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Leveraging Medical Conferences and Webinars for Hands-On Clinical Quality Improvement: An Intervention to Improve Health Literacy-Informed Communication in Pediatrics

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Large professional conferences are commonly used by clinicians for continuing medical education (CME). Although clinicians spend significant time, expense, and effort participating in CME activities, their impact on enhancing clinical quality remains modest.¹ Didactic sessions at conferences have not been shown to improve professional practice.² Interactive workshops result in moderately large improvements but tend to be more expensive and accommodate fewer attendees.² During 2015–2016, the American Academy of Pediatrics' (AAP) Council on Quality Improvement and Patient Safety (COQIPS) tested a prototype for a quality improvement (QI) intervention for AAP members to earn Part 2 and Part 4 Maintenance of Certification (MOC) and CME credits utilizing a hands-on learning session at the AAP National Conference and Exhibition (NCE) that combined with ongoing virtual support through webinars.

In order to test this concept, AAP COQIPS surveyed its members to identify a high-priority clinical focus area relevant to a wide range of practice settings. The area selected for the intervention was increasing the use of clear communication strategies utilizing principles of health literacy. Health literacy is the “capacity to obtain, communicate, process, and understand basic health information and services to make health decisions” and is a national health priority. At least 1 in 4 parents in the United States have limited health literacy skills.³ The Agency for Healthcare Research and Quality (AHRQ) Health Literacy Universal Precautions Toolkit outlines steps that clinicians can take to increase patients' understanding of health information and to enhance support for patients of all health literacy levels.⁴ Evidence-based strategies for improving health communication include using everyday language instead of medical terminology, presenting only 2 to 3 concepts at a time, asking patients to use their own words to summarize key information (teach-back), handing printed materials to patients, reading

instructions aloud, writing out instructions, repeating key information, highlighting important points in patient information materials, and using pictures, models, and other visual aids to explain information.^{5,6} In this article, we describe our process and results with integrating a hands-on QI learning session at the 2016 AAP NCE supplemented with virtual peer and expert support through webinars.

The leadership team and faculty included experts in QI and health literacy, and a family advisor. Participants were recruited through informational messages posted on the COQIPS and AAP listserv and included 38 outpatient and inpatient general pediatricians and pediatric subspecialists. The AHRQ Health Literacy Universal Precautions Toolkit was used to develop QI interventions.⁴ During a 4.5-hour learning session at the AAP NCE, participants learned and practiced the use of basic QI and health literacy tools (teach-back, readability and suitability assessment of written materials, using print materials to supplement verbal counseling). They used a structured approach to enhance the understandability of written parent educational resources. They practiced verbal communication skills, specifically teach-back, to supplement the effectiveness of educational resources. During 4 monthly 1-hour webinars, participants reviewed aims for improvement, quality measures, and how to enter, assess, and benchmark their data using AAP's data collection portal.

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Figure 1. Frequency of utilization and effectiveness of health literacy-informed strategies to enhance communication with families.

Participants reviewed run charts with their own and the group's data monthly, used data to guide improvement, planned interventions for improvement, and discussed sustainability and spread strategies. Each pediatrician surveyed 20 parents at baseline and at each of the 3 follow-up time points on health literacy-informed strategies used during clinical encounters and quality of their communication. The parent survey, adapted from the Consumer Assessment of Healthcare Providers and Systems Health Literacy Item Sets, assessed whether the pediatrician gave parents the information they wanted about their child's health; explained things in a way that was easy to understand; encouraged parents to talk about their health questions or concerns; answered parents' questions to their satisfaction; asked parents to explain in their own words how they would take care of their child's health or health problem (teach-back); provided parents written material that was easy to understand; and used pictures, drawings, models, or videos during the visit that were easy to understand.⁷

Approximately 760 parent surveys were completed at each of the 4 time points. Improvements were seen in all measures (Figure 1). The greatest improvement was noted in the use of teach-back to verify understanding, which increased from 66.6% to 86.1%. The combined use of visual materials with teach-back increased from 55.6% to 72.4%. Participants received 25 MOC Part 4 credits for completing the QI project, 20 MOC Part 2 points through completion of an American Board of Pediatrics health literacy module, and CME credits for attending the AAP NCE session.

Our results indicate that a hands-on QI learning session at the AAP NCE supplemented with webinars for virtual support provided participants with the opportunity to improve clinical care through the use of health

literacy-informed communication strategies; obtain CME, Part 2, and Part 4 MOC credits; gain hands-on experience with clinical and QI tools; and learn from a network of peers and experts. The interactive format enabled participants to share best practices and experiences and utilize the already existing AAP infrastructure, such as its annual conference and data portal.

Innovative educational approaches that incorporate hands-on activities and the opportunity to practice skills show a higher likelihood of changing clinical practice and health care outcomes.⁸ Our experience highlights the potential for leveraging professional meetings such as the AAP NCE as an opportune and feasible venue for an in-person interactive skills-based learning session and delivery of education aimed at improving quality of care.

The integration of CME, MOC, and QI provides a feasible and effective way to improve clinical care.¹ We demonstrated the value of this educational model across a diverse array of clinical settings, practices, providers, and geographic regions. We adapted the learning collaborative approach and integrated it with a professional society conference, thereby decreasing cost and effort for faculty and organizers. A potential drawback to this model is that spending multiple hours at a conference focusing on one topic may not be desirable to some participants, especially those who view attending a large CME event as an opportunity to learn many new things. However, integrating QI learning sessions into professional conferences and supplementing them with periodic just-in-time virtual peer and expert guidance through webinars can potentially enhance the effectiveness of conferences, and increase the efficiency and cost-effectiveness of educational interventions used as part of QI initiatives. This model can be replicated by other professional societies,

customizing it to focus on topics relevant to their own members, effectively taking advantage of their existing professional meetings.

Authors' Note

The views expressed in this article are those of the authors, and no official endorsement by the Agency for Healthcare Research and Quality or the Department of Health and Human Services is intended or should be inferred.

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