Quality Improvement in Coronary Artery Disease: How Does it Benefit Me and My Patients?

Every family physician is responsible for maintaining his or her proficiency to practice medicine. This means having the appropriate knowledge, demonstrating that knowledge, and applying it to patient care – the correct care for each patient, every time. The Performance Improvement requirement of the American Board of Family Medicine (ABFM) Certification program offers a basic framework and tools to aid you in providing the best possible care for your patients. This framework is provided through our Performance in Practice Modules (PPMs), grounded in quality improvement (QI) and, more specifically, the process of PDSA (Plan, Do, Study, Act) cycles.

The utility of the old models for patient care and physician education are being extensively challenged today; the traditional CME model of "expert" driven, location specific, time-based sessions, with little interaction between the teacher and learner, has demonstrated minimal improvement in physicians' practices or their patients' outcomes. To improve patient outcomes, we must focus on the clinical setting, measure the outcomes, and assess how we can improve the consistency of achieving desired goals.

Thus, the Performance in Practice Modules are not only about satisfying your Family Medicine Certification requirements. Our goal is to introduce the busy family physician to individual QI techniques. To borrow from the Institute for Healthcare Improvement’s (IHI) Model for Improvement, we would like you to begin examining what areas in your patients' management could be improved, plan for and institute change(s), and then determine whether that change leads to improved outcomes. The only way to know if improvement occurs is to measure indicators before and after the change. This process of planning a change, measuring a sample of patients to see if an improvement has occurred, and then implementing the proven change for your whole patient population, is called a PDSA cycle. These cycles are not a research tool; they are a proven method for improving outcomes and/or care processes. Each of our PPMs represents one PDSA cycle. The ABFM also hopes to foster Diplomates’ sharing of their quality improvement ideas with one another. To facilitate this process, in the near future the ABFM web portal will include a forum for Diplomates to post and discuss the techniques they’ve used in their QI projects.

So what do we mean by a "PDSA" cycle? Let's assume for a moment that you've observed through a practice audit that many of your coronary artery disease (CAD) patients are not taking a platelet inhibitor (i.e., aspirin or clopidogrel). Along with your office staff and nurse, you review the process for a CAD patient's typical office visit. One member of your staff suggests, "Why not put a sticker on the chart to remind us to ask about platelet inhibitors? We can see if this results in more of the patients taking prophylactic platelet inhibitors." (the "plan" component of the PDSA cycle). This suggestion sounds reasonable, but you want to test this solution on a small scale before implementing it for the whole practice. You design a trial in which you will have your assistant perform this intervention for your next 10 CAD patients (the "do" in the PDSA cycle). You then review this small-scale trial to see if indeed it worked, i.e., improved the percentage of CAD patients taking platelet inhibitors, and if the process requires any fine tuning (you "study" your proposal, the next stage in the cycle). Once you and your staff are happy with the proposed intervention, you implement this for all of your CAD patients (the "act," the final part of the PDSA cycle). Sounds simple, doesn't it? Each PPM will be implemented in a similar fashion.

The PDSA methodology dovetails nicely with the Chronic Care Model. This model comprises an integrated system for managing a patient with a chronic health condition, such as asthma. The model includes attention to the community and how this influences chronic illness, issues of health systems that can affect chronic illness care, engagement of the patient in self-management, delivery system design to support chronic illness care, decision support, and clinical information systems. In this model, care needs are anticipated, evidence-based care is consistently delivered and documented, the patient understands his or her role as the prime manager of his or her condition, and a team works together to achieve the best possible outcomes for that particular patient. Each component of the Chronic Care Model is part of a system of effective healthcare. These elements provide a framework for the PPMs, to lead to optimal interactions between physicians and patients. For instance, to foster communication between physicians and patients, the PPM process includes patient questionnaires that can help highlight areas in which physicians might improve patients' understanding of their conditions and their role in management.

Likewise, ABFM feels that this PPM will give you some experience in basic "failure mode" analysis (now being mandated by JCAHO). We encourage you to conceptualize your care of CAD patients as a series of steps that will lead
to improved health and well-being for each patient. We hope that you can identify the steps in that process of care, identify areas within each step that are at risk for failure in your current practice, and then institute change(s) that will prevent or minimize that risk for failure.

The ABFM recognizes the wonderful heterogeneity of its Diplomates and their practices. Thus, this PPM is not meant to be a single process; rather, it represents multiple paths that may be adopted to improve your current processes of care. The indicator performance feedback is meant to illuminate areas for potential improvement and then to provide you with insight as to whether the change(s) made represented an improvement. These data are used to support the PDSA cycle(s) mentioned and are in no way meant to be used for inter-physician comparisons or as any kind of "report card." Your performance on the indicators themselves will not be monitored or tracked by ABFM, nor will we have any capability of reporting this physician-specific data to others.

We chose the clinical indicators for CAD and the menu of suggested improvement strategies from commonly accepted, evidence-based guidelines and consensus agreements for primary care indicators. We doubt that many of these indicators will be unknown or controversial to our Diplomates. Even if you do not agree with all the indicators and interventions, please remember that you only must choose to work on one of the indicators, using an improvement strategy of your choice, to satisfy the Performance Improvement requirement for each Family Medicine Certification cycle. Please also note that our improvement options focus on several different areas of care coordination, including promotion of patient self-management, structured visits, improved patient follow-up, case management, heightened decision support, and delivery system design. At least one of these should be well suited, and prove useful, to your practice setting.

We wish you well on this endeavor and hope that the process proves beneficial to your professional development and your patients' outcomes. We hope that you will find QI so useful that you would consider implementing several improvement strategies multiple times in numerous disease domains.