Innovating Well-Child Care to Improve Outcomes and Experiences of Low-Income Families

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Disclosures

• The authors have no financial relationships to disclose or Conflicts of Interest (COIs) to resolve.
• This presentation will not involve discussion of unapproved or off-label, experimental or investigational use.
Agenda

- Partnering with pediatric practices and clinics for innovation in well-child care
  - Development and design
  - Implementation and testing
  - Next steps and more questions
Rationale

- Well-Child Care (WCC) not currently meeting the needs of children in low-income communities
- Many children do not receive recommended care
- Need for sustainable, comprehensive models for WCC for infants and young children
Phase 1: Stakeholder Input

Phase 2: Development of the New Model of Care

Phase 3: Testing the New Model
Phase 1: Stakeholder Input

Phase 2: Development of the New Model of Care

Phase 3: Testing the New Model

Parents ➔ Payors ➔ Pediatricians
Phase 1: Stakeholder Input

Phase 2: Development of the New Model of Care

Phase 3: Testing the New Model

Community Advisory Board (CAB)

National Expert Panel
CAB Meetings

Expert Panel Process

CAB Model Selection
Expert Panel Process

- Quality of care provided
- Receipt of recommended WCC services
- Feasibility and efficiency of model
- Patient-centeredness of care

- Cost analysis (for CABs)
Designs for Well-Child Care

- Group Visit Model
- One-on-One Team-Based Model
- Mixed One-on-One/Group Visit Model
- Technology-based Model
Group Visit Model

One-on-One Team Based Model
WCC Delivery Models

- Reliance on health educator
- Reduced pediatrician-time
- Web-based pre-visit parent tool
  - customize the visit to the parents needs
  - complete any pre-visit screening
- Structured methods for parent communication
**PARENT**

- Parent-focused **Redesign for Encounters, Newborns to Toddlers**
  - Parent Coach
  - Well Visit Planner
  - Text Message Service
  - Brief, focused clinician encounter
Parent Coach
**Welcome Parents!** We hope you'll take a few minutes to complete the online questionnaire for YBPC before your child's next well-visit. Your answers will help your child’s health care providers focus on the specific topics you wish to discuss, as well as issues that are important for your child and family.

**Step 1**  
Answer a Questionnaire about your child and family

**Step 2**  
Pick Your Priorities for what you want to talk or get information about at your child’s well-visit

**Step 3**  
Get Your Visit Guide that you and your child’s health care provider will use to tailor the visit to your child & family needs

**New Users**  
Get Started  
Click Here to Begin

**Español**
Automated Text Message Service

Hearing your baby cry can be stressful. Learn more about why babies cry and how to cope @ http://goo.gl/7NST

Remember to only put your baby in a rear-facing infant seat in the rear of the car. Car seat safety tips @ http://goo.gl/A2Ggg
Methods

• Randomized controlled trial of PARENT vs. usual care
• Eligible families: infant ≤12 months
• Parent survey at 12-month post-enrollment to assess WCC quality and healthcare utilization
  • Promoting Healthy Development Survey (PHDS)
  • Consumer Assessment of Healthcare Providers and Systems (CAHPS)
Outcomes

- WCC Quality
  - Recommended Preventive Care
    - Anticipatory Guidance
    - Psychosocial Assessment
    - Developmental Services
  - Parent Experiences of Care
    - Family-centeredness
    - Helpfulness of Care
    - Overall Rating of Care

- Healthcare Utilization
  - Up-to-date on WCC Visits
  - Urgent Care Visits
  - Emergency Department (ED) Visits
Recruitment

Agreed to Speak to Research Assistant
N=270

Eligible
n=255

Ineligible
n=15

Declined to Participate
n=4

Enrolled
n=251
90% Retention

251 Enrolled
226 at 12-month
### RCT Participants

<table>
<thead>
<tr>
<th></th>
<th>N=251</th>
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<tbody>
<tr>
<td>Age at Enrollment (mean, SD)</td>
<td>4.5 months (3.5)</td>
</tr>
<tr>
<td>Child Race/Ethnicity</td>
<td></td>
</tr>
<tr>
<td>Latino</td>
<td>77%</td>
</tr>
<tr>
<td>Non-Latino White</td>
<td>1%</td>
</tr>
<tr>
<td>Non-Latino Black</td>
<td>18%</td>
</tr>
<tr>
<td>Non-Latino Other</td>
<td>4%</td>
</tr>
<tr>
<td>Household language- Spanish</td>
<td>46%</td>
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### RCT Participants

<table>
<thead>
<tr>
<th>Household education</th>
<th>N=251</th>
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<tr>
<td>&lt;HS</td>
<td>18%</td>
</tr>
<tr>
<td>HS/GED</td>
<td>36%</td>
</tr>
<tr>
<td>Some college</td>
<td>36%</td>
</tr>
<tr>
<td>4-year college degree</td>
<td>10%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Household Income</th>
<th></th>
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<tbody>
<tr>
<td>&lt;$20,000</td>
<td>64%</td>
</tr>
<tr>
<td>$20,000-$34,999</td>
<td>25%</td>
</tr>
<tr>
<td>$35,000 or more</td>
<td>11%</td>
</tr>
<tr>
<td>Receipt of Preventive Care</td>
<td>Control n=111</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Anticipatory Guidance</td>
<td>77.4 (24.5)</td>
</tr>
<tr>
<td>Health Information</td>
<td>89.6 (22.2)</td>
</tr>
<tr>
<td>Psychosocial Assessment</td>
<td></td>
</tr>
<tr>
<td>a. Family Risks</td>
<td>70.9 (36.4)</td>
</tr>
<tr>
<td>b. Tobacco, Drug, &amp; Alcohol</td>
<td>91.9 (21.9)</td>
</tr>
<tr>
<td>Receipt of Preventive Care</td>
<td>Control n=111</td>
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<td>-------------------------------------------</td>
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<tr>
<td>Structured Developmental Screening</td>
<td>81%</td>
</tr>
<tr>
<td>Parental D/B Concerns Addressed</td>
<td>74%</td>
</tr>
<tr>
<td>Experiences of Care</td>
<td>Control n=111</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td></td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Family Centered Care</td>
<td>92.4 (13.0)</td>
</tr>
<tr>
<td>Helpfulness of Care</td>
<td>82.1 (19.4)</td>
</tr>
<tr>
<td>Overall Rating of Care</td>
<td>91.7 (11.6)</td>
</tr>
<tr>
<td>Utilization</td>
<td>Control n=115</td>
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<tr>
<td>-----------------------------------------</td>
<td>---------------</td>
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<tr>
<td>Well-visits up to date</td>
<td>76%</td>
</tr>
<tr>
<td>Urgent care visits: ≥ 2</td>
<td>40%</td>
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<tr>
<td>Emergency department visits: ≥2</td>
<td>22%</td>
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Qualitative Interviews
Well Visits

• Used a team-based approach to care with parent coach and pediatrician (clinician) providing distinct elements of care
• Wait time is more efficiently used with PARENT intervention
Well Visits

It is quicker [now]... she already knew what I wanted to talk about... what specific topics... it changed my experience for the better.
Parent Coach

• Established positive and trusting relationship with parents
• Provided useful and timely information and guidance to parents
• Provided social-emotional support for their role in parenting
There was a time when my daughter was acting up... she [Parent Coach] downloaded a book for me and researched a facility where I could get more help or more information...it made me feel really special...
Well Visit Planner

• Provided an additional source of information and guidance
• Improved the efficiency of the visit by helping parents be more prepared for the visit
• Other options to access it, e.g., mobile phone
Well Visit Planner

I would do that [WVP] and I would see all the little options... I’d be like ‘oh yeah I need to ask her about this’... I liked the kiosk because that was more specific things... you could write comments... if you needed to remember something.
Text Message Service

- Helpful source of new information and reinforcement of information learned at well-visits
- Parents would have enjoyed more text messages, others reported that the number of text messages was adequate
...It wasn't enough to where they bugged [me], but it was enough to where I would remember... I think it was good like that.
Summary of Findings

✔ Better performance on receipt of WCC services
  • Anticipatory guidance and health education
  • Psychosocial screening
  • Structured developmental screening

✔ Better patient experiences of care
  • Helpfulness of care
  • Family-centeredness of care

✔ Fewer ED visits
Conclusions and Implications

• PARENT improves WCC quality for low-income families, and may lead to cost savings by substantially reducing ED utilization
• Financial incentives for reducing overall costs of care or for providing higher quality of care will help make PARENT a sustainable model
Next Steps

- Larger RCT across multiple practices and Parent Coaches (funded by NIH/NICHD)
  - Can this be replicated across multiple clinics/practices with other parent coaches?
  - How can the PARENT pre-visit tool element be improved to meet parents’ needs and reduce up-front costs of linking to the EMR?
  - Is PARENT cost-effective? Efficient?
  - Partner with health plans for sustainability plan
Partners and Funders

- Wee Care Pediatrics
- YBPC Pediatrics
- WCC Expert Panel Members
- HealthyTxt
- CAHMI (Well Visit Planner)
- CAB Members
- LA Care Health Plan

- NICHD
- HRSA
- UCLA/Kaiser Center for Health Equity
- Research Collaborators and Staff
Research Staff, Students, and Collaborators

Staff and Students
- Sandra Chacon, BS
- Sandra Contreras, MPH
- Naomi Mimila
- Fatima Urquilla
- Lorena Porras, MPH
- Kelly Mooney, BA
- Jeffrey Mercado, BS
- Christopher Biely, MS
- Candice Moreno, MPH
- Annika Windon, BA
- Tainayah Thomas, MPH
- Tanesha Moss, BA

Collaborators
- Paul Chung, MD, MS
- José Escarce, MD, PhD
- Paul Shekelle, MD, PhD
- Mark Schuster, MD, PhD
- Marc Elliott, PhD


Mooney K, et al. Well-child care clinical practice redesign- a community health center's perspective. *Journal of Primary Care and Community Health* 2013; 2150131913511641,