Pediatric Collaborative Improvement Networks: Bridging Quality Gaps to Improve Health Outcomes

In 2003, the American Board of Pediatrics (ABP) endorsed a network model as a means to accelerate the translation of evidence into practice, to improve care and outcomes for children, and to serve as the gold standard for the performance in practice component of Maintenance of Certification (MOC) for pediatricians. This model involves multisite practice-based clinical networks that allow teams to learn from one another, to effectively test and implement changes, and to use data to understand and ultimately spread what works in practice. Networks are especially important in pediatrics, and particularly in subspecialty pediatrics, where no one center or group of physicians has a large enough sample of children to readily learn if what they are doing works. Since the ABP endorsement of the network model, other national entities have promoted similar frameworks. The Institute of Medicine recommended the concept of the “Learning Healthcare System,” which would use data feedback and is designed to generate and apply the best evidence for the health care choices of both the patient and provider and to ensure innovation, quality, safety, and value in health care. Using Rapid Learning Networks to improve outcomes and advance knowledge for patients, clinicians, and researchers is a top recommendation of the Patient Centered Outcomes Research Institute.

In November 2011, the ABP Foundation sponsored an invitational “National Meeting on Collaborative Improvement Networks in Children’s Healthcare.” Cosponsors included the National Association of Children’s Hospitals and Related Institutions (now the Children’s Hospital Association) and The James M. Anderson Center for Health Systems Excellence at Cincinnati Children’s Hospital Medical Center and the pediatric Center for Education and Research on Therapeutics, supported by cooperative agreement number U19HS021114 from the Agency for Healthcare Research and Quality. The objectives of the meeting were as follows: (1) to highlight the evidence, attributes, and value of successful collaborative improvement networks; (2) to realize the opportunity that collaborative improvement networks offer for individual physicians and practices to assess and improve quality of care; and (3) to understand key elements in developing and sustaining collaborative improvement networks, including the infrastructure needed. This supplement to Pediatrics summarizes and expands on several key presentations from the national meeting.

The first article after this introduction provides background and an overview of pediatric collaborative improvement networks, including evidence that informed their development, describes how the ABP network model was developed, and explains how improvement networks function, distinguishing them from time-limited collaboratives. Subsequent articles include the following:
• a summary of the improvement results in important child health outcomes and patient safety issues achieved by 5 regional or national networks4;
• a review of the changes in the construct of medical professionalism and its connections with physician participation in improvement efforts, MOC, and payor incentives and oversight5;
• descriptions of how a collaborative network can serve as a robust platform or “co-laboratory” for conducting translational level or T2 science (eg, patient-centered outcomes research) and of T3 studies that address how to achieve health care delivery change, as well as how to study improvement methods themselves6; and
• a synopsis of the role for children’s hospitals in reducing pediatric morbidity, mortality, and costs through participation in collaborative improvement networks, as well as potential barriers to growth and scalability of that involvement.7

In the next 2 articles, the authors describe a new paradigm for chronic care, a collaborative chronic care network, which harnesses the collective intelligence of patients, families, clinicians, and researchers,8 and peer-to-peer health care, online patient communities that may serve as an example for clinician collaboration.9 Finally, the supplement concludes with a vision for the future that highlights the key role that pediatric collaborative improvement networks will have in improving care and outcomes for children and families, the challenges to sustainability that must be addressed, and the role of networks in setting a standard for the ABP MOC program.10

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