

# UCLA

## UCLA Previously Published Works

### Title

Feasibility and Acceptability in a Community-Partnered Implementation of CenteringParenting for Group Well-Child Care.

### Permalink

<https://escholarship.org/uc/item/0ht9p2pg>

### Journal

Academic Pediatrics, 18(6)

### Authors

Jones, Kai

Do, Stephanie

Porras-Javier, Lorena

et al.

### Publication Date

2018-08-01

### DOI

10.1016/j.acap.2018.06.001

Peer reviewed



# HHS Public Access

Author manuscript

*Acad Pediatr.* Author manuscript; available in PMC 2024 March 14.

Published in final edited form as:

*Acad Pediatr.* 2018 August ; 18(6): 642–649. doi:10.1016/j.acap.2018.06.001.

## Feasibility and Acceptability in a Community-Partnered Implementation of CenteringParenting for Group Well-Child Care

**Kai A. Jones, BS,**

Columbia University College of Physicians and Surgeons, New York, NY

**Stephanie Do, MD,**

South Bay Family Health Care, Torrance, Calif

**Lorena Porrás-Javier, MPH,**

Mattel Children's Hospital UCLA, David Geffen School of Medicine at UCLA

**Sandra Contreras, MPH,**

Cedars Sinai Medical Center

**Paul J. Chung, MD, MS,**

Mattel Children's Hospital UCLA, David Geffen School of Medicine at UCLA; UCLA Fielding School of Public Health, Los Angeles, Calif

**Tumaini R. Coker, MD, MBA**

University of Washington School of Medicine, Seattle Children's Research Institute, Seattle, Wash

### Abstract

**Background:** In a community-academic partnership, we implemented a group-based model for well-child care (WCC) (CenteringParenting) and conducted a pilot test for feasibility and acceptability among families at a federally qualified health center (FQHC).

**Methods:** The FQHC implemented CenteringParenting for all WCC visits in the first year of life, starting at the 2-week visit. Over a 14-month time period, parents from each new CenteringParenting group were enrolled into the study. Baseline data were collected at enrollment (infant age < 31 days) and again at a 6-month follow-up survey. Main outcomes were feasibility and acceptability of CenteringParenting; we also collected exploratory measures (parent experiences of care, utilization, self-efficacy, and social support).

**Results:** Of the 40 parent-infant dyads enrolled in the pilot, 28 CenteringParenting participants completed the 6-month follow-up assessment. The majority of infants were Latino, black, or "other" race/ethnicity; over 90% were Medicaid insured. Of the 28 CenteringParenting participants who completed the 6-month follow-up, 25 completed all visits between ages 2 weeks and 6 months in the CenteringParenting group. Of the CenteringParenting participants, 97% to 100% reported having adequate time with their provider and sufficient patient education and having their needs met at visits; most reported feeling comfortable at the group visit,

---

Address correspondence to Tumaini R. Coker, MD, Seattle Children's Research Institute, 2001 8th Ave, Room 650, Seattle WA 98121 (Tumaini.Coker@seattlechildrens.org).

The authors have no conflicts of interest to disclose.

and all reported wanting to continue CenteringParenting for their WCC. CenteringParenting participants' mean scores on exploratory measures demonstrated positive experiences of care, overall satisfaction of care, confidence in parenting, and parental social support.

**Conclusions:** A community-academic partnership implemented CenteringParenting; the intervention was acceptable and feasible for a minority, low-income population. We highlight key challenges of implementation.

### Keywords

group visits; preventive care; well-child care

---

WELL-CHILD CARE (WCC) during the first 3 years of a child's life provides an opportunity to identify and address social, developmental, behavioral, and health issues that could have significant long-term impact.<sup>1</sup> However, the literature demonstrates that many families, particularly in low-income communities, have multiple unmet needs in care with regard to anticipatory guidance, psychosocial screening, and behavioral and developmental services.<sup>2-7</sup> Our academic research team partnered with a multi-site, federally qualified health center (FQHC) to improve the delivery of WCC to low-income families with children ages 0 to 3.

We used a multi-year community academic partnership and a rigorous partnered research process that included qualitative data collection from key stakeholders (parents, providers, and payers), a systematic literature review on WCC, and a community advisory board.<sup>8-13</sup> Through this process, the academic research and FQHC teams selected group WCC (GWCC) as a new care model to improve the effectiveness and efficiency of preventive services and support parents during well-child visits.<sup>12</sup>

In GWCC, a group of 6 to 8 families with similarly aged children is seen for a well visit. A clinician or health educator leads a group discussion focusing on anticipatory guidance and parent education, either preceded or followed by measurement, examination, and immunization of each child, typically in the GWCC room. The total duration can range from 1 to 2 hours, giving parents more time to receive education and guidance on key parenting topics while maintaining or increasing clinician time spent per patient.<sup>14-17</sup> Evidence for GWCC suggests it is equally as or more effective in providing WCC services to families when compared with usual care and utilizes clinician time more efficiently.<sup>8</sup> This increased well-visit time can provide families with more time to engage with their provider team and other parents on a range of different education and guidance topics.<sup>15,18</sup>

CenteringParenting is a distinct model of GWCC that brings a cohort of 6 to 8 families together for a group visit over the infant's first year of life (since this study was completed, CenteringParenting has been expanded through 24 months of age).<sup>19,20</sup> The model emphasizes a dyad approach to care in which the mother and infant's wellbeing is a key focus. Group visits rely on group activities and facilitated group discussions for education and guidance portions of the visit. CenteringParenting was developed by the Centering Healthcare Institute based on their CenteringPregnancy model. CenteringPregnancy is an evidence-based group model for prenatal care that has received a "strong" evidence rating

by the Agency for Healthcare Research and Quality.<sup>21</sup> One randomized control trial (n = 993) examined the impact of CenteringPregnancy on key outcomes, including adequacy of prenatal care and rates of preterm birth. CenteringPregnancy group participants received better prenatal care, had fewer preterm births, were more likely to initiate breastfeeding, and had better prenatal knowledge compared with those receiving usual care.<sup>22</sup> Studies indicate that sites using CenteringPregnancy report enhanced capacity to serve nonpregnant patients, because group sessions free up resources previously used for individual visits.<sup>21</sup> Although evidence supports CenteringPregnancy as a group model of care, there are no published trials on CenteringParenting. We identified 4 publications related to CenteringParenting. One study examined the model as a teaching tool among 4 family medicine residents and assessed the residents' perspectives on providing CenteringParenting well visits.<sup>23</sup> Another study provided perspectives from program leaders from multiple CenteringParenting sites.<sup>19</sup> A qualitative study assessed stakeholder perspectives on potential implementation of CenteringParenting at FQHCs in Baltimore, Maryland, and found that potential implementation was desirable yet faced perceived barriers, including scheduling, training difficulties, and high implementation cost.<sup>24</sup> None of the participants in the study had implemented or participated in CenteringParenting. Finally, a pilot of CenteringParenting among 24 parent-child dyads at 2 public health clinics in Alberta, Canada, was described.<sup>25</sup> This Canadian study is the only one of the 4 studies that examined data from parents who had actually participated in CenteringParenting; however, 75% or more of participants in the Canadian study were white, had greater than a high school education, and had an annual household income of at least \$70,000.

Given the dearth of studies on CenteringParenting, particularly on implementation among low-income populations, our objective was to examine the feasibility and acceptability of implementing CenteringParenting for GWCC among low-income mother-child dyads at a FQHC. Here, we 1) briefly summarize the community-academic partnership to redesign WCC using CenteringParenting at this multi-site FQHC (details provided in a previous publication)<sup>12</sup>; 2) describe this pilot implementation and testing of CenteringParenting; and 3) report findings related to feasibility and acceptability.

## Methods

### A Community-Academic Partnership to Redesign WCC

In 2008, a multisite FQHC identified the need to improve parents' experiences in WCC and began exploring delivery redesign. A community partnership was created with focus groups to explore parental perspectives on WCC. The FQHC recruited 51 mothers and 5 fathers to participate in 8 focus groups (4 in English, 4 in Spanish). The age of the index child (the child discussed for the purposes of the focus group) was between 6 months and 5 years, and 96% of parents reported a household income of <\$35,000.

Parent participants discussed concerns with WCC delivery at their FQHC clinical site and offered their perspectives on alternative formats, locations, and providers (detailed findings presented elsewhere).<sup>10</sup> Parents endorsed group visits and viewed GWCC as empowering—an opportunity to learn from other parents and to build a support network. Some parents

shared positive experiences with prenatal and parent support groups, which offered benefits similar to those for GWCC.

Although it was clear that parents viewed GWCC as a way to enhance the delivery of WCC, it was not known whether GWCC would be viewed as acceptable and feasible (logistically and financially) from the perspectives of providers, staff, and leadership of the FQHC, as well as from the FQHC's major payers. We conducted focus groups and interviews with additional stakeholders: 1) the FQHC's pediatric teams and leadership and 2) the payers of the care (health plans, state agencies administering Medicaid, and large medical groups) (findings presented elsewhere).<sup>9,11</sup>

Using these qualitative data from 3 major WCC stakeholders, we conducted a 12-month rigorous process to select a new model of care in partnership with the FQHC. A community advisory board of key FQHC stakeholders used aforementioned qualitative data, a systematic literature review of WCC,<sup>8</sup> and an expert panel process<sup>12</sup> to select a new care model to implement and test at their clinical sites (details published elsewhere).<sup>12</sup> After this design process, the community advisory board for the FQHC selected GWCC as their new WCC model for families with children ages 0 to 3 years. This decision was based on the stakeholder input, findings from the literature review and expert panel, and in particular the positive response from parents regarding the prospect of GWCC.

CenteringParenting was selected by the FQHC because it represented a comprehensive model of care with a set curriculum; additionally, because one of the FQHC's clinical sites offered both prenatal and pediatrics services, CenteringParenting would provide the potential to expand their group visit model to later include CenteringPregnancy, providing a direct path for parents to move from prenatal care to group visit cohorts for newborns.

## Implementation

In April 2014, the entire clinical staff (pediatrician, obstetrics/gynecology providers, medical assistants, front desk staff, and clinic manager) underwent 2 days of CenteringParenting training and received official CenteringParenting site approval. The Centering Healthcare Institute worked closely with the FQHC for training, approval, and quality assurance of CenteringParenting.<sup>20</sup> CenteringParenting launched in July 2014, with all groups facilitated by the pediatrician and the pediatric medical assistant (MA); CenteringParenting groups continue to be used at this clinical site currently. The CenteringParenting curriculum was used, but adapted in 2 ways to meet the needs of the pediatrician-MA team: 1) Bright Futures guidelines for well-child care were incorporated,<sup>1</sup> and 2) maternal weight checks and maternal blood pressure monitoring were omitted.

Each month, a new CenteringParenting group begins, representing a new cohort of mother-infant dyads. Groups are composed of approximately 8 parents with their infants ready for a 2-week to 1-month well visit. The same group meets at 2 weeks and at 2, 4, 6, 9, and 12 months for routine well checks. Each group visit consists of the following elements over approximately a 110-minute period:

**First 30 minutes**—Parents in the group visit conference room rotate through 3 stations for their infants to be measured, weighed, and examined.

**Station 1**—The parents, with help from the MA, weigh and measure each infant; the MA records and plots the findings.

**Station 2**—The pediatrician examines each infant.

**Station 3**—Parents complete any previsit screening forms for the visit, such as the Parents' Evaluation of Developmental Status (PEDS),<sup>26</sup> at the 9-month visit.

**Next 60 minutes**—The pediatrician and MA lead the group session as cofacilitators to discuss Bright Futures–based, age-appropriate anticipatory guidance topics in a nondidactic manner using interactive activities to engage parents in discussion around each topic.

**Last 20 minutes**—The MA cofacilitator, accompanied by another MA staff member, gives immunizations to each child and any referrals, prescriptions, or follow-up instructions to the parent.

### Recruitment and Enrollment for Feasibility Study

We approached parent participants with a child who was <31 days of age attending a CenteringParenting well-visit at the intervention clinic. Parents who agreed to be contacted by a UCLA research assistant (RA) were invited to enroll in the study, in person or by phone, and to complete the baseline survey.

### Participants

Parents or legal guardians arriving at the clinical site for a well visit with infants 31 days old were approached to discuss study participation. Interested parents were screened; if eligible, they gave consent in person or by phone by an RA. Participants (henceforth “parents”) were ineligible if they 1) did not speak English or Spanish, 2) were <18 years of age, 3) planned to move outside of Los Angeles County or change primary care providers within the next 12 months, or 4) were currently employed by the participating clinic.

### Parent Survey and Data Collection

Enrolled parents completed a baseline survey containing demographic data on the infant, parent, and household. At 6 months after enrollment, when the child was generally 6 to 7 months of age, parents completed a 20-minute RA-administered follow-up survey by phone. We selected a 6-month follow-up period to meet the FQHC's desire to have initial findings available to help with organizational decisions on WCC delivery.

### Measures

Main outcomes for this pilot study are feasibility and acceptability, assessed by collecting data on parent attendance at CenteringParenting visits and on parent experiences of care in CenteringParenting visits. We also examined assessments for exploratory measures important to a future randomized controlled trial of CenteringParenting, such as patient experiences of care, parent social support, parenting confidence, and health care utilization.

We did enroll parents at another clinical site of the FQHC that was not using GWCC as a potential comparison group; however, because this study was focused on acceptability and feasibility and was not powered for comparison, we do not present data from the comparison clinic.

To assess the feasibility of CenteringParenting for well visits, we collected data on attendance at well visits. Parents were asked about attendance (at 2 weeks and at 2, 4, and 6 months) and, if they missed a visit, the reason for missing and if it was rescheduled. To assess acceptability, we asked parents to report their experiences in receiving care in a group format, focusing on session structure, interaction with other parents, and receiving information. Most questions were quantitative; however, we included some open-ended items on benefits and challenges of group visits.

In addition to CenteringParenting-specific items, we asked questions on experiences of care, overall satisfaction with care, health care utilization for the infant, parental social support, and parenting confidence. Parents reported on the number of sick, urgent care, and emergency department visits for their infant in the 6-month study period. We used items from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Clinician & Group Survey for patient experiences of care and the overall parent rating of care.<sup>27</sup> We used CAHPS composite measures of 1) how well providers communicate with patients (6 items), 2) doctor's attention to your child's growth and development (6 items), and 3) provider's advice on keeping your child safe and healthy (5 items).<sup>28</sup> We also used the CAHPS overall rating of the care (1 item). Parents also completed the 15-item Karitane Parenting Confidence Scale (KPCS)<sup>29</sup> for perceived parenting self-efficacy (score range of 0–45, with scores of <39 indicating low levels of parenting confidence) and the 24-item Social Provision Scale (SPS)<sup>30</sup> to assess social support (score range 24–96, with higher scores indicating better social support). All scales (CAHPS,<sup>27</sup> KPCS,<sup>29</sup> and SPS<sup>30</sup>) have been previously validated and demonstrate good reliability; psychometric analyses are available elsewhere.

### Quantitative Methods

First, we use summary statistics to describe baseline characteristics of participants. For feasibility and acceptability measures, we present summary statistics for all intervention participants completing the 6-month follow-up. For our exploratory outcome measures, we also present summary statistics for each survey item or scale. Analyses were conducted using Stata SE 11 (StataCorp, College Station, Tex).

### Qualitative Methods

Verbal responses to open-ended survey questions (Table 1, questions 11–13) were recorded verbatim by the RA during survey administration, and analyzed using a content analysis approach.<sup>31</sup> One member of the research team read answers and created a codebook for each question, with multiple categories for each item. Two other team members reviewed and finalized the codebook. Two team members then independently coded all responses. Cohen's  $\kappa$  using all item responses<sup>23</sup> gave scores of 0.88 to 1.0, suggesting excellent coder

consistency.<sup>23-25</sup> We present the categories of answers that emerged for each open-ended question and the number of participants responding with each.

The study was approved by the UCLA Institutional Review Board.

## Results

### Participants Characteristics

Forty CenteringParenting parents consented to participate in the study and completed the baseline questionnaire. Of the 40 CenteringParenting index infants, 30% were black, 40% Latino, 5% white, and 25% multiracial. The index infant was a mean of 21.8 days of age at enrollment. An annual household income of <\$35,000 was reported by 90% of the participants; 52.5% of the participants did not have any college education; and 97% of the index children were Medicaid insured (Table 2).

### Feasibility and Acceptability

At 6 months after enrollment, 28 parents completed a 6-month follow-up survey of experiences with CenteringParenting. Among the CenteringParenting participants, 12 were lost to follow-up. Of these 12, 7 participants changed primary care providers during the 6-month period and no longer received care from the FQHC site, while 5 remained at the clinic but were not reachable via phone after 3 attempts (Table 3).

#### Feasibility

All 28 CenteringParenting families who completed the 6-month surveys attended the 2-week, 2-month, and 4-month well visits in the CenteringParenting model; 25 of the families attended the 6-month group visit (Table 3), and 3 missed it due to work, school, or travel. The average number of mother-child dyads per CenteringParenting group was 4 (range 2–7).

#### Acceptability

In response to questions regarding experiences in group visits (Table 1), all parents who completed the 6-month follow-up survey ( $n = 28$ ) reported that they always or usually had enough time to ask questions of the provider and that they received enough parent education. Ninety-seven percent ( $n = 27$ ) reported that they felt comfortable sharing experiences in a group and sharing/talking with group members and that they felt supported by them. Ninety-seven percent ( $n = 27$ ) also reported that they felt that the provider usually or always had a plan for the group session and could adapt the plan to meet parents' needs. The number of participants in the group was "just the right amount" according to 18 participants (64%), whereas 10 participants (36%) reported there were not enough participants in the group.

Participants also answered a series of open-ended questions about experiences in CenteringParenting. When asked what they liked best, parents reported the benefits of social interaction and sharing experiences within group visits ( $n = 23$ ) and the ability to learn valuable information about caring for their child ( $n = 3$ ). When asked what they liked least about the group visits, parents reported that visits were longer ( $n = 1$ ) and difficult to



schedule (n = 3) and that too few people were included in the group (n = 4). Fifteen parents reported there was nothing that they did not like about group visits, and 5 reported other challenges (eg, lack of refreshments). Most participants would not change anything about the visits; however, 3 parents reported that they would change the time of the sessions, and 5 would increase the number of parents in group sessions. All parents reported that they would like to continue to have their well visits in this group visit format.

### Exploratory Measures

The mean scores (Table 3) ranged from 8.9 to 9.9 (0–10 scale) for parents' assessment of the three CAHPS composite measures: 1) how well providers communicated with them (mean, 9.9; standard deviation [SD], 0.4), 2) how much the providers paid attention to their child's growth and development (mean, 9.3; SD, 1.8), and 3) the providers' provision of advice on keeping their child safe and healthy (mean, 8.9; SD, 1.8). The mean score was 9.3 for overall satisfaction with care (SD, 0.9).

The mean score for self-efficacy in parenting using the KPCS was 41.5 (SD, 2.5). The mean score for parental social support using the SPS was 82.2 (SD, 8.3).

A child having no urgent or sick care visit during the 6-month period was reported by 57% of the CenteringParenting parents; 78% of CenteringParenting participants reported having no emergency department visits.

### Discussion

In this academic-community research partnership, we implemented the CenteringParenting model of GWCC and pilot-tested for acceptability and feasibility among a low-income population. Parents were enrolled within the first month of their infant's life. For those who remained in the study through the 6-month follow-up, CenteringParenting was an acceptable way in which to receive well-visits. Parents attended group visits, received recommended care, and reported satisfaction with CenteringParenting groups.

Of the 40 parents who enrolled and began CenteringParenting visits, 12 were lost to follow-up. Most of these participants were no longer attending the clinical site; 5 of the 12 did not attend the 6-month group visit and could no longer be reached. This suggests there may be barriers to creating cohorts for GWCC that can be sustained through the first year of life. This is significant for implementation planning, because keeping each CenteringParenting cohort at a sustainable size is critical for clinic efficiency. CenteringParenting cohorts that are too small will make GWCC less efficient for a clinic compared with individual care. For example, if well visits are scheduled in 20-minute slots, a clinician could complete 5.5 well visits in a 110-minute time period, compared with the equivalent of 8 well visits in that same time period using GWCC. Under this scenario, to maintain clinic efficiency, every GWCC visit should include at least 5 patients.

A previous study reported that CenteringParenting was either cost neutral or cost effective, depending on group size (larger groups of around 8 being most cost effective), duration of session (longer visits being more costly), and who provides care (utilization of physicians

vs non-physician professionals).<sup>32</sup> In this pilot test of CenteringParenting, we found that additional parent-infant dyads needed to occasionally be added to groups to keep cohorts at an efficient level. This change in group composition to maintain group size may have an unmeasured and unintended impact on the experience of CenteringParenting for parents. This is particularly a problem for clinics that do not have enough volume of infants to create cohorts. Furthermore, the volume at our partner clinic could not support more than 1 new cohort per month. Finally, the clinic used an “opt-out” approach, in that new infants were enrolled in a CenteringParenting cohort automatically for their well visits unless parents specifically requested to opt out and receive individual well-child care. This was implemented to normalize GWCC for the families at the clinic. The clinical site has since continued CenteringParenting using this opt-out approach and is considering other options for addressing the challenge of cohort size, including allowing late entry into cohorts (eg, an open enrollment period for the first 2 to 3 visits of a cohort) and creating cohorts with mixed age groups (eg, 2- and 4-month-olds in same cohort).

These concerns of cohort size and efficiency were some of the main challenges in implementation of CenteringParenting, but our pilot also highlighted benefits.

CenteringParenting groups were generally feasible and acceptable to the parents who completed the 6-month follow-up. Of the 28 CenteringParenting group participants who completed the study, 25 completed all visits up to the 6-month visit and just 3 missed the 6-month visit.

All or nearly all of the CenteringParenting participants reported positive experiences of care and comfort in groups. These findings are similar to other studies that found group formats for well-child care to be acceptable and feasible for families.<sup>17,33,34</sup> Through our exploratory measures, we found that parents gave high ratings to their providers and the care received; these findings support those of previous studies of GWCC generally.<sup>15-17,25,33,34</sup> Most important, and perhaps in terms of acceptability, all parents in the CenteringParenting groups stated they would continue groups rather than use one-on-one visits. Notably, 40% of these mothers had had a prior child and so had previously experienced typical WCC.

This study has several limitations. We examined acceptability and feasibility only and cannot comment on the effectiveness of CenteringParenting WCC visits compared to usual care. Our findings inform the feasibility and acceptability of CenteringParenting in an FQHC setting among a low-income minority urban population which may not generalize to other clinical populations, such as pediatric offices serving a primarily privately insured, middle-income population. Our main method of assessment was parent self-report, both qualitatively and quantitatively, which may introduce bias. Cost of implementation was mainly the training costs related to CenteringParenting and was covered through the study; this cost, however, may be a significant barrier for practices in implementing CenteringParenting. Finally, we did not collect data on parents who opted out of CenteringParenting WCC, which may be another source of bias.

In conclusion, we found that a community-academic partnership was capable of implementing CenteringParenting for WCC at an FQHC. Findings of acceptability and

feasibility of CenteringParenting in this primarily low-income, urban, and minority clinic population are encouraging. We highlight key challenges to implementation and sustainability. Further research can explore benefits, costs, outcomes, and the potential for a sustainable CenteringParenting model of WCC.

## Acknowledgments

Supported by a Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) K23 Career Development Award (K23HD062677).

## References

1. Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents*. 4th ed Elk Grove, Ill: American Academy of Pediatrics; 2017. 4th ed.
2. Schuster M, Duan N, Regalado M, et al. Anticipatory guidance: what information do parents receive? What information do they want? *Arch Pediatr Adol Med*. 2000;154:1191–1198.
3. Bethell C, Reuland CH, Halfon N, et al. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. *Pediatrics*. 2004;113:1973–1983. [PubMed: 15173469]
4. Chung PJ, Lee TC, Morrison JL, et al. Preventive care for children in the United States: quality and barriers. *Ann Rev Public Health*. 2006;27:491–515. [PubMed: 16533127]
5. Halfon N, Regalado M, Sareen H, et al. Assessing development in the pediatric office. *Pediatrics*. 2004;113:1926–1933. [PubMed: 15173463]
6. Bethell C, Reuland C, Schor E, et al. Rates of parent-centered developmental screening: disparities and links to services access. *Pediatrics*. 2011;128:146–155. [PubMed: 21646266]
7. Norlin C, Crawford MA, Bell CT, et al. Delivery of well-child care: a look inside the door. *Acad Pediatr*. 2011;11:18–26. [PubMed: 21272820]
8. Coker TR, Windon A, Moreno C, et al. Well-child care clinical practice redesign for young children: a systematic review of strategies and tools. *Pediatrics*. 2013;131:S5–S25. [PubMed: 23457149]
9. Mooney K, Moreno C, Chung PJ, et al. Well-child care clinical practice redesign at a community health center: provider and staff perspectives. *J Prim Care Community Health*. 2014;5:19–23. [PubMed: 24327599]
10. Coker TR, Chung PJ, Cowgill BO, et al. Low-income parents' views on the redesign of well-child care. *Pediatrics*. 2009;124:194–204. [PubMed: 19564300]
11. Coker TR, DuPlessis HM, Davoudpour R, et al. Well-child care practice redesign for low-income children: the perspectives of health plans, medical groups, and state agencies. *Acad Pediatr*. 2012;12:43–52. [PubMed: 22075467]
12. Coker TR, Moreno C, Shekelle PG, et al. Well-child care clinical practice redesign for serving low-income children. *Pediatrics*. 2014;134:e229–e239. [PubMed: 24936004]
13. Coker T, Casalino LP, Alexander GC, et al. Should our well-child care system be redesigned? A national survey of pediatricians. *Pediatrics*. 2006;118:1852. [PubMed: 17079554]
14. Dodds M, Nicholson L, Muse B, et al. Group health supervision visits more effective than individual visits in delivering health care information. *Pediatrics*. 1993;91:668–670. [PubMed: 8441582]
15. Osborn LM, Woolley FR. Use of groups in well child care. *Pediatrics*. 1981;67:701–706. [PubMed: 7254999]
16. Rice RL, Slater CJ. An analysis of group versus individual child health supervision. *Clin Pediatr*. 1997;36:685–689.
17. Taylor JA, Davis RL, Kemper KJ. A randomized controlled trial of group versus individual well child care for high-risk children: maternal—child interaction and developmental outcomes. *Pediatrics*. 1997;99:E9.
18. Halfon N, Stevens GD, Larson K, et al. Duration of a well-child visit: association with content, family-centeredness, and satisfaction. *Pediatrics*. 2011;128:657–664. [PubMed: 21930541]

19. Bloomfield J, Rising SS. CenteringParenting: an innovative dyad model for group mother—infant care. *J Midwifery Womens Health*. 2013;58:683–689. [PubMed: 24406037]
20. Centering Healthcare Institute. CenteringParenting. Available at: <https://www.centeringhealthcare.org/what-we-do/centering-parenting>. Accessed April 22, 2018.
21. Agency for Healthcare Research and Quality. Group visits focused on prenatal care and parenting improve birth outcomes and provider efficiency. Available at: <https://innovations.ahrq.gov/profiles/group-visits-focused-prenatal-care-and-parenting-improve-birth-outcomes-and-provider>. Accessed July 20, 2017.
22. Ickovics JR, Kershaw TS, Westdahl C, et al. Group prenatal care and perinatal outcomes: a randomized controlled trial. *Obstet Gynecol*. 2007;110:330–339. [PubMed: 17666608]
23. Mittal P Centering parenting: pilot implementation of a group model for teaching family medicine residents well-child care. *Perm J*. 2011;15:40–41. [PubMed: 22319414]
24. Connor KA, Duran G, Faiz-Nassar M, et al. Feasibility of implementing group well baby/well woman dyad care at federally qualified health centers. *Acad Pediatr*. 2017. 10.1016/j.acap.2017.09.011.
25. Johnston JC, McNeil D, Lee G, et al. Piloting CenteringParenting in two Alberta public health well-child clinics. *Public Health Nurs*. 2017;34:229–237. [PubMed: 27501111]
26. Glascoe FP. Parents' evaluation of developmental status: how well do parents' concerns identify children with behavioral and emotional problems? *Clin Pediatr*. 2003;42:133–138.
27. Lee Hargraves J, Hays RD, Cleary PD. Psychometric properties of the Consumer Assessment of Health Plans Study (CAHPS) 2.0 Adult Core Survey. *Health Serv Res*. 2003;38:1509–1528. [PubMed: 14727785]
28. AHRQ. CAHPS Clinician & Group Survey and Reporting Kit 2008 (Four-Point Scale): Reporting Measures for the CAHPS Clinician & Group Survey (Four-Point Scale), Document No. 309. Rockville, Md: Agency for Healthcare Research and Quality; 2010. Available at: [https://www.communitycarenc.org/media/files/309-4\\_cg\\_reporting\\_measures\\_4pt.pdf](https://www.communitycarenc.org/media/files/309-4_cg_reporting_measures_4pt.pdf).
29. r n ec R, Barnett B, Matthey S. Development of an instrument to assess perceived self-efficacy in the parents of infants. *Res Nurs Health*. 2008;31:442–453. [PubMed: 18297638]
30. Cutrona CE, Russell DW. The provisions of social relationships and adaptation to stress. In: Jones WH, Perlman D, eds. *Advances in Personal Relationships*. Stamford, Conn: JAI Press; 1987:37–67.
31. Hsieh H-F, Shannon SE. Three approaches to qualitative content analysis. *Qual Health Res*. 2005;15:1277–1288. [PubMed: 16204405]
32. Yoshida H, Fenick AM, Rosenthal MS. Group well-child care: an analysis of cost. *Clin Pediatr*. 2014;5:387–394.
33. Taylor J, Kemper K. Group well child care for high risk families: maternal outcomes. *Arch Pediatr Adol Med*. 1998;152:579–582.
34. Taylor JA, Davis RL, Kemper KJ. Health care utilization and health status in high-risk children randomized to receive group or individual well child care. *Pediatrics*. 1997;100:E1.

### What's New

In this academic-community research partnership, we implemented the CenteringParenting model of group well-child care and pilot-tested it for acceptability and feasibility among a low-income population; we found that parents attended group visits, received recommended care, and reported positive experiences of care.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

**Table 1.**

**Acceptability: Centering Parenting-Specific Experiences of Care**

	Always/Usually (versus Sometimes/ Never)%(N)
1. How often did the provider give you enough time for questions?	100 (28)
2. How often do you feel you received enough patient education?	100 (28)
3. How often did you feel your individual needs were addressed?	93 (26)
4. How often did you participate in the weighing and measuring of your baby during the visit?	97 (27)
5. How often did you feel comfortable sharing your experiences in the circular setting?	97 (27)
6. How often did you feel the provider had an overall plan for the session?	97 (27)
7. How often did you feel the provider was able to change the overall plan of the session to meet the needs of the group?	97 (27)
8. How often did you feel comfortable talking and sharing with the other group members?	97 (27)
9. How did you feel about the number of participants?	
Just the right amount	64 (18)
Not enough	36 (10)
Too many	0
10. What did you like best about the group? *	
Social interaction and sharing of experiences	82.1 (23)
Learned valuable information on care	10.7 (3)
Other	7.1 (2)
11. What did you like least about the group? *	
Nothing	53.6 (15)
Was longer or difficult to schedule	14.3 (4)
Too few people	14.3 (4)
Other	17.9 (5)
12. What would you change? *	
Nothing	60.7 (17)
Time of meeting	10.7 (3)
More people in the group	17.9 (5)
Other	10.7 (3)
13. Overall care rating, mean (SD)	9.29 (0.94)

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

	Always/Usually (versus Sometimes/ Never)% (N)
14. Would you continue to stay in the group setting?	
Yes	100 (28)
No	0

\* Open-ended questions and the options listed for these are the main findings from qualitative analysis of data.

**Table 2.**

## Participant Characteristics (N = 40)

Characteristic	% (N)
Child race/ethnicity, % (N)	
Latino	40.0 (16)
White, non-Latino	5.0 (2)
Black, non-Latino	30.0 (12)
Other, non-Latino	25.0 (10)
Child age (days) at enrollment, mean (SD)	21.8 (7.8)
Child gender: female, % (N)	45.0 (18)
Highest household educational attainment, mean (SD)	
Less than high school	10.0 (4)
High school/GED	42.5 (17)
Some college/ 2-year degree	27.5 (11)
4-year college degree	20.0 (8)
Marital status, % (N)	
Married	27.5 (11)
Living with partner	40.0 (16)
Single/divorced	32.5 (13)
Currently employed, % (N)	
No	60.0 (24)
Yes, but taking leave from work	37.5 (15)
Yes	2.5 (1)
Annual household income, % (N)	
Less than \$10,000	25.0 (10)
\$10,001 to \$19,999	37.5 (15)
\$20,000 to \$34,999	25.0 (10)
\$35,000	10.0 (4)
Child's health insurance, % (N)	
Medicaid	97.5 (39)
Private insurance	2.5 (1)
Uninsured	0 (0)
Years parents had lived in United States, mean (SD)	12.8 (7.7)
Patient Health Questionnaire-2 composite	
Positive screen for depression, % (N)	2.5 (1)



**Table 3.** Outcome Measures (Feasibility, Acceptability, and Exploratory Measures) of CenteringParenting

	CenteringParenting % (N) or mean (SD)
All well visits completed (2-week and 2-, 4-, and 6-month visits)	89.3 (25)
How well providers communicate with patients composite (0–10 score) (Provider explained things clearly, listened carefully showed respect, spent enough time, knew important information about the child's medical history, gave easy to understand instructions)	9.9 (0.4)
Provider's attention to your child's growth and development composite (0–10 score) (Spoke with provider about child's normal behaviors, learning, growth, mood and emotions, and interaction with others)	9.3 (1.8)
Provider's advice on keeping your child safe and healthy composite (0–10 score) (Spoke with provider about the child's diet and activities, how to prevent injury and received information about injury prevention, and discussed any household problems)	8.9 (1.8)
Overall satisfaction with care (0–10 scale)	9.3 (0.9)
Urgent care/sick visits	
0 visits	57.1 (16)
1 visit	28.6 (8)
2 or more visits	14.3 (4)
Emergency department visits	
0 visits	78.6 (22)
1 visit	17.9 (5)
2 visits	3.5 (1)
Parental self-efficacy in parenting (mean score on Karitane Parenting Confidence Scale)	41.1 (2.5)
Parental social support (mean score on Social Provision Scale)	82.2 (8.3)