Quality Improvement and Maintenance of Certification

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QUALITY IMPROVEMENT (QI) is an integral part of the American Board of Pediatrics' (ABP) Maintenance of Certification (MOC) Program. When the ABP addressed the core physician competency of Practice-Based Learning and Improvement approved by the ACGME and American Board of Medical Specialties in 2000, it made a strategic decision to adopt a QI approach rather than attempting to assess individual physician practice performance in a high-stakes manner. Although the ABP does assess medical knowledge and other aspects of professional development at the individual physician level, there are significant barriers to assessing individual physician clinical performance, including issues of attribution, risk adjustment, and small sample sizes. Focusing on performance at the practice or unit level and encouraging improvement across the entire population of practices addresses the issue of significant gaps in quality even within the highest-performing practices and organizations and has the potential to improve care across a broad spectrum of the pediatric population.

The ABP requires that pediatricians demonstrate with data that they can assess the quality of care they (and their care teams) deliver and that they can apply QI methodology to systematically improve care in order to receive Part 4 MOC credit. The standards that a QI activity must meet to be approved by the ABP for Part 4 MOC credit are a modification of the Standards for Quality Improvement Reporting Excellence reporting guidelines for QI; the ABP has also developed standards for what constitutes meaningful physician participation in QI effort to qualify for Part 4 credit. Using these standards, the ABP has to date developed 3 pathways for receiving credit for assessing practice performance. Since 2010, when the ABP first began requiring Part 4 MOC, over 20,000 pediatricians have successfully completed at least one QI activity. Although individual physicians are not required to show improvement because not all improvement efforts are successful, most of the activities have resulted in improved processes or outcomes of care. As of June 2013, 13 other American Board of Medical Specialties boards have endorsed the same standards for some or all of their Part 4 programs.

The first pathway involves completing a Web-based Performance Improvement Module (PIM) that leads a diplomate through the process of assessing baseline practice performance: collecting data at the time of a patient encounter, identifying gaps in quality, making changes or interventions in practice, reassessing performance to determine whether improvement occurred, and then repeating this process for a minimum of two improvement cycles. Each of the 15 approved PIMs is based on a successful real-world QI effort. More than 15,000 pediatricians have completed ABP PIMs for MOC credit, and aggregate data from all of the PIMs have shown improvement in care from baseline to the second improvement cycle. The ABP has also approved externally developed Web-based QI modules, principally the AAP's Education in Quality Improvement for Pediatric Practice modules, which have also shown positive results.

Meaningful participation in an ABP-approved QI activity in the diplomate's own practice setting is a second pathway for Part 4 credit. Although individual physicians are not required to show improvement, projects are expected to achieve positive results within a year to continue to be approved. The ABP has approved nearly 400 QI efforts from over 140 organizations nationwide. An increasing number of diplomates (approximately 20% in 2012) meet their Part 4 requirements through this pathway. Portfolio status allows an organization to approve QI projects internally rather than having to submit each activity separately to the ABP for approval. This offers organizations that are committed to supporting physician involvement in QI a faster, more efficient, and less expensive approach to multiple activity approval and enables organizations to align physician involvement in QI with organizational improvement goals. Through a joint effort with 13 other American Board of Medical Specialties specialties, organizations can apply for Multispecialty Portfolio Sponsor status (mocportfolioprogram.org). These organizations use a single application process to be granted the ability to internally approve QI efforts for Part 4 credit across multiple specialties, enabling physicians to engage in collaborative projects within health care organizations. A recent external evaluation of the MSPP conducted by the Center for Program Design and Evaluation at Dartmouth showed that MOC is an important means to engage physicians in clinically important improvement efforts across specialties. The ABP has

Table. Examples of Published QI Articles Approved for Part 4 Credit

Title of Article: Successful implementation of a perioperative glycemic control protocol in cardiac surgery: barrier analysis and intervention using Lean Six Sigma[1]
Journal Name: *Anesthesiology Research and Practice*
Authors: Elizabeth A. Martinez, Raul Chavez-Valdez, Natalie F. Holt, Kelly L. Grogan, Katherine W. Khalifeh, Tammy Slater, Laura E. Winner, Jennifer Moyer, Christoph U. Lehmann
Title of Article: Decreased pediatric hospital mortality after an intervention to improve emergency care in Lilongwe, Malawi[2]
Journal Name: *Pediatrics*
Authors: Jeff A. Robison, Zahida P. Ahmad, Carl A. Nosek, Charlotte Durand, Annie Namathanga, Robert Milazi, Ann Thomas, Joyce V. Soprano, Charles Mwansambo, Peter N. Kazembe, Susan B. Torrey
Title of Article: Utilizing improvement science methods to improve physician compliance with proper hand hygiene[3]
Journal Name: *Pediatrics*
Authors: Christine M. White, Angela M. Statile, Patrick H. Conway, Pamela J. Schoettker, Lauren G. Solan, Ndidi I. Unaka, Navjyot Vidwan, Stephen D. Warrick, Connie Yau, Beverly L. Connelly

played a key role in the development and spread of this program.

In a third pathway for MOC Part 4, the ABP awards credit to diplomates for authorship of a peer-reviewed article describing a QI project using Standards for Quality Improvement Reporting Excellence reporting guidelines. As of June 2013, the ABP has approved over 30 articles for MOC credit (Table).[1–3] As the ABP's MOC program continues to evolve, additional pathways will be developed to allow pediatricians to demonstrate that they have the skills and knowledge to improve care for children.

The ABP has actively promoted and provided some financial support to national QI collaborative networks as the gold standard for MOC Part 4. The model of multisite interdisciplinary teams working together using QI methods and real-time data to prospectively standardize care and prospectively test changes to practice has led to significant improvements in processes and outcomes of care, improved efficiency, and marked increases in patient involvement in care. Successful networks have been developed around critical care, cystic fibrosis, inflammatory bowel disease, neonatal care, congenital heart disease, dialysis care, hematology oncology, rheumatology, nephrology, and asthma care in general pediatrics. The ABP Foundation has provided funding to help start four of these efforts and has sponsored 2 national meetings on pediatric QI networks, and the proceedings of the 2011 meeting have been published.[4] The ABP thinks that QI networks that use rigorous QI methodology offer diplomates an important opportunity to not only improve care but also to participate in learning and translational research that add new knowledge to improving systems of care for children and adolescents.

MOC is a driver for changing physician practice behavior, but we believe that the reason most pediatricians become involved in meaningful QI is their desire and recognized professional responsibility to improve care for children. The ABP's goal for MOC is that at some time in the near future, every pediatrician will be able demonstrate—with data—to their patients and the public their own professional development and the quality of the care they deliver in real time, and to show how they are using QI to continually narrow gaps in quality of care.

REFERENCES

1. Martinez EA, Chavez-Valdez R, Holt NF, et al. Successful implementation of a perioperative glycemic control protocol in cardiac surgery: barrier analysis and intervention using Lean Six Sigma. *Anesthesiol Res Pract*. 2011;2011:565069.
2. Robison JA, Ahmad ZP, Nosek CA, et al. Decreased pediatric hospital mortality after an intervention to improve emergency care in Lilongwe, Malawi. *Pediatrics*. 2012;130:e676–e682.
3. White CM, Statile AM, Conway PH, et al. Utilizing improvement science methods to improve physician compliance with proper hand hygiene. *Pediatrics*. 2012;129:1–9.
4. Lannon CM, Miles PV, Stockman JA 3rd. The path forward: collaborative networks and the future for children's health care. *Pediatrics*. 2013;131(suppl 4):S226–S227.