Overview of Cardiovascular Programs in Hospitals

Cardiology programs consist of expert physicians who diagnose and treat common and rare cardiac diseases. Some of these may include coronary artery disease, heart failure, cardiac arrhythmia, valvular heart disease, and inherited heart disease. Examples of procedures performed to treat cardiac disease include coronary angioplasty and stenting, arrhythmia ablations, pacemaker insertion, automatic internal cardioverter defibrillator (AICD) insertion, balloon dilation of diseased valves, and catheter-based replacement of a diseased aortic valve.

Cardiac surgery encompasses a range of surgical interventions, including coronary artery bypass, valve replacement, repair or palliation of congenital lesions, minimally invasive cardiac surgery, off-pump coronary bypass, surgical ablation for atrial fibrillation, surgical ventricular remodeling procedures, heart and lung transplantation, and ventricular assist device implantation.

Endovascular therapy involves diagnostic and therapeutic interventions for a broad spectrum of circulatory disorders, such as aortic aneurysms, peripheral arterial aneurysms, cerebrovascular disease, peripheral arterial occlusive disease (PAD), and vein disorders. Interventions may include minimally invasive endovascular therapy, conventional open surgery, and hybrid procedures for aneurysms and PAD.

The highest volume of procedures occurs in interventional radiology, which uses minimally invasive, image-guided procedures to diagnose and treat disease. Examples of these diseases include venous thromboembolism, renal artery disease or renal vascular disease, peripheral arterial disease or peripheral vascular disease, claudication, visceral stenting and angioplasty, chronic total occlusions of peripheral arteries, upper and lower extremity stenting and angioplasty, and vascular malformations. Interventional radiology procedures for these conditions are the most likely to undergo scrutiny.

Cardiology Programs Face Risk

One of the reasons that cardiac procedures are being targeted for scrutiny is that the average length of stay for cardiology procedures, especially interventional procedures, has gradually decreased, leading auditors to believe that they can routinely be performed in an outpatient setting. Admitting patients for these procedures raises a red flag for auditors.

The Centers for Medicare & Medicaid Services (CMS) identified nearly $1.03 billion in improper Medicare payments just within the first three years of implementing its Recovery Audit Contractor (RAC) program, which was established in 2005. Of the improper payments identified by these RACs, 96% were overpayments to healthcare providers and the remaining 4% were underpayments repaid to healthcare providers.

According to the United States Department of Health and Human Services Office of Inspector General (HHS OIG), the most common Medicare reimbursement violation is failure to comply with medical necessity requirements. Widespread scrutiny continues, especially for certain costly diagnoses involving interventional cardiology procedures (such as angioplasty or pacemaker implantation).
In 2006, a hospital in Louisiana paid $3.8 million to settle a United States Department of Justice false-claims lawsuit and also paid an additional $7.4 million to settle a class-action lawsuit brought by former patients of one of its interventional cardiologists. In 2009, the cardiologist was sentenced to 10 years in federal prison for implanting stents in patients who did not need them. He was convicted on 51 counts of billing private and government health insurers for unnecessary medical procedures and received the maximum sentence. Testimony during the trial revealed that the doctor falsified patient symptoms in medical records, including chest pain when patients never complained of such pain, and falsified findings on medical tests. From 1999 to 2003, he billed Medicare and private insurance companies more than $3 million, which made him the top cardiology biller in the state and allowed him to personally pocket more than $500,000.

A Maryland hospital agreed to pay a $22 million fine in 2010, to settle charges that it paid illegal kickbacks to a cardiologist’s practice in exchange for patient referrals. Reports indicate that the cardiologist may have implanted more than 500 stents that were medically unnecessary, with Medicare paying $3.8 million of the $6.6 million charge for those procedures. According to a hospital statement, “The medical center reached the agreement without admitting any liability in order to avoid the expense and uncertainty of litigation and to allow the medical center to move forward.”

In 2014, a Kentucky hospital agreed to pay $16.5 million in fines after the government alleged that doctors working at the hospital performed numerous invasive cardiac procedures on Medicare and Medicaid patients who did not need them, and that the hospital was aware of these unnecessary procedures. The hospital was also charged with entering into sham management agreements that financially benefitted physicians of an affiliated clinic, in order to have more patients directed to the hospital.

Collecting Data and Reporting to National Databases

In order to measure and evaluate performance, performance measures must be identified. There are a number of basic principles for selecting these measures. The measure must be meaningful and valid and reliable. It should also be adjustable for patient variability, and modifiable by improvements in the processes of care, with opportunity for performance improvement. It should be feasible to measure the performance of healthcare providers, taking time and budget into consideration.

 Participating in national databases provides a number of potential benefits to hospitals. Participation helps improve patient outcomes, identifies initiatives and new areas for quality improvement, documents the quality of care delivered, enables risk modeling of major procedures, offers access to data for assessment of new technology and techniques, and provides the option to publicly report ratings.

The Society of Thoracic Surgeons (STS) National Database was established in 1989 as an initiative for quality improvement and patient safety, as well as a potential tool for clinical research. There are three different components of the STS National Database: adult cardiac surgery; congenital heart surgery; and general thoracic surgery.

The National Cardiovascular Data Registry (NCDR) was developed in 1997 by the American College of Cardiology (ACC) in order to explore strategies for improving cardiovascular care through the use and application of clinical data. It offers a suite of cardiovascular data registries: acute myocardial infarction treatment; diagnostic cardiac catheterization and percutaneous coronary intervention; implantable cardioverter defibrillator and lead procedures; lower extremity peripheral vascular interventions, carotid artery revascularization and endarterectomy procedures; pediatric and adult congenital treatment procedures; transcatheter valve therapy procedures; and outpatient cardiovascular care for coronary artery disease, heart failure, hypertension, atrial fibrillation, and diabetes.

The STS/ACC TVT Registry was designed by the STS and the ACC to monitor the safety and efficacy of transcatheter valve replacement (TVR) and repair procedures and emerging treatments for valve disease patients. The registry captures and reports patient demographics, procedure details, and facility and physician information, delivering insight into clinical practice patterns and patient outcomes. It is also a potential research tool, and it fulfills the CMS registry participation requirement for transcatheter aortic valve replacement (TAVR) and transcatheter mitral valve repair (TMVR) procedures.
Ensuring Appropriate Use

Appropriate use criteria (AUC) were developed by the ACC and/or the American College of Cardiology Foundation (ACCF), working jointly with other professional societies, such as the American Heart Association (AHA) and the Society for Cardiac Angiography and Interventions (SCAI). They were designed to critically and systematically create, review, and categorize a broad range of clinical situations in which diagnostic tests and procedures are used to treat patients with known or suspected cardiovascular disease, based on current understanding of the benefits and risks of the procedures examined. AUC should not be considered substitutes for sound clinical judgment and practice experience.

Even with the use of AUC, optimizing patient care remains difficult. There are many reasons for this, including the continual introduction of new devices and the barrage of data on novel strategies both from clinical trials and large registries. There is also increased focus on patient groups at higher risk for adverse outcomes because of advanced age or comorbidities, and recommendations lack specificity in accurate risk prediction for individual patients.

Establishing team-based care optimizes the management of complex patient issues by facilitating joint and shared decision making among different medical care stakeholders, such as cardiac surgeons and interventional cardiologists. The heart team also allows customization of each patient’s needs and values. The 2010 European Society of Cardiology and European Association for Cardio-Thoracic Surgery Guidelines for Coronary Revascularization, as well as the 2012 ACC/AHA Guidelines for Coronary Artery Bypass Grafting, include the heart team as a class 1 indication.

Peer Review as a Risk Management Strategy

Early detection and resolution of issues reduces negative consequences for physicians and hospitals. In addition to minimizing harm to patients, it also minimizes liability exposure of practitioners and the hospital’s financial losses. Peer review not only detects and resolves physician performance issues that can lead to loss, but also prevents medical errors through increased transparency and accountability, reduces negative consequences and costs for both the physician and the hospital, and reduces risk of litigation between facility and physicians, when managed properly.

Many hospitals take a reactive approach to peer review, reviewing only cases with negative outcomes and missing opportunities to identify and track inappropriate clinical performance and medical errors in their broader context, in order to prevent their future occurrence. This not only compromises the effectiveness of peer review, but also creates a punitive culture and does not provide timely opportunities for education, re-proctoring, or re-training. As a result, many poor practice patterns are not discovered until a bad outcome occurs, if they are discovered at all. This can result in loss of reputation and competitive positioning, high malpractice costs, expensive litigation, and government audits.

A good peer review system includes both internal and external peer review. Internal peer review should always be the starting point. It is the best solution for routine cases and matters. Provisional review is a good example. There is no reason to send all of these cases out for external peer review. In addition, the internal team is knowledgeable about internal processes and procedures.

A good peer review system includes both internal and external peer review. Internal peer review should always be the starting point. It is the best solution for routine cases and matters. Provisional review is a good example. There is no reason to send all of these cases out for external peer review. In addition, the internal team is knowledgeable about internal processes and procedures.

There are, however, disadvantages to the internal peer review system. Many people think that it is just a rubber stamp in some hospitals, and there is the potential for conflicts of interest (COI). Doctors do not want to review peers—it is very uncomfortable to be looking at somebody else’s care and saying whether or not they have provided the standard of care that is necessary for their patients. They are also very busy, and peer review becomes a low priority.

One of the advantages of external peer review is that it avoids COI that can arise from economic, professional, or social ties among physicians within a single institution. External review may also be an effective solution for hospitals that lack adequate physician resources to conduct timely performance analyses. It also reduces medical errors through objective evaluations performed in a non-punitive, educational context that supports a culture of continuous improvement, while improving quality of care and patient safety. Physicians know that board-certified specialists with the same credentials and from similar practice settings will objectively evaluate their work at regular intervals. External peer review also uncovers problematic practice patterns and physician- and hospital-level issues that need to be addressed before they turn into claims.
As with internal peer review, external peer review is not without its disadvantages. Most importantly, it is not a replacement for internal peer review. An effective peer review program must include both internal and external review. Another potential disadvantage associated with external peer review is cost and the fact that some hospitals do not have ongoing external peer review built into their budgets.

Identifying triggers for external peer review helps to set expectations, which supports fairness in the peer review process and ensures that practitioners are treated uniformly and held to the same standards. The hospital and medical staff should jointly define what is meant by quality of care, appropriate resource use, patient safety, professionalism, and accountability for active participation as a team member in the care system. Once the medical staff leadership sets and communicates practitioner performance expectations, they must ensure that all physicians know that their performance will be measured, how it will be monitored, and how it will be compared to that of their peers. Evaluations of practitioner performance should be conducted regularly and not just at the time of re-appointment, with data maintained for all practitioners. Ongoing monitoring helps to promote practitioner compliance with these expectations.

It is also important to identify automatic triggers for focused evaluations and apply them consistently. Automatic triggers include: re-credentialing; adding new privileges; unexpected patient death; complication; re-admission; delay in diagnosis or treatment; disruptive practitioner behavior; inadequate hand-off among practitioners; missed or wrong diagnosis; and serious patient complaint.

According to CMS case review guidelines, hospitals should, whenever possible, avoid assigning a case to a physician reviewer if the reviewer actively practices in the same hospital as the physician under review. The guidelines also state that potential COI should be avoided when selecting physicians to serve on quality improvement and sanction committees.

Hospitals should turn to external peer review not only when COI have been identified, but also when the peer review committee cannot reach a conclusion or consensus on how to proceed with a case review, when quality issues related to a particular department, procedure, or practitioner have been identified, and/or when physician performance may have had an impact on clinical outcomes.

Conclusions

As cardiology procedures continue to undergo intense scrutiny, hospitals are now being forced to demonstrate that patients meet strict medical necessity criteria and guidelines. The penalties for inappropriate reimbursement are steep, with some hospitals facing millions of dollars in fines. Advances in diagnostic and interventional cardiology have led to an increase in the utilization of various procedures and devices. Risk management professionals must identify and evaluate initiatives for quality improvement so that these options can effectively and safely be used in clinical care.
Bibliography


About AllMed Healthcare Management

AllMed provides external peer review solutions to leading hospital groups and ASCs, nationwide. AllMed offers MedEval℠ and MedScore℠, which help facilities improve physician performance through both periodic and ongoing case reviews at the individual or departmental levels. Services are deployed through PeerPoint®, AllMed’s state-of-the-art medical review portal. For more information on how AllMed can help your organization improve the quality and integrity of healthcare, contact us today at info@allmedmd.com.

AllMed Healthcare Management
621 SW Alder St., Suite 740
Portland, OR 97205
800-400-9916
www.allmedmd.com