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Beyond Methods and Messenger to the Message

Barry Zuckerman, MD, Elizabeth Peacock-Chambers, MD, MS

Randomized controlled trials, the gold standard, have been the backbone for 50 years of advancing medical knowledge to benefit patients.1 More recently, it has become the gold standard to test selected health policy, health systems, and even economic ideas. The article by Goff et al in this month's *Pediatrics* is an example of an elegantly developed and implemented randomized controlled trial to evaluate the efficacy of patient navigators providing low-income prenatal patients with traditional quality measures of pediatric practices to see if it would inform their choice of pediatric care.² The authors found that women in the intervention group were more likely to use this information presented by the navigator compared with a control group to make their decision to select a practice with higher clinical quality and patient experience scores. However, few women (5%) rated quality measures as among the most important factors in their selection. The authors conducted multiple additional analyses, including assessing potential effect modifiers with no important changes in findings. Given the labor-intensive approach of using patient navigators to get this marginal effect, it is unlikely to be implemented on a larger scale. The lack of efficacy of decision support by patient navigators in this trial stands in contrast to other studies of patient navigators for selective medical problems, especially cancer care.3 Given conflicting findings, it is important to study and understand the role of context and message in determining the effect of patient navigator support.

Similar to most "negative" welldone studies or those with "modest" changes, the findings in this thoughtful and well-conducted study raise questions of context, especially the potential residual confounding by unmeasured factors. Although "knowing" the doctor was rated as one of the most important factors for practice selection by ~30% of women, it is unknown whether these women actually meant liking and trusting the pediatrician, given that nearly 50% of the sample had >1 child. Perhaps the other 20% of multiparous mothers did not rank knowing their doctor as an important factor because they did not like their older child's doctor or they did not know a doctor because they saw different doctors at each visit. Logistical factors (transportation, location, hours of operation) were also likely to be important because 152 women from this trial went to a single practice. What unmeasured factors explain one-quarter of the sample attending a single practice? Despite these limitations common to all clinical trials, this study confirms that positive experience with a doctor, likely consisting of a trusting relationship, and proximity to a practice trumped quality ratings.

In addition to the preceding factors, the authors touch on what we believe is a critical issue in communicating information: knowing what patients or, in this case, parents want and need. If we want to create value for decision support, we need to identify what information would be most helpful and what is the best format and messenger to present such information. The practice quality ratings used in

Department of Pediatrics, Boston University School of Medicine, and Boston Medical Center, Boston, Massachusetts

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Address correspondence to Barry Zuckerman, MD, East Concord St, Vose Building, Room 324L, Boston, MA 02118. E-mail: barry.zuckerman@bmc.org.

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this study were developed from administrative data, refined by administrators and doctors when needed. Because this study had a specific, intended audience of lowincome and minority mothers, the best approach may be to ask a small group of similar mothers for their input on quality measures. "Humancentered design," an important and systematic approach to understand human needs,4 is moving from the product world to health care to more effectively create change and empower patients. The patient, the "end user," becomes a collaborator in developing interventions. This goes beyond presenting facts to understanding the intended audience's hopes, fears, aspirations, and needs. This approach would almost certainly come up with quality measures that are different from those determined by organizations health systems and practices that were the primary intended audience for this data. Imagine if the Web site Yelp had only been designed by business owners and employees; consumers would find it much less useful.

Beyond creating different quality measures, human-centered design has great potential to provide meaningful, engaging, and actionable information. The conventional medical approach involves telling the patient what he or she should do, based on evidence—just the facts. Presenting the facts has not prevented a growing number of parents from opting out of immunizations for their child, let alone poor adherence to medication or needed lifestyle changes. What should we learn from these failings? When was last time a truly novel approach to presenting information was developed and tested by physicians? Health care has yet to learn from other business models to find synergy between what the data say patients need and what they want. We suggest the time is right to experiment with new approaches to provide information or decision support to improve health behaviors and outcomes, with input from or, even better, codesigned by patients and parents. We encourage more use of engaging visuals in digital media instead of words, doctors' drawings, and text in pamphlets. We also suggest taking a page from marketing

by appealing to emotions; facts determine the path, but emotions are the driver of change.⁵

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