Although significant gaps in care and outcomes for children exist, there is a path forward. The articles in this supplement reveal the successes of collaborative networks for improvement and research in various pediatric settings and present a scalable approach for addressing gaps in clinical quality. A range of organizations are working to refine the start-up, implementation, and sustainability of the network model in pediatrics, and to do it more effectively and efficiently. Several examples demonstrate improved health outcomes.

The time has come to accelerate the spread of this model. The use of collaborative networks is now a proven and transforming principle in pediatrics.\(^1\) The Institute of Medicine\(^2\) and the Patient Centered Outcomes Research Institute\(^3\) recommend this model. Multiple successful examples, some described in this supplement, reveal that collaborative improvement networks can facilitate partnerships among patients, families, health care practitioners, and researchers in focused improvement efforts that significantly improve health outcomes, and generate new knowledge about what works and how to improve care. Several of these examples have also demonstrated cost savings.\(^4\)–\(^6\) The value of these networks is especially important in child health, where almost all pediatric diseases can be classified as “rare” using the definition of the National Institutes of Health of a prevalence of fewer than 200,000 affected individuals in the United States.\(^7\) Multisite collaboration is almost mandatory to adequately address most of these problems.

In addition, the outcomes achieved in these networks provide strong support that meaningful participation in a rigorously designed quality improvement effort approved for Maintenance of Certification credit by the American Board of Pediatrics is associated with improved pediatric care and health. Participating pediatricians can develop and demonstrate competency in measuring and improving care and outcomes for specific diseases, and subsequently apply these methods to improve additional clinical and safety topics and care processes.

There are challenges to spreading the collaborative network improvement model. For example, in the design phase for each new network, robust evidence is sometimes lacking to develop recommended care processes and outcome metrics. There is a need for more basic research to provide the evidence base for children’s health care. In the absence of this evidence base, collaborative improvement networks can be designed to do research. Additional financial support for transactional costs (eg, human subjects review, data use agreements) would help accelerate the pace at which a network can add new participating sites. A data infrastructure that allows 1-time data entry at the point of care, and real-time performance measurement feedback, is not yet a reality, despite progress and multiple efforts. Promoting the

**AUTHORS:** Carole M. Lannon, MD, MPH,\(^a\) Paul V. Miles, MD,\(^a\) and James A. Stockman III, MD, FAAP\(^b\)

\(^a\)Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio; and \(^b\)American Board of Pediatrics, Chapel Hill, North Carolina

www.pediatrics.org/cgi/doi/10.1542/peds.2012-3786L
doi:10.1542/peds.2012-3786L

Accepted for publication Feb 27, 2013

Address correspondence to Carole M. Lannon, MD, MPH, James M. Anderson Center for Health Systems Excellence, Cincinnati Children’s Hospital Medical Center, 3333 Burnet Ave, Cincinnati, OH 45229. E-mail: carole.lannon@cchmc.org

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2013 by the American Academy of Pediatrics

**FINANCIAL DISCLOSURE:** The authors have indicated they have no financial relationships relevant to this article to disclose.

**FUNDING:** The conference on which the articles in this supplement were based was funded by the American Board of Pediatrics Foundation, the National Association of Children’s Hospitals and Related Institutions (now the Children’s Hospital Association), 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 U19HS021114 from the Agency for Healthcare Research and Quality. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Agency for Healthcare Research and Quality.
development of this infrastructure would have the biggest impact on accelerating this spread of collaborative improvement networks. Successful networks incur additional pressure for increased funding to support innovations, growth, and research.

Sustained funding is a challenge. Networks use a variety of funding mechanisms for support: foundation grants, state and federal contracts and grants, and participation fees. All present certain challenges. Grants are usually time-limited. The “pay-to-play” concept of participant fees has been a barrier for “low revenue” subspecialties (eg, rheumatology, adolescent medicine) or for hospitals or health systems that want to support participation in multiple improvement networks at the same time. Prioritization is a challenge in making the argument for insurser support for pediatric networks as child health, even for children with complex chronic disease, is only a small percentage of total insurance costs. Finally, the process of rewarding innovation and improvement needs to be redesigned. Even when substantial savings are documented, these monies may not be channeled back to the network for infrastructure or development costs, or to the individual institutions to offset their participation fees.

These challenges can be overcome. The costs of participating in collaborative improvement networks must be built into how care is reimbursed. The infrastructure to ensure that pediatricians can practice in networks that link them with patients, families, and other care teams must be built as an essential part of “how care is delivered.” Clinicians need the ability to learn from real-time measurement, to track their outcomes, and to connect with patients, families, and colleagues. Participating in a collaborative improvement network should be as essential a part of pediatric practice as the use of a stethoscope.

The need is real, the time is now, and the opportunity to close the gap substantial. For example, the ImproveCareNow network estimates that if every pediatric patient with inflammatory bowel disease in the United States was cared for in a site that achieved the same high remission rate as the initial ImproveCareNow sites, an additional 10,000 children would be feeling well. We know how to support effective pediatric networks. We are learning how to do it even better. Pediatric collaborative improvement networks offer a way to realize the promise that “every child we treat is a child from whom we can learn.”

REFERENCES

The Path Forward: Collaborative Networks and the Future for Children's Health Care
Carole M. Lannon, Paul V. Miles and James A. Stockman III
Pediatrics 2013;131;S226
DOI: 10.1542/peds.2012-3786L

Updated Information & Services
including high resolution figures, can be found at:
http://pediatrics.aappublications.org/content/131/Supplement_4/S226

References
This article cites 2 articles, 0 of which you can access for free at:
http://pediatrics.aappublications.org/content/131/Supplement_4/S226
.full#ref-list-1

Subspecialty Collections
This article, along with others on similar topics, appears in the following collection(s):
Administration/Practice Management
http://classic.pediatrics.aappublications.org/cgi/collection/administration/practice_management_sub

Standard of Care
http://classic.pediatrics.aappublications.org/cgi/collection/standard_of_care_sub

Permissions & Licensing
Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
https://shop.aap.org/licensing-permissions/

Reprints
Information about ordering reprints can be found online:
http://classic.pediatrics.aappublications.org/content/reprints
The Path Forward: Collaborative Networks and the Future for Children's Health Care
Carole M. Lannon, Paul V. Miles and James A. Stockman III

*Pediatrics* 2013;131;S226
DOI: 10.1542/peds.2012-3786L

The online version of this article, along with updated information and services, is located on the World Wide Web at:

http://pediatrics.aappublications.org/content/131/Supplement_4/S226