

# Overcoming Data Integrity Challenges in ACC Reporting

*The underlying problem with ACC data integrity is that many cardiology providers lack the resources necessary to automate data capture, analysis and reporting.*

## EXECUTIVE SUMMARY

Currently, a number of factors are driving the need for cardiology service providers to submit higher quality American College of Cardiology (ACC) data elements. Among these are increased reporting requirements, heightened regulatory and reimbursement scrutiny, and the expansion of appropriate use criteria (AUC).

These forces have heightened the need for collecting and submitting quality data and exposed the challenges in doing so. These include such issues as access and integration, as well as questionable data integrity resulting from inaccurate, incomplete or inconsistent procedure documentation. Also at play is lack of a single “source of truth” that leaves physicians, billers and coders guessing at whether the data they are utilizing is correct and complete.

The underlying problem with ACC data integrity is that many cardiology providers lack the resources necessary to automate data capture, analysis and reporting. They must instead rely on error-prone and time-consuming manual processes that can impact both quality and compliance.

To overcome these data integrity challenges, cardiology providers must establish a road map that closes the gaps in their current data collection and reporting processes. A key element in this should be implementing procedure documentation and coding software capable of automating previously manual processes for significantly improved data collection and reporting.

In addition to overcoming standardization issues, automation can:

- Mitigate the risk of error for improved quality
- Increase reporting efficiency and accelerate patient throughput
- Reduce human errors that can lead to incomplete documentation and incorrect coding
- Standardize documentation of criteria necessary to establish medical necessity

The result is an increase in both productivity for cardiology staff and profitability for the organization as a whole.

## INTRODUCTION

For cardiology service providers, a number of forces are driving the need to provide higher quality American College of Cardiology (ACC) data elements. Among these are increased reporting requirements, heightened regulatory and reimbursement scrutiny and the expansion of appropriate use criteria (AUC).

While these forces have heightened the need for collecting and submitting quality data, they have also exposed the challenges in doing so. For cardiology, these include such issues as access and integration, as well as questionable data integrity resulting from inaccurate, incomplete or inconsistent procedure documentation. Also at play is lack of a single “source of truth” that leaves physicians, billers and coders guessing at whether the data they are utilizing is correct and complete.

As a result, cardiology organizations often struggle to comply with new regulations. It also impacts their ability to confidently bill procedures at the highest appropriate rates, thus negatively impacting the profitability of the organization as a whole.

Automated cardiology procedure-documentation and coding software can overcome a number of these challenges, improving data integrity at the organizational and ACC levels.

## THE NEED FOR DATA QUALITY IMPROVEMENT

According to statistics drawn from Comprehensive Error Rate Testing (CERT) of a medical record against the requirements for documentation as delineated in a National Coverage Determination (NCD), 50–100 percent of inpatient cardiac procedures are unjustified.<sup>i</sup> Those findings, coupled

with high case volume, intense scrutiny surrounding inappropriate placement of stents and implantable cardiac defibrillators (ICDs), and rising concerns over the appropriate use of diagnostic testing, have placed cardiology under a regulatory and reimbursement microscope.

Consider that the Medicare Administrative Contractor (MAC) in Florida has already instituted prepayment reviews of 11 cardiovascular diagnosis-related groups (DRGs). Further, under the Recovery Audit Contractor (RAC) program, the majority of medical necessity denials are related to cardiology DRGs.

Highly public cases of inappropriate stent and ICD use, coupled with a number of studies identifying failures to adhere to evidence-based guidelines, have prompted unprecedented focus on appropriate use in the cardiovascular terrain.<sup>ii</sup> These issues have driven the expansion of AUC, creating further challenges for cardiology providers.

For cardiology service providers, the financial implications of these changes are significant. Under the Florida prepayment review, the 11 targeted cardiovascular DRGs represent approximately 24 percent of all volume, 28 percent of total revenue and 28 percent of total contribution profit for cardiac services, with estimated contribution profits for these DRGs ranging from \$3,053 to \$14,250.<sup>iii</sup>

## ACC DATA INTEGRITY CHALLENGES

The underlying problem with ACC data integrity is that many cardiology providers lack the resources necessary to automate data capture, analysis and reporting and instead rely on error-prone and time-consuming manual processes that can impact both quality and compliance.

Interoperability issues also exist. When data is siloed in multiple disparate systems, for example, the procedure-documentation and hemodynamic systems are not interfaced with the electronic medical record (EMR), the result is an inconsistent and incomplete patient record. Further, conflicting perspectives regarding which data is necessary for capture and who should capture it, reporting can create tension between teammates and result in a process inertia that is difficult to overcome.

Cardiovascular Information Systems (CVIS) solutions have done little to help. KLAS reports that 45 percent of providers consider cardiology systems to be incomplete, with the majority of respondents citing clinical reporting as the missing link. In addition, many find that these systems lack the reporting functionality necessary to compile and validate data to their best ability.<sup>iv</sup>

As a result, many providers continue to rely on primarily manual and paper-based processes to capture and report data points, which can be highly redundant and fraught with the potential for human error. In addition, traditional processes often require up to four full-time equivalents to handle the department’s registry reporting.<sup>v</sup>

The situation is further complicated by the complex nature of cardiology documentation, which can lead to information gaps resulting in double-digit error rates, thus hindering the accurate, comprehensive capture of structured and compliant data. In fact, an internal audit conducted by one hospital found error rates as high as 90 percent in its cardiac catheterization lab, while another found an average error rate of 70 percent in cardiology peripherals.<sup>vi</sup>

The reality is that these documentation and record-keeping deficiencies ultimately result in incomplete and inconsistent data that does not advance the goals of quality initiatives or allow providers to validate data submitted to the National Cardiovascular Data Registry (NCDR).

### DATA INTEGRITY ROAD MAP

To overcome these data integrity challenges, cardiology providers must establish a road map that closes the gaps in their current data-collection and reporting processes. They should begin by identifying and prioritizing their data-improvement objectives.

At minimum, these objectives should include minimizing the amount of manual data entry and eliminating redundant processes. This prevents

quality data required by NCDR registries, such as pre-procedural, intra-procedural and post-procedure information, that are traditionally documented and stored in multiple reports or systems.

Critical to success is identifying and communicating with key stakeholders. Unless leadership is engaged and sold on the process and technology changes necessary to achieve the desired state, it is unlikely the short- or long-term resources will be dedicated to improving data integrity.

### The Use of Technology to Protect Data Integrity

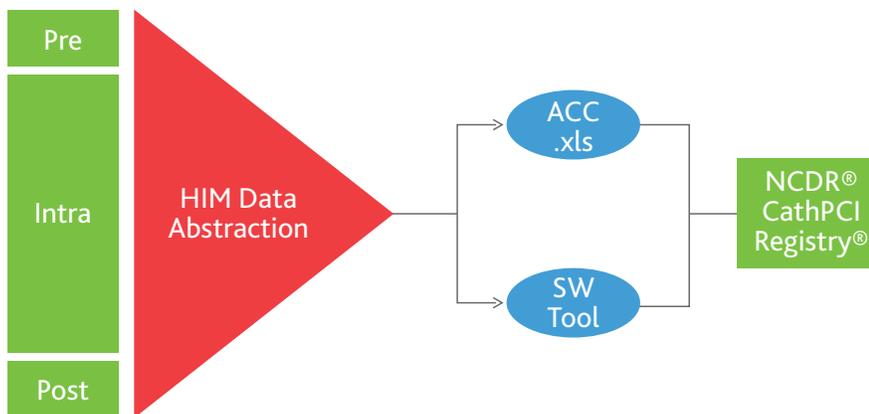
A key element of any quality improvement road map is implementing procedure-documentation and coding software

notes, lessening the need for manual intervention and eliminating duplicate data entry. It also enables resources to focus on other core responsibilities, increasing productivity and potentially accelerating patient throughput. Finally, by improving documentation and quality data, cardiology departments can take the steps necessary to improve processes and organizational decisions that may lead to better patient care.

In recognition of the growing emphasis on quality metrics, a small number of vendors have also introduced reporting tools that integrate with procedure-documentation and coding software to further enhance data integrity and streamline reporting processes. By auto-populating information generated during procedures, these robust reporting tools allow for structured reporting that interfaces with cardiovascular information systems (CVIS) as well as the EMR.<sup>vii</sup>

In addition, the best solutions will include registry reporting modules that extract registry data for multiple reporting registries. For instance, ProVation MD, which provides streamlined procedure documentation and coding, can send approximately 70 percent of NCDR CathPCI fields, primarily the physicians procedure report, directly to the registry reporting module. This greatly reduces physician queries and duplicate data entry which can lead to inaccuracies or inconsistencies within the data. The remaining 30 percent of the data fields, which include pre- and post-procedure data (history and physical, labs, discharge information) can be manually entered by abstractors, unless integrated with the registry reporting tool.

By guiding physicians through the process of capturing all required data elements, these tools allow data to be organized into specific formats that can be transmitted directly to the



*Most of the intra-procedural data elements required by the NCDR® CathPCI Registry® are collected from the cardiologist's clinical report. Currently, HIM professionals are tasked with manual abstraction and reentry of these data for submission to ACC, which often involves the lengthy process of querying cardiologists for missing data points.*

data bottlenecks and decreases the potential for error by health information management (HIM) and quality staff, who typically must manually abstract and reformat data elements for registry submission (see illustration).

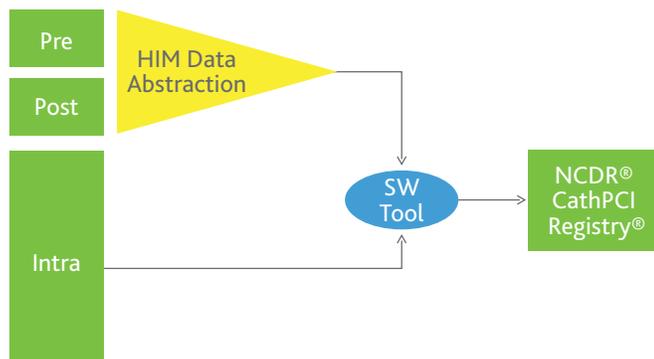
Objectives should also enable the capture of trustworthy and comprehensive data that flows freely between systems and departments. This includes critical

capable of automating previously manual processes for significantly improved data collection and reporting.

In addition to overcoming standardization issues, automation can mitigate the risk of error for improved quality. Intuitive procedure-documentation software allows many of the required data points to be collected directly from procedure

various registries. Ultimately, these tools make data collection and reporting an integral part of a physician's workflow, thus increasing reporting efficiency and eliminating human errors that can lead to incomplete documentation and incorrect coding.

Furthermore, the use of structured reporting software, such as ProVation® MD, can significantly reduce the amount of manual, error-prone efforts by HIM and quality staff required for data abstraction, as illustrated in the process map below:



*By utilizing advanced procedure documentation software, critical data elements captured in the cardiologist's case note can be automatically sent to a software tool, reducing the resources spent on abstraction and duplicate data entry and protecting data integrity.*

Automation can also help ensure that physicians and hospitals are able to more efficiently and effectively defend claims, accelerating the audit process and avoiding unnecessary financial shortfalls.

Finally, by automating traditionally manual processes, cardiology service lines can standardize documentation of criteria necessary to establish medical necessity while allowing other areas to be customized according to physician preference.

## CONCLUSION

While cardiology providers can certainly address increased reporting requirements by modifying current processes to capture data more efficiently and effectively within their department, the best strategies will also include the implementation of automated cardiology procedure-documentation and coding software.

These solutions not only reduce the human errors plaguing information quality but also ensure that the data collected for each procedure is comprehensive enough to combat prepayment audits and demonstrate medical necessity. The result is an increase in both productivity for cardiology staff and profitability for the organization as a whole.

<sup>i</sup> Florida Chapter of the American College of Cardiology. (n.d.). CMS audit background information. Retrieved from <http://www.acfl.org/take-action/take-action.html>

<sup>ii</sup> Hartman, J. (2012, May 14). Appropriate use criteria for diagnostic cath. Cardiovascular Rounds. Retrieved from <http://www.advisory.com/research/cardiovascular-roundtable/cardiovascular-rounds/2012/05/appropriate-use-criteria-for-diagnostic-cath>

<sup>iii</sup> Maher, B. (2011, December 20). How CMS's prepayment review will impact demand for CV services. The Daily Briefing. Retrieved from <http://www.advisory.com/Daily-Briefing/2011/12/20/How-will-CMS-prepayment-review-demo-impact-demand-for-CV-services>

<sup>iv</sup> Cardiology PACS and consolidation: Will a leader emerge? (2012, March 19). Imaging Technology News. Retrieved from <http://www.itnonline.com/article/cardiology-pacs-and-consolidation-will-leader-emerge>

<sup>v</sup> The Advisory Board Company Cardiovascular Roundtable (2012). "The Information-Powered Cardiovascular Enterprise: Imperatives for Leveraging Health IT to Deliver Value and Coordinate Care."

<sup>vi</sup> Benson, S. (2010, March 12). "Top 5 documentation and coding challenges confronting hospital specialty service lines." Becker's Hospital Review. Retrieved from <http://www.beckershospitalreview.com/news-analysis/top-5-documentation-and-coding-challenges-confronting-hospital-specialty-service-lines.html>

<sup>vii</sup> The Advisory Board Cardiovascular Roundtable.