An Essay on the History of Medical Peer Review in the United States

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A broad definition of medical peer review is the evaluation of individual, program, or institution performance based on the assessment of measures such as outcomes and process data, financial metrics, public and/or regulatory ratings, technical and non-technical skills, and behavioral concerns. The foundational goals of peer review are as follows:

- **Goal 1:** Assurance of quality healthcare for the public good.
- **Goal 2:** Enhancement of performance and growth for individual, program, or institution best practices.
- **Goal 3:** Protection of the integrity of the cardiovascular physician profession.
- **Goal 4:** Compliance with regulatory requirements, whether state, local, societal, governmental, etc.
- **Goal 5:** Provision of an objective framework for credentialling, re-credentialing, and licensure of providers.
- **Goal 6:** Delivery of corrective and disciplinary actions as required and mandated by regulatory or by-law standards.

Based on these goals, peer review can be divided into two basic categories: (1) performance validation and enhancement, and (2) corrective action. While peer review for the purpose of disciplinary action or of meeting credentialing standards (Goal 6) is listed last, this is certainly not meant to imply a lack of critical importance. Rather, it is because Goal 6's particular aspect of peer review mandates an entirely different set of standards and processes — ones that are punitive and designed to correct issues that have emerged over time.

All other forms of peer review tend to be related to ongoing continuous quality improvement activities, wherein the primary purpose is to validate quality performance and/or enhance personal and professional development of individuals, programs, and institutions, be it an ongoing professional practice evaluation (OPPE) for an individual, or a multidisciplinary morbidity and mortality (M&M) review, or quality improvement (QI) program. This approach lends itself to a much broader set of processes and standards of conduct, along with best practices that are proactive and designed to communicate performance data ahead of any negative issue or outcome.

Disciplinary and licensure review activities tend to be structured around legal, judicial, and regulatory rules, and carry a negative stigma, while opportunities for peer review centered in personal and professional enhancement, and programmatic and process improvement, lead to a much more collegial, multidisciplinary, and collaborative methodology for quality assurance. Corazon believes herein lies the key to quality assurance efforts that succeed — a proactive and ongoing approach to verify and validate performance ahead of any need for corrective action.

Disciplinary activities are often triggered by a single event or a rapidly occurring series of events related to negative case outcomes; individual behavioral issues; or patient, colleague, or staff complaints. Allowing issues pertaining to disciplinary activity to be a part of the standard peer review process will dilute its effectiveness and discourage participation.

Corazon believes these disciplinary situations should be handled separately, based on how individual institutions have structured their bylaws and governance. If a punitive approach is taken from the start, a hospital will find less impactful outcomes are the result. On the other hand, if performance is reviewed regularly, physicians will be motivated to participate with the hopes of improving from both a personal and professional growth standpoint, while also creating an opportunity for contributing to enhanced program and institutional quality.

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Data Developments

It wasn't until the early- to mid-90s, as computers gained the ability to gather and assess more robust information (data), that the healthcare industry was able to arrive at meaningful conclusions regarding outcomes. Prior to that time, most of the basis for peer review was more anecdotal than fact-based, and relied on rudimentary, raw, and poorly risk-adjusted data, if at all. The ability to use machines to abstract, analyze, and apply meaningful statistical analysis to larger and larger amounts of data helped considerably to further advance this process.

With more sophisticated data analysis came the ability to more clearly understand what contributed to better patient outcomes, along with the risk factors and events that contributed to less-desirable outcomes. From both sides of that equation, physicians and program leaders became far better able to predict, based on historical data, the potential outcomes and risks associated with a specific patient and their treatment plan.

Further, this information led to the ability to aggregate data from multiple sources and the means to benchmark physicians and hospitals against each other as a driver to improve outcomes, based on the comparisons and explanatory data behind them.

One of the best examples is the Society of Thoracic Surgeons (STS) National Database. Although voluntary in participation, since its birth in the early 1990s, nearly every cardiac surgeon and surgical program in the U.S. and Canada is a member. The STS is recognized as arguably the most mature and robust database in medicine today. Not only is it used by participants for quality assessment and improvement, but it is also used by both government agencies for policy-making and by payors for reimbursement standards.

Despite the advances in technology that have so impactfully affected medicine, the issue of physician buy-in to peer review remains challenging. There continues to be a general distrust of the process on behalf of some as the lines between disciplinary and clinical peer review remain blurred. Possible explanations may still be concern for misuse for personal interests such as economic or political gain.

The landmark example occurred in 1986 with Patrick v. Burget. False claims were used in a hospital peer review hearing against Dr. Patrick after he turned down a partnership in a clinic run by other surgeons with ranking positions in the hospital and opened up his own competing clinic. The result of the hearing was to terminate Dr. Patrick's privileges. Dr. Patrick instead chose to resign and subsequently filed an antitrust lawsuit against the clinic and Dr. Burget, claiming bad-faith peer review in order to stifle competition.

The United States Supreme Court ruled in favor of Dr. Patrick, awarding him $2.2 million and disbanding the clinic as a violation of the Sherman Antitrust Act. The unintended consequence of this much-publicized case caused many physicians to decline to participate in peer review activities, fearing litigation. Simultaneously, malpractice lawsuits were at an all-time high. Effective peer review was viewed by legislators as critical to reducing the ongoing medical-malpractice crisis. This, in turn, led to enactment of the Health Care Quality Improvement Act (HCQIA) to expand reviewer immunity, with the hope of encouraging a higher level of physician participation in peer review.

As a second consequence, the law created the National Practitioner Data Bank (NPDB) to tackle the issue of "state hoppers." The NPDB database remains confidential and can only be accessed by hospitals, state medical boards, and professional societies. Unfortunately however, this leaves hospital and review boards with nearly a carte blanche ability to abuse the peer review process with sham reviews, resulting in physicians who may be unfairly treated, with no viable remedy. There is no argument that peer review to protect the public and the medical profession from incompetent, unethical, or poorly behaved physicians is necessary. But the dangers of the absolute power afforded under the HCQIA have the potential to lead to significant abuse and have weakened the process.

Professional peer review unfortunately continues to carry the stigma of being a punitive process. It is usually enacted retroactively in response to a perceived egregious action or negative outcome as the result of a physician's activities. Such scrutiny can feel humiliating or demoralizing for the physician, as well as extremely uncomfortable for those conducting the review, as these are not unlikely to be close colleagues or friends. Long-term relationships can be forever affected, and careers can be irreversibly altered. For this reason, an unbiased third-party reviewer can be a welcomed solution.

While certainly there needs to be public and professional protection afforded against individuals whose standards of practice or conduct are sub-par, the majority of physicians sincerely work to deliver good care.

While the intent of legislation such as the HCQIA was to provide protection for reviewers in a peer review process, there were two significant unintended consequences. First, the burden of responsibility and accountability was shifted almost totally on the "accused," leaving them vulnerable to sham reviews that are nearly impossible to reverse. Secondly, it has for all intents and purposes turned physician peer review into a legal event designed to levy punitive measures against the physician under review.

While certainly there needs to be public and professional protection afforded against individuals whose standards of practice or conduct are sub-par, the majority of physicians sincerely work to deliver good care. Bad outcomes occur, and even good doctors can and do make mistakes, often leading to a second 'victim' in such a situation. Unless there is malicious intent, a collaborative, empathetic, and educationally corrective approach is far more likely to lead to improved patient outcomes, along with a physician's personal and professional development.

Additionally, a more proactive and collaborative approach paves the way for encouraging providers to self-report medical errors, which has proven to be an effective means of improving safety in high-reliability organizations. But, recognizing that there remains a place for disciplinary peer review, the American Academy of Family Physicians, in a policy statement, puts it this way, "In the public interest, peer review by medical staffs, medical societies, medical groups, health plans, and other entities should be confidential, protected, and not subject to disclosure or discovery, but the evidence and clinical decision-making used in developing peer review decisions should be transparent and open to scrutiny. There should be the opportunity to provide further information and rebuttal to peer review outcomes."

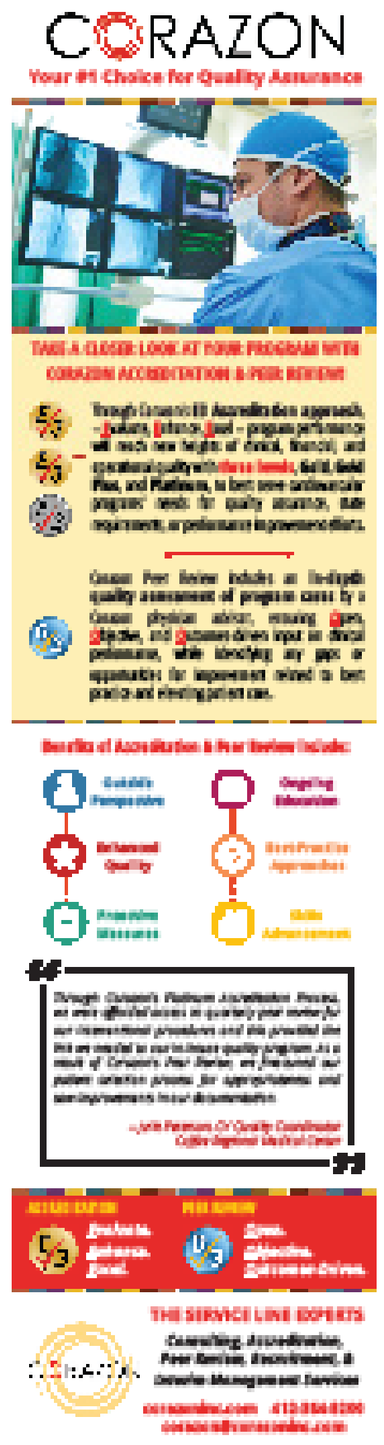
Another deficit of current peer review process is the lack of standardization and or physician agreement upon methodology. In the *American Journal of Medical Quality*, Dr. Marc Edwards feels that "despite its importance, the objective impact of clinical peer review on the quality and safety of care has not been studied. Data...shows that peer program and related institutional factors can explain up to 18% of the variation in standard measures of quality and patient safety. The majority of programs rely on an outmoded and dysfunctional process model. Adoption of best practices informed by the continuing study of peer review program effectiveness has the protentional to significantly improve patient outcomes."

Standard Standards?

There is often little agreement on what is pertinent to include in the very basics of a clinical peer review. Other than outcomes data (e.g., infection rates, mortality, length of stay, etc.) how does one really define "quality"? What other measures of physician performance are important?

The details of how to perform any type of ongoing performance evaluation are left to the discretion of each individual institution. Guidelines are vague and lack substance. At the institutional level, medical staff bylaws govern some review standards. But concerns by those proposing guidelines is that if the rigor of such reviews become too onerous, they themselves may become victims of the very process they designed. Additionally, there are concerns with how to make the process fair across the spectrum of physician specialties and disciplines. Certainly, standards for a cardiovascular program would differ from those required for top quality in a different specialty.

For example, the rich wealth of outcomes data that may be available to evaluate the performance of a cardiac surgeon may not be comparable to the evaluation of, for example, a hospitalist. Tailoring OPPEs to fairly evaluate those whose practice is very focused, such as an interventional cardiologist who cares for but never admits a patient, may need to be different than evaluation for the hospitalist, for whom



all patients get admitted, and whose responsibilities may rest, in large part, in coordinating the activities of multiple specialists. Hospitalists have less control over their activities, yet would be as accountable for outcomes as the "admitting" physician.

In-house peer review processes often lack opportunity to provide personal or professional development, and can serve merely as a check-the-box exercise that has little impact on quality and patient safety.

Another missing piece is the inability to assess non-technical skills. While it is not uncommon for physicians to be called onto the peer review carpet for behavioral concerns, it is usually as a result of multiple complaints over a significant period of time. Would it not be more effective to have an ongoing assessment of communication, leadership, situational, and self-awareness skills? While programs are being developed to evaluate and help physicians self-correct in these areas, they are often totally omitted from the standard peer review process.

A Strategic Solution

The first question that must be answered for any organization is the core purpose of peer review. In consideration of the goals listed above, there are many and varied elements to consider. Ideally, the process should be open, objective, and outcomes-driven. It should be a means to ensure safe and efficient patient care, and also serve as a safeguard for the profession.

But should it not also provide physicians a means through which they can receive constructive feedback? And offer a path forward of ongoing personal and professional development? A collaborative process that is safe for both reviewers and reviewees alike, encouraging them to be participants? Corazon believes that peer review should meet all these goals and more. The process must be proactive and not reactive; objective, not biased; and of course, outcomes-driven instead of non-standardized. Yet while outcomes are important, as the sole measure for peer review, the use of outcomes is more likely to lead to a negative course of action, rather than one that leads to physician development.

If we really wish to improve patient outcomes and physician performance, then we must find ways to identify trends in performance by focusing on processes along with outcomes. Chasing outcomes alone often becomes a never-win battle. In effect, processes drive outcomes, and by focusing on physician process evaluation and outcome improvements, performance will be heightened, quality will increase, and physician satisfaction will rise.

Corazon seeks to change this perception and process through its peer review program, offered as a stand-alone service or part of a full cardiac program accreditation. Consider the need for:

- Legislative reform to provide appropriate protection for both reviewers and reviewees.
- Standards that are equitable, as well as robust, with opportunities for ongoing physician education and development built into the process.
- A focus on non-technical skills incorporated, evaluated, and taught as well.

The quality and patient safety inherent in addressing patient care is a multidisciplinary, team-driven activity that indeed relies on individual physician operators. While there certainly remains a role for review of individual physician performance, there should also be methods whereby teams are evaluated via a multidisciplinary approach as well. Removing the punitive legal stigma embedded in peer review will no doubt help to lead to more frequent self-reporting of any errors. It will allow physicians to focus on error management and avoidance in a similar fashion that other, highly reliable organizations have proven worthwhile. ■

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FROM THE ARCHIVES

Well, That's Not Good...

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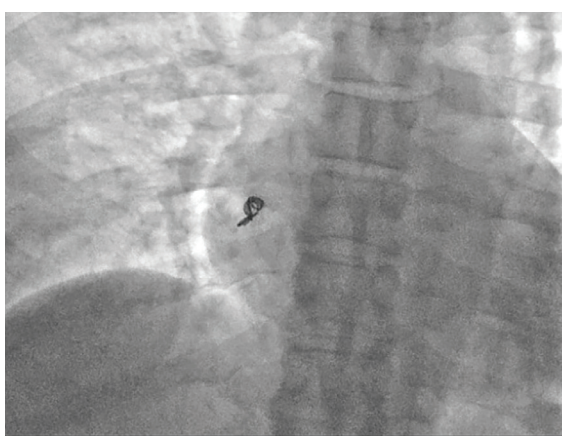
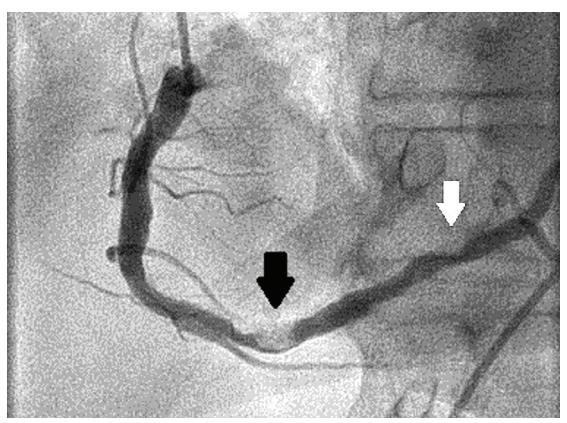


Case: **A migrated coil from the epigastric vein to the right ventricle.**

From Kyaw H, et al. Coil embolization to the right side of the heart after elective hypogastric vein embolization requiring open-heart surgery. *Cath Lab Digest* 2018 Sept; 26(9).



Case: **Left anterior oblique angiogram shows a large right coronary artery with severe, calcified 90% distal stenosis (black arrow) followed by 70% stenosis (white arrow).**

From Stys AT, et al. Novel extreme triple telescopic support for percutaneous coronary intervention. *Cath Lab Digest* 2017 Mar; 25(3).