics since becoming accredited. Improvement in these metrics denotes a development towards better clinical practices and patient outcomes...and the data shows just that!

The goal is continual growth and excellence. One key measure to track is volume trends. Here, we compare the same facilities during the first quarter of 2014 (referred to as 14Q1) through the first quarter of 2018 (referred to as 18Q1) — a four-year difference. In 14Q1, these facilities performed an average of 25.50 percutaneous coronary intervention (PCI) procedures per quarter. In 18Q1, this number more than doubled to an average of 52 cases per quarter, a 103.92% increase (*Figure 1*).

One quality metric that the CathPCI Registry tracks is the in-hospital risk-adjusted rate of bleeding events (“bleeding rate”). This metric indicates the proportion of patients in a facility that experienced a bleeding event post PCI. A decrease in one metric may indicate a decrease in another metric. Typically, if there is a decrease in the bleeding rate, there should also be a decrease in the number of blood transfusions a hospital has — with less bleeding, there is often less need for transfusion. When comparing the bleeding rate to another CathPCI metric, transfusion of whole blood or red blood cells (RBC) post PCI (“transfusion rate”), there is a correlation. On average, facilities saw a decrease of 45.24% in their transfusion rate and a 36.95% decrease in their bleeding rate just in their first year of accreditation.

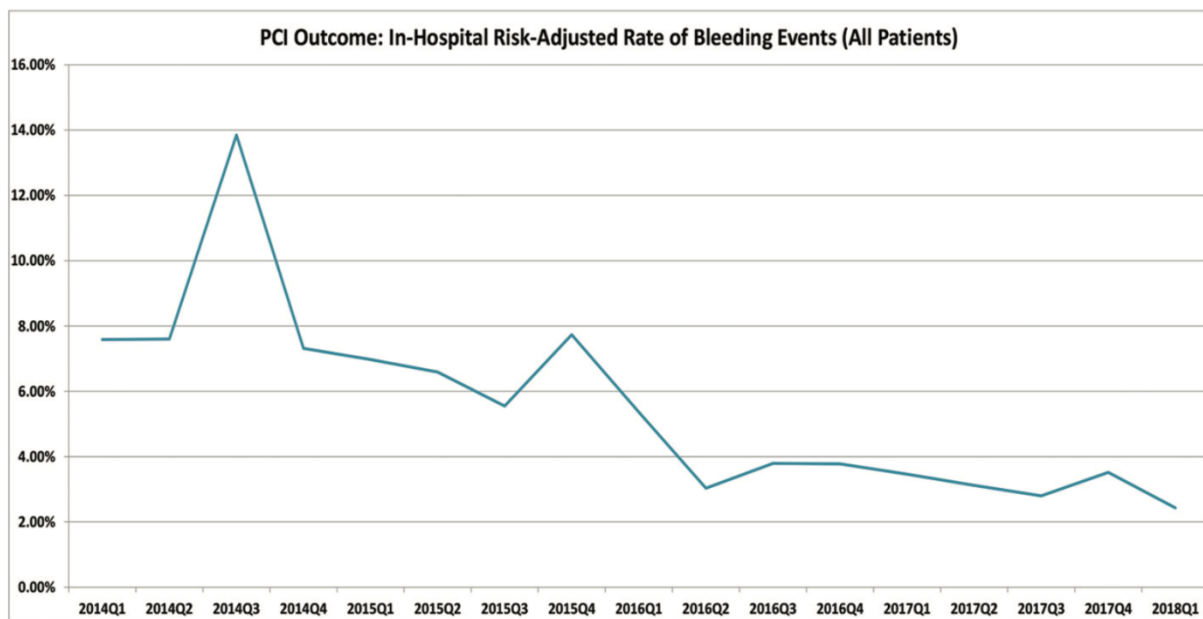


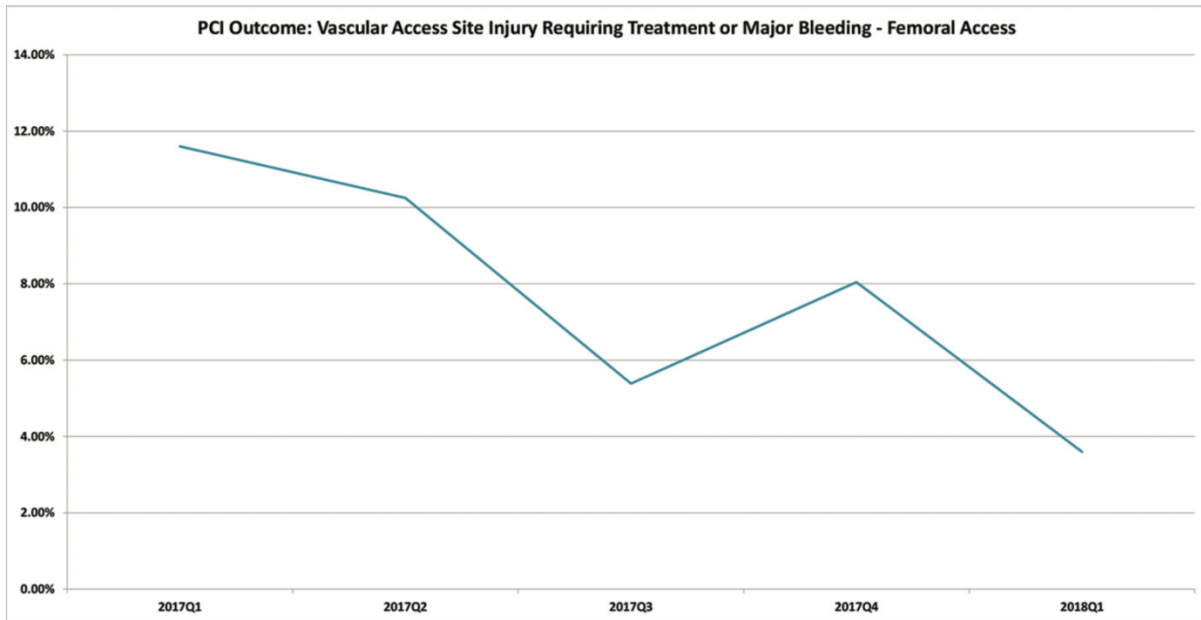
Figure 2.

After four years of accreditation, the rate of bleeding events markedly dropped. Client sites that began accrediting their PCI program in 2014 averaged a 7.59% bleeding rate. As of 18Q1, this value decreased to 2.43% — a 67.98% decrease (*Figure 2*). These same facilities saw a decrease in their transfusion rate over four years as well. In 2014, these facilities averaged a 1.93% transfusion rate. In 18Q1, they averaged a 1.09% transfusion rate. This 43.52% decrease, along with the 67.98% bleeding rate decrease, shows a correlation to look for when analyzing quality metric data.

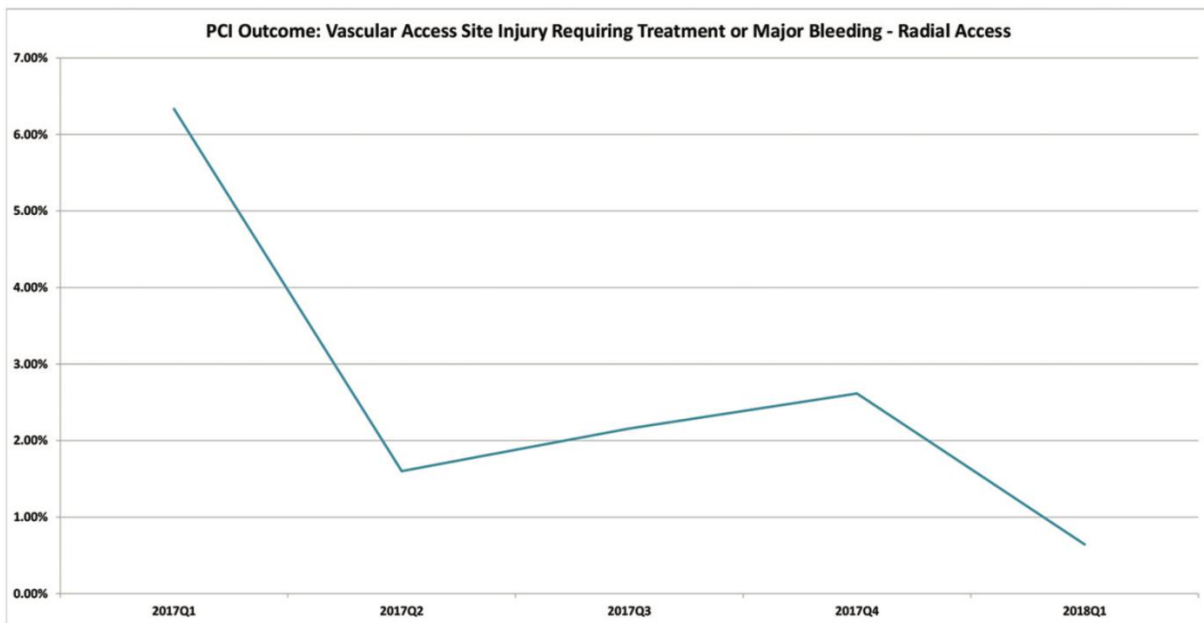
Another quality metric from the CathPCI Registry is vascular access-site injuries requiring treatment or major bleeding (“access site injury rates”). The CathPCI Registry breaks this down into two separate metrics: one for the femoral access site and one for the radial access site. Over the course of just one year accreditation, client sites experienced an average of a 70.65% and 84.50% drop in their femoral and radial access site injury rates, respectively.

When looking at the facilities for which Corazon most recently began reviewing NCDR data, the improvement trend in quality metrics appeared as well. Looking at one year’s worth of the latest NCDR data, the facilities reviewed starting in 17Q1 had an average femoral access site injury rate of 11.60% and an average radial access site injury rate of 6.33%. The latest data shows that these facilities have dropped their femoral access site injury rate to 3.60% and their radial access site injury rate down to 0.64%, a respective change of 68.97% and 89.89% (*Figures 3-4*).

Based on these data measures, accreditation has improved quality metrics including (but not limited to) the risk-adjusted rate of bleeding events, the transfusion of whole blood or RBC post-PCI, and both the femoral and radial access site injury rates requiring treatment or major bleeding across ALL client hospitals. Tracking these and other key measures of clinical quality will do much to raise the bar of quality care within a cardiovascular program.



**Figure 3.**



**Figure 4.**

Whether state-mandated or not, accreditation is fast becoming part of the strategic initiatives many cardiovascular programs are executing in order to give themselves a competitive edge. The evaluation that is included as part the accreditation process encourages cardiovascular service lines to excel and compete in an ever-evolving market.

Not only does formal accreditation offer cardiovascular programs the ability to drive continuous quality improvement (CQI), but also allows for consideration in operational improvement and efficiencies. These improvements are often not recognized or acted upon, unless quality is at the forefront. Specifically, when programs begin to evaluate operational improvements, they are able to quantify this in cost savings through

standardizing processes. Corazon has also seen many states offering pay-for-performance incentives rewarding programs for their stellar quality outcomes and out-of-the-box thinking. Evaluate, enhance, and excel: consider accreditation for your program as a means to reach the next level of success.



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