

ORIGINAL RESEARCH

Clarifying Parents' and Pediatricians' Views of Partnership

Richard C. Rapp, PhD, and John Pascoe, MD, MPH

Purpose: Given the importance of partnership in improving health care outcomes among children, there is a substantial need to understand better what partnership means to parents and physicians. The goal of this study was to develop a partnership survey that was based on parents' and pediatricians' opinions about the key concepts of partnership.

Methods: Parents of patients visiting an affluent suburban private practice and a federally qualified health center, and 2 groups of pediatricians, were asked to review 61 partnership concepts and identify those they considered as being important to partnership.

Results: Parents and pediatricians from both practices agreed that 42 (68.9%) of the concepts were important to partnership. Sixteen of these concepts were dropped because they were redundant. Parents from both the suburban practice and health center identified 5 (8.2%) concepts that they believed contributed to partnership. Seven (11.5%) concepts were viewed as important to parents and pediatricians from the suburban practice but not to parents from the health center. Significant socioeconomic differences between the 2 parent groups suggested factors that explained the differences between parent groups.

Conclusion: The 38 concepts endorsed by parents and pediatricians provided a nuanced view of partnership and formed the Parent Pediatrician Partnership Survey. (J Am Board Fam Med 2016;29:563–571.)

Keywords: Child, Decision-Making, Parents, Patient-Centered Care, Pediatrics, Physicians, Private Practice, Surveys & Questionnaires

Partnerships between stakeholders in the health care system can effectively “. . . address the needs of individuals and build an environment and community that supports healthy living.”¹ Consistent with this view, partnership between parents and their child's health care clinicians has been linked to improved quality of care, satisfaction with care, adherence to recommendations, and better medical, environmental, and health outcomes.^{2–4} Efforts to understand partnership have centered on the parents of children with special health care needs—

likely the result of parents' long-term relationships with their children's physicians.⁵ Parents with children who have attention deficit hyperactivity disorder (ADHD) were found to associate higher levels of partnership with their child's pediatrician to desirable outcomes, such as more preventive care visits and fewer missed school days.³ Partnership was increasingly important when children had a particularly serious manifestation of ADHD, when children were taking medications, and when the family had particularly high levels of strain. Partnership has also been predictive of 16% fewer school days missed, 11% more preventive care visits, 1% more preventive dental care visits, fewer emergency department visits, and fewer school days missed.⁶ Attempts to link partnership and satisfaction with services have been equivocal.^{4,6}

Describing Partnership

Several challenges exist in operationally defining partnership. First, several terms, including *patient-*

This article was externally peer reviewed.

Submitted 29 January 2016; revised 9 May 2016; accepted 16 May 2016.

From the Department of Pediatrics, Wright State University Boonshoft School of Medicine, Dayton, OH.

Funding: none.

Conflict of interest: none declared.

Corresponding author: Richard C. Rapp, PhD, Department of Pediatrics, Wright State University Boonshoft School of Medicine, Dayton Children's Hospital, Cox Building, 1 Children's Plaza, Dayton, OH 45435 (E-mail: richard.rapp@wright.edu).

centered,⁷ family-centered,⁸ shared decision making,⁹ and therapeutic alliance,¹⁰ have been used interchangeably with *partnership* or as a similar, but different, concept. Whatever the terms used, descriptions of partnership have usually been provided by clinicians and researchers. In a large (N = 91,642) national household survey, parents of children with ADHD were asked to describe partnership by indicating how often their child's pediatrician engaged in 5 investigator-provided behaviors: (1) spent enough time with their child, (2) listened carefully to them, (3) gave them specific information, (4) was sensitive to their customs and values, and (5) was a partner in the care of their child.³ Partnership was defined as an "always" response to all 5 of the questions. The composite definition of partnership was found to be associated with being less likely to have an unmet health care need and more likely to have received needed mental health care.

Using similar methods, investigators asked parents of patients with asthma to rate the importance of 10 study-provided physician communication strategies as indicators of partnership.² Investigators were interested in the relationship between communication strategies and health care outcomes that included number of office visits, phone calls, hospitalizations, and trips to emergency departments. Parental responses suggested that there was no unitary definition of partnership; the strategies that made up partnership varied, depending on the outcome. Reviewing the long-term plan was the strategy associated with the largest number of positive outcomes: fewer office and urgent care visits, phone calls, emergency department visits, and hospitalizations. The other communication strategies identified by parents as part of partnership were related directly to medical care: reaching agreement on a short-term goal, helping parents use criteria about asthma management, and interactive conversation. Interestingly, none of the communication strategies that emphasized a psychosocial relationship—nonverbal attentiveness and encouragement, verbal praise, giving reassuring information, and finding out about parents' and children's worries and concerns—were identified by parents.

The National Survey of Children with Special Health Care Needs^{4,8} is a frequently cited source for identifying correlates of partnership. In this survey parents are asked to self-define partnership

when responding to the question, "How often did your child's doctor and other health care providers help you feel like a partner in his/her care?" While responses to this question may provide an estimate of how often parents view partnership occurring, it does little to address the question of what partnership is since each parent likely defines partnership differently.

The Current Study

Existing methods for defining partnership have relied almost exclusively on investigators providing a limited list of partnership-related concepts; neither parents nor physicians have had the option of including their views of partnership. Although partnership has been associated with important outcomes, it is still unclear what partnership really means to parents and clinicians. The methods used in this study were designed to address that omission. Parents and pediatricians were asked to examine an extensive list of concepts and identify those they thought were important to the development of a partnership. This approach should provide a nuanced understanding of the similarities and differences in how the 2 groups view partnership. The results of this study will be used in the first step in developing the Parent-Pediatrician Partnership Scale. This study was conducted at primary care pediatric practices to provide a robust sample of parents; the relevance of these findings for family physicians and other clinical providers who work with children is discussed.

Methods

Sample

Two convenience samples of pediatricians (n = 24) were asked to provide their opinions about which of 61 concepts generated from a review of the literature were relevant to the topic of partnership. One sample of pediatricians was attending a leadership meeting of the Southwestern Ohio Ambulatory Research Network (SOAR-Net), a primary care, pediatric care practice-based research network, and the second sample was attending a meeting of the Western Ohio Pediatric Society, a group of general pediatricians in and around Dayton, Ohio. Parents from 2 SOAR-Net practices were asked to provide their opinions about the same 61 items viewed by the pediatricians. The first practice is a privately owned practice (suburban practice) of

6 pediatricians located in Springboro, Ohio, an affluent suburb of Dayton, Ohio ($n = 90$). The second practice is a federally qualified community health center (health center) in Springfield, Ohio, a city of 60,000 located 28 miles northeast of Dayton ($n = 101$).

Survey

Concepts related to partnership were extracted from peer-reviewed literature related to, partnership, patient-centeredness, working alliance, and shared decision making. A MEDLINE search was conducted using these terms and the term *medical* to limit the articles to those that were related to health care. Fifty-five articles were reviewed in-depth; 33 of them addressed adult partnership and 22 were related to youth. Investigators reviewed both the adult and youth literature and identified 61 concepts that were relevant to partnership; 16 of the 61 concepts were informed by the pediatric literature. The concepts were presented to parents and pediatricians; both groups were asked to rate each item as not important, “0”, somewhat important, “1”, or very important, “2”. The 0, 1, 2 paradigm was used instead of a traditional Likert-like continuum (ie, 1, 2, 3, 4, 5) since the goal was to include or exclude items, rather than gauge the relative strength of an item along a continuum such as never to always.

Parent surveys also included questions about demographic information such as the sex, race, and age of both parent and index child brought to the clinic, type of insurance coverage, and marital status and income of the parent. Screening tools were included that assessed parents’ level of family dysfunction,¹¹ social capital,¹² symptoms of alcohol abuse,¹³ symptoms of depression,¹⁴ and domestic violence.¹³

All study protocols and instruments were approved as expedited by the institutional review board at Dayton Children’s Hospital, Dayton, Ohio. Research assistants who were trained in confidentiality issues through the online Collaborative Institutional Training Initiative read survey concepts to parents.

Analysis

We calculated means and standard deviations (SDs) separately for each concept and then used *cdf:normal* to create a common metric on a concept-by-concept basis. The cumulative distribution function (*cdf:normal*) provided an aggregated score for each concept and the probability that the score was within 1 SD of

the cumulative mean of all concepts. The raw scores were multiplied by 100 to present the probability in an intuitive form. The 80% threshold was established as a cutoff for probability scores before analyses so as not to influence the selection of concepts that were retained. Although 80% was not empirically derived, it did offer face validity, suggesting a high likelihood that participants considered the concept to be important to partnership. Parent and pediatrician surveys were analyzed separately.

χ^2 Tests and a comparison of means statistics were used to compare characteristics of the 2 practices. Four characteristics describing youth—sex, ethnicity, self-perceived health, and receipt of special learning services in school—were used, as were 4 parent characteristics: type of insurance (public insurance such as Medicaid with private insurance), education level (parents with more than a high school education with those who had less education), household income (household income \geq \$50,000 and less income), and marital status (married parents and all other categories of relationship). In addition to demographic characteristics, parents were asked to provide information on the number of people they could count on for support (social support), level of family functioning, symptoms of depression, frequency of domestic violence incidents, and excessive alcohol use.

Results

Parents in 2 Practices

Parents and youth in the 2 pediatric practices were significantly different on most demographic characteristics and measures of functioning (Table 1). Parents from the health center were more likely to be on Medicaid (54.5% vs 0.00%; $P = .000$), have a child on an individualized education plan at school (34.9% vs 16.5%; $P = .006$), and have income $<$ \$50,000 (78.2% vs 24.5%; $P = .000$). These parents had less education after high school (56.4% vs 87.7%; $P = .000$) and were more likely to have an unmarried parent bring the child to the pediatrician (59.4% vs 23.3%; $P = .000$). Finally, health center parents also had more domestic violence (15.8% vs 1.1%; $P = .000$) and female parents who reported a history of excessive drinking (39.1% vs 17.1%; $P = .003$). Suburban practice parents had a higher score on family dysfunction (8.7 [SD, 2.0] vs 7.6 [SD, 2.5]). All other characteristics were not significantly different.

Table 1. Comparison of Parents and Children at 2 Pediatric Practices

| Characteristics | Suburban Practice (n = 90) | Health Center (n = 101) | Total (N = 191) | Significance (P Value) |
|---|-------------------------------|----------------------------|--------------------|---------------------------|
| Female sex* | 87.6% (78) | 71.4% (70) | 79.1% (148) | .029 |
| African American ethnicity | 4.4% (4) | 9.9% (10) | 7.3% (14) | n.s. |
| Child health (excellent/very good) | 82.2% (74) | 75.2% (76) | 78.5% (150) | n.s. |
| Insurance (Medicaid) | 0.0% (0) | 54.5% (55) | 28.8% (55) | .000 |
| Child on special learning plan in school* | 16.5% (13) | 34.9% (30) | 26.1% (43) | .006 |
| Parent education (more than high school) | 87.8% (79) | 56.4% (57) | 71.2% (136) | .000 |
| Household income \geq \$50,000 | 75.6% (68) | 21.8% (22) | 47.1% (90) | .000 |
| Parent marital status (married) | 76.7% (69) | 40.6% (41) | 57.6% (110) | .000 |
| No. of people to count on (n) | 8.3 (4.6) | 7.4 (3.9) | 7.8 (4.3) | n.s. |
| Score on family dysfunction scale | 8.7 (2.0) | 7.6 (2.5) | 8.1 (2.4) | .001 |
| Domestic violence (yes) | 1.1% (1) | 15.8% (16) | 8.9% (17) | .000 |
| No. of symptoms of depression | 7.8% (7) | 10.9% (11) | 9.4% (18) | n.s. |
| Drinks in the past 3 months (n) | | | | |
| \geq 5 (men) | 36.4% (4) | 61.5% (16) | 54.1% (20) | n.s. |
| \geq 4 (women) | 16.0% (12) | 40.9% (27) | 27.7% (39) | .001 |

*Sample sizes on these concepts varied because of missing data. n.s., not significant.

Responses to Partnership Concepts

Forty-two concepts had probability scores \geq 80% in all 3 groups (pediatricians and parents from both practices). These concepts were considered to be mutually identified; that is, both parents and physicians thought the concepts were important to partnership. The concepts represented over two thirds (68.9%) of the original sample of 61 concepts. A review of the 42 concepts resulted in 16 concepts that were redundant in meaning and were dropped from consideration, leaving 26 mutually identified concepts. Redundant concepts included “treat medical information in a confidential manner” versus “protect family privacy” (retained); “involve parent in condition management” versus “including parent’s recommendations about what should be included in a treatment plan” (retained); and “responding in some fashion to questions parents have” versus questions “being interested in what parents want to know” (retained) (see Table 2).

Table 3 contains 19 concepts that did not have uniformly high probability scores and were not mutually identified. The concepts fell into 3 internally consistent groups. Scores for 2 concepts were very low (negatively identified) for all 3 groups: “pediatrician sharing personal information about self” and “engaging in social talk.” These concepts were dropped given the agreement among groups that they were not important in describing partner-

ship. Five concepts identified by parents showed consistently high scores among parents from both practices (scores $>$ 80%) but lower scores for pediatricians (all scores $<$ 80%). The concepts were “avoiding legal issues interfering with pediatrician relationships with parent and child,” “discussing child’s care with other professionals,” “being available any time of day or night,” “spending as much time as possible with parent/child,” and “agreement with pediatrician on treatment plan.” These concepts were retained since the scores demonstrated congruence between parent groups regardless of the impressions of pediatricians.

Seven concepts formed a pattern whereby scores were substantially different between the 2 groups of parents. Suburban practice parents viewed the concepts as important to partnership ($>$ 80%), whereas health center parents rated them as less important ($<$ 80%). These concepts included “giving specific reassuring information,” “making recommendations about a course of treatment,” “involving parent in defining the problem,” “including parent’s recommendations about what should be included in a treatment plan,” “including an age-appropriate child in planning a course of treatment,” “including the child in a discussion of their condition,” and “giving advice on how to stay healthy in future.” Pediatricians’ probability scores were similar to those of the parents from the suburban practice. These 7 suburban practice/pediatrician-identified

Table 2. “Mutually Identified” Partnership Concepts with Probability Scores of $\geq 80.00\%$ for All Three Groups

| Concept/Statement* | Pediatricians (n = 24) | Parents | | |
|--|---------------------------|-------------------------------|----------------------------|------------------|
| | | Suburban Practice (n = 90) | Health Center (n = 101) | All (n = 191) |
| 1. Providing parent with skills or information to help parent’s child succeed | 100.00 | 100.00 | 100.00 | 100.00 |
| 2. Showing nonverbal attentiveness ¹⁵ | 95.50 | 99.83 | 91.39 | 96.52 |
| 3. Protecting family’s privacy ¹⁶ | 93.64 | 100.00 | 100.00 | 100.00 |
| 4. Reviewing long-term therapeutic plan ² | 98.57 | 100.00 | 96.81 | 99.56 |
| 5. Providing friendly administrative staff | 97.18 | 95.11 | 99.12 | 97.55 |
| 6. Making sure that parent has easy access to office | 99.42 | 99.23 | 94.77 | 97.25 |
| 7. Understanding parent’s/youth’s main reason for coming to the pediatrician | 98.57 | 100.00 | 92.58 | 98.59 |
| 8. Being honest with parent, even when there is bad news | 100.00 | 100.00 | 100.00 | 100.00 |
| 9. Understanding parent’s/youth’s emotional needs | 97.18 | 99.15 | 99.99 | 99.84 |
| 10. Making it easy to schedule an appointment | 97.18 | 99.83 | 94.57 | 97.88 |
| 11. Treating child and parent with dignity ¹⁶ | 100.00 | 100.00 | 100.00 | 100.00 |
| 12. Showing respect for parents alternative values and beliefs ⁴ | 93.64 | 90.88 | 100.00 | 97.97 |
| 13. Being friendly and approachable ¹⁵ | 97.18 | 99.60 | 100.00 | 99.96 |
| 14. Having nonjudgmental attitude toward parent and child ¹⁶ | 95.50 | 100.00 | 100.00 | 100.00 |
| 15. Being interested in what parent/youth want to know | 98.57 | 99.15 | 99.94 | 99.73 |
| 16. Clearly explaining what the treatment is | 100.00 | 100.00 | 100.00 | 100.00 |
| 17. Making sure parent/youth understand plan | 100.00 | 100.00 | 100.00 | 100.00 |
| 18. Responding to worries/concerns ² | 99.94 | 100 | 98.66 | 99.88 |
| 19. Giving parent/youth opportunity to ask questions | 99.94 | 100.00 | 100.00 | 100.00 |
| 20. Explaining problem and treatment in terms parent/youth can understand | 100.00 | 100.00 | 100.00 | 100.00 |
| 21. Understanding the overall situation of the parent/youth | 95.5 | 99.99 | 94.49 | 98.47 |
| 22. Discussing the problem with parent/youth | 99.52 | 100.00 | 99.79 | 100.00 |
| 23. Ensuring the family is satisfied ⁴ | 100.00 | 99.85 | 100.00 | 100.00 |
| 24. Making sure the parent/youth really understand the problem/treatment | 100.00 | 100.00 | 100.00 | 100.00 |
| 25. Listening to everything the parent/youth have to say about youth’s problem | 83.62 | 99.8 | 99.99 | 99.99 |
| 26. Exploring parent’s confidence in a treatment plan | 95.5 | 93.19 | 87.86 | 90.45 |

*Concepts with references were inspired by peer-reviewed articles regarding partnership as it applied to parents and children.

concepts were retained for inclusion based on their importance to 1 group of parents and to pediatricians. The remaining 5 concepts did not present a clearly defined trend and were dropped.

Discussion

This study was designed to obtain parents’ and pediatricians’ views of concepts important to partnership. Providing 61 concepts from which parents and pediatricians could choose, rather than the 4 or 5 in previous studies, revealed nuanced differences between what the 2 groups viewed as important and what different groups of parents valued. The concepts identified by the 3

groups will form the basis of the Parent Pediatrician Partnership Survey. The study was conducted with parents attending outpatient primary care pediatric practices in contrast to exclusively parents of children who had chronic health problems such as ADHD or asthma.

Similarities in Endorsing Partnership Concepts: Parents and Pediatricians

Parents from both practices, as well as pediatricians, mutually identified almost 70% of the initial pool of concepts, suggesting that these concepts are central to partnership. Several basic aspects of medical care were identified as impor-

Table 3. Parent-Identified, Suburban Practice/Pediatrician–Endorsed Partnership Concepts with Probability Scores <80.00% for Any Group, and Dropped Partnership Concepts

| Concept/Statement* | Pediatricians (n = 24) | Parents | | |
|--|---------------------------|-------------------------------|----------------------------|------------------|
| | | Suburban Practice (n = 90) | Health Center (n = 101) | All (n = 191) |
| Parent identified | | | | |
| 27. Being available any time of day or night ³ | 44.82 | 85.08 | 99.94 | 94.89 |
| 28. Discussing child’s care with other professionals | 60.54 | 94.12 | 80.38 | 86.85 |
| 29. Spending as much time as possible with parent/child ³ | 74.26 | 88.76 | 87.50 | 88.12 |
| 30. Avoiding legal issues interfering with pediatrician relationship with parent and child | 61.86 | 96.77 | 99.51 | 98.55 |
| 31. Agreeing with physician on treatment plan | 65.96 | 95.90 | 96.33 | 96.21 |
| Identified by suburban practice/pediatricians | | | | |
| 32. Making recommendations about a course of treatment | 99.94 | 90.30 | 51.07 | 67.72 |
| 33. Involving parent in defining the problem | 99.52 | 98.75 | 66.61 | 81.32 |
| 34. Including the child in a discussion of his/her condition ¹⁶ | 91.69 | 79.60 | 40.60 | 57.36 |
| 35. Including an age-appropriate child in planning a course of treatment ¹⁶ | 98.35 | 98.53 | 69.47 | 82.71 |
| 36. Giving specific reassuring information | 95.01 | 98.15 | 67.11 | 81.69 |
| 37. Including parent’s recommendations about what should be included in treatment plan | 89.69 | 85.83 | 65.51 | 74.92 |
| 38. Giving advice on how to stay healthy in future | 91.69 | 100.00 | 67.61 | 83.62 |
| Identified as negative | | | | |
| 39. Engaging in social talk ¹⁵ | 39.68 | 39.61 | 22.73 | 30.69 |
| 40. Pediatrician sharing personal information about self | 15.88 | 22.30 | 26.61 | 24.77 |
| No defined trend | | | | |
| 41. Asking parent’s opinion about child’s treatment | 91.69 | 82.77 | 71.49 | 76.50 |
| 42. Involving parent in deciding how to manage child’s condition | 97.18 | 99.60 | 75.63 | 87.44 |
| 43. Giving verbal praise ² | 78.21 | 62.84 | 86.49 | 74.83 |
| 44. Giving advice on how to reduce risk of future illness | 93.04 | 100.00 | 73.44 | 87.62 |
| 45. Giving nonverbal encouragement (Cox et al, 2007) | 87.66 | 72.92 | 76.53 | 74.92 |

*Concepts with references were inspired by peer-reviewed articles regarding partnership as it applied to parents and children.

tant: identifying the presenting problem, making a diagnosis, and planning and implementing treatment. In addition, the 3 groups agreed on contextual issues in partnership, including protecting privacy, making it easy to receive services, and the pediatrician being aware that the parent and youth are affected by influences outside of the pediatric practice. Last, a group of psychosocial issues were identified by all groups, characterized by statements such as treating child and parent with dignity, showing respect for alternative beliefs, being friendly and approachable, and pediatricians responding to worries and concerns on the part of the parent or child.

Our findings are in contrast to an earlier study where parents were asked to rate the importance to partnership of 10 pediatrician communication strategies.² In that study parents identified purely

treatment-related concepts as important, but they did not include as important any affective communication strategies—strategies that describe the relational, rather than the medical, elements of partnership. Each of the concepts rejected in the earlier study—nonverbal attentiveness and encouragement, verbal praise, and finding out about parents’ and children’s worries and concerns—were mutually identified in the current study. The need for pediatricians to give specific reassuring information was identified by suburban practice parents and pediatricians.

The 3 groups were also in agreement on 2 concepts that they believed were not important to partnership: that it was not necessary for pediatricians to share personal information about themselves or to engage in social talk with parents. The consistency between both groups of parents and

pediatricians indicated that each group distinguished between substantive indicators of a partnership, such as the pediatrician being friendly and approachable and being interested in what the parent and youth want to know, and more superficial interactions.

Varied Views of Partnership

Parents and Pediatricians

Although mutually identified concepts represented the largest group of concepts, there were differences in what parents and pediatricians viewed as important to partnership. Parents valued their pediatrician's interaction with other professionals: "avoiding legal issues interfering with pediatrician relationships with parent and child" and "discussing child's care with other professionals." The importance of this concept is not surprising; the health of children frequently affects areas of their lives that involve teachers, day care staff, and even child welfare workers.

Perhaps most important in differing views of partnership is that both groups of parents agreed on the importance of accessibility, represented by "being available any time of day or night" and "spending as much time as possible with the child." Pediatricians' endorsement of these concepts was low: 44.8% and 74.3%, respectively. In addition, suburban practice and health center parents were nearly identical on their view of "agreeing with physician on treatment plan" (95.9% and 96.3%, respectively), whereas physicians' rating of the item as very important was at 66%.

The universal support by parents of the access and treatment plan concepts and the low rating by pediatricians offers a stark contrast, one made even more distinct given that the parent groups in this study were very different from one another. Suburban practice parents were, on the whole, well-educated, had adequate incomes, and did not rely on public insurance for their medical coverage. Health center parents did not enjoy any of these advantages and had signs of dysfunction characterized by symptoms of domestic violence and maternal alcohol abuse. While it is not appropriate to assign undue importance to just 3 concepts, the concepts seem important to the clinical encounter. Parents who feel hurried during their time with a pediatrician and who do not agree with a treatment plan may be less likely to

understand and then follow up with care. Even in other characterizations of partnership, parental "buy-in" with the treatment plan was associated with adherence to the plan and better health outcomes.¹⁷ In addition, the importance of accessibility, especially spending enough time with parents and children, has been cited as an important part of partnership.²

Suburban Practice and Health Center Parents

Just as suburban practice and health center parents agreed on some concepts, there were differences between them as well. Seven concepts were reported to be relatively unimportant to health center parents but important to suburban parents. Interestingly, health center parents seemed to not value making recommendations about a course of treatment, being involved in defining the problem, or having their opinions included in a treatment plan. These views seem to be in contrast to the view noted earlier that health center parents wanted to agree with their pediatricians on a treatment plan. These apparent discrepancies seem to suggest that while health center parents are willing to cede to pediatricians much of the development of a plan, they do want to have the final opportunity to agree (or not) with the plan.

In contrast, suburban practice parents viewed the concepts related to treatment plan *development* as an important part of partnership. It may be that higher educational levels prepare them to take an active role in treatment plan development, rather than being mere consumers of a plan developed by pediatricians.

Implications for Child Health Clinicians

Although pediatric clinics provided the critical mass necessary to conduct this study, the findings are relevant for all clinicians who treat children, with 1 notable addition. Physicians in practices that primarily see adult patients may need to consider the potential differences that exist between adults who are patients and adults who represent the well-being of their children. When considering the parent-identified concepts, family practice physicians, nurse practitioners, and physician assistants are faced with of the same challenges as pediatricians in establishing partnerships. Large patient loads can limit the opportunity both to spend time with a child patient and to engage parents in a full understanding of a treatment plan. And, like pediatri-

cians, other child health care practitioners must ultimately understand the cultural and individual factors that affect and shape partnerships with parents.^{18,19}

Limitations

While the use of normalized scores provided a reasonable measure by which to compare groups, there was not an externally validated standard for denoting a score as high or low. As such, the 80% probability score used as a cutoff for agreement was arbitrary. Still, we believe that the approach we took, using normalized scores, was an improvement over purely subjective methods of deciding what concepts are relevant in considering partnership. The next step in the development of the Parent Pediatrician Partnership Scale is conducting factor analyses with the 38 retained concepts and identifying characteristics of parents, children, and practices that provide further clarity to the nature of partnership.

The pediatricians and parents in this study represented a small convenience sample, and as such, results should be viewed tentatively until larger studies are conducted. This limitation suggests the next phase of developing the Parent Pediatrician Partnership Survey: a larger sample including more and varied practices that provide an opportunity to determine whether the current results generalize across other populations and settings. Mixed-methods designs would also provide narrative data that offer insights into the differences that were identified in this study between pediatricians and parents and between parents of differing socioeconomic strata. Understanding and appreciating these differences can be used to inform medical education and strategies for partnering with diverse parents. Since partnership has been linked to health care outcomes for children, such knowledge may be used to ameliorate health disparities.

Conclusion

This article described the first phase of development of the Parent Pediatrician Partnership Survey. Development was based on the view that it is important to represent both parents' and physicians' perspectives in the selection of partnership concepts. The findings of this study will assist pediatricians, family physicians, and other child

health clinicians as they consider what parents value in partnership.

The authors appreciate the Dayton Children's Hospital Research Foundation for their support of this study.

References

1. Westfall JM. Cold-spotting: linking primary care and public health to create communities of solution. *J Am Board Fam Physicians* 2013;26:239–40.
2. Clark NM, Cabana MD, Gong ZM, et al. The clinician-patient partnership paradigm: outcomes associated with physician communication behavior. *Clin Pediatr (Phila)* 2008;47:49–57.
3. Hinojosa MS, Fernandez-Baca D, Knapp C. Factors associated with family-provider partnership among children with ADHD. *J Fam Med* 2012;44:463–70.
4. Kenney MK, Denboba D, Strickland B, Newacheck PW. Assessing family-provider partnerships and satisfaction with care among US children with special health care needs. *Acad Pediatr* 2011;11:144–51.
5. Clark NM, Notwehr F, Gong M. Physician-patient partnership in managing chronic illness. *Acad Med* 1995;70:957–9.
6. Strickland B, McPherson M, van Dyck P, Huang ZJ, Newacheck P. Access to the medical home: results of the National Survey of Children with Special Health Care Needs. *Pediatrics* 2004;113:1485–92.
7. Chewning B, Bylund CL, Shah B, Arora NK, Gueguen JA, Makoul G. Patient preferences for shared decisions: a systematic review. *Patient Educ Couns* 2012;86:9–18.
8. Denboba D, McPherson MG, Kenney MK, Strickland B, Newacheck PW. Achieving family and provider partnerships for children with special health care needs. *Pediatrics* 2006;118:1607–15.
9. Fiks AG, Hughes CC, Gafen A, Guevara JP, Bark FK. Contrasting parents' and pediatricians' perspectives on shared decision-making in ADHD. *Pediatrics* 2011;127:188–96.
10. Brown RL, Krupnick J. Therapeutic alliance in pediatric primary care: preliminary evidence for a relationship with physician communication style and mothers' satisfaction. *J Dev Behav Pediatr* 2010;31:83–91.
11. Murphy JM, Kelleher K, Pagano ME, et al. The family APGAR and psychosocial problems in children: a report from ASPN and PROS. *J Fam Pract* 1998;46:54–64.
12. Looman WS. Development and testing of the social capital scale for families of children with special health care needs. *Res Nurs Health* 2006;29:325–36.
13. Smith PC, Schmidt DM, Allensworth-Davies D, Saitz R. Primary care validation of a single-question alcohol screening test. *J Gen Intern Med* 2009;24:783–8.

14. Radloff LS. The CES-D scale: a self report depression scale for research in the general population. *Applied Psychological Measures* 1977;1:385–401.
15. Cox, E. D., Smith, M. A., Brown, R. L., Fitzpatrick, M. A. Assessment of the physician-caregiver relationship scales (PCRS). *Patient Educ Couns* 2008; 70:69–78.
16. Summers JA, Hoffman L, Marquis, J, et al. Relationship between parent satisfaction regarding partnerships with professionals and age of child. *Topics in Early Childhood Special Education* 2005;25:48–58.
17. Makoul G, Clayman ML. An integrative model of shared decision making in medical encounters. *Patient Educ Couns* 2006;60:301–12.
18. Rosenbaum L. The paternalism preference–choosing unshared decision making. *N Engl J Med* 2015; 373:589–92.
19. Street RL Jr, Krupat E, Bell RA, Kravitz RL, Haidet P. Beliefs about control in the physician-patient relationship: effect on communication in medical encounters. *J Gen Intern Med* 2003;18:609–16.