Design Options: Studying Welcome Baby Outcomes in the Best Start LA Communities

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Goals of an Outcomes Study

1. To examine the short-term and long-term outcomes demonstrated by Welcome Baby participants.

2. To understand if and how variation in Welcome Baby service delivery correlates with client outcomes.

3. To examine variation in outcomes based on client risk profiles and other client characteristics.
Research Questions

1. What features of service models and implementation are associated with key child and family outcomes?

2. Is there a difference between outcomes for women with various dosage levels?
   - e.g., Post-partum WB only; prenatal + post-partum WB; WB-lite;
   - How many engagement points are needed to demonstrate positive outcomes? Is there a minimum number needed?

3. How do client characteristics correlate with child and family outcomes?

4. What are the correlations between client risk profiles, referrals made, whether services were received, and child and family outcomes?
Design Options – Summary

Primary Data Collection
  1. Follow-up survey of Welcome Baby clients

Secondary Data Analysis
  1. Welcome Baby client outcomes using Stronger Families database
  2. Welcome Baby “Lite” client outcomes using Stronger Families database
  3. Linked administrative data from WIC, Medi-Cal, DCFS
  4. Secondary data sources for local comparison estimates
Study Design Options Involving Primary Data Collection
Primary Data Collection: Option 1: Follow-up Survey of Welcome Baby clients

- To measure long-term program outcomes past the 9-month home visit
- To examine associations between variation in family’s Welcome Baby experiences and their outcomes
- Longitudinal, in-home survey of a sample of Welcome Baby clients (potentially when child is 12, 24, and 36 months old)
  - # of waves optional; intervals could vary
- Measure the health and well-being of mothers and children’s health and school readiness
Survey Methodology Options

- Sample should include women from multiple sites
- Draw a stratified random sample
- Key stratification variables = hospitals, timing of enrollment (1\textsuperscript{st}/2nd trimester, 3\textsuperscript{rd} trimester, postpartum)
- The larger the sample the more precise the estimates, but 300 to 500 interviews would be enough to measure many key outcomes
- For sub-group analysis (for instance enrolled prenatally) some oversampling may be required
## Example Sample Sizes

### Margin of Error for Various Measures and Sample Sizes

<table>
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<tr>
<th>Measurement</th>
<th>Number of Enrolled Women</th>
<th>Survey Sample Size</th>
<th>Design Effect</th>
<th>Margin of Error (90%)</th>
<th>Margin of Error (95%)</th>
<th>Margin of Error (99%)</th>
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Potential Survey Constructs

- Quality of home environment
- Parenting behaviors and practices
- Breastfeeding
- Child nutrition
- Healthy weight
- Child development
- Maternal mental health
- Perceived social support and family functioning
- Linkages to services
Study Design Options Involving Secondary Data Analysis
Secondary Data Analysis: 
Option 1: Analysis of Welcome Baby Clients’ Initial Outcomes

- Stronger Families Database includes all data collected on Welcome Baby clients, including initial outcomes
  - Demographic and household characteristics
  - Program experiences (timing of entry, # visits, referrals, education)
  - Assessments (home safety, prenatal care, health insurance, breastfeeding, PHQ-9 for depression, ASQ for developmental delay)
- Select cohort of women who enroll during a specific period of time (over one year)
- Analyze associations between program experiences and potential benefits
- One year to complete; 2nd or 3rd year of evaluation
Secondary Data Analysis: Option 2: Analysis of Stronger Families Database for Welcome Baby Lite Clients

- To understand who participates in WB-Lite (high risk, non-Best Start Community) and how they compare to full WB (moderate/low risk in Best Start Communities)
  - e.g., characteristics, program experiences, initial outcomes
- WB-Lite offers only three postpartum engagement points (up to 2 months) vs. five points ending at 9 months
- Data would be limited but include some initial outcomes:
  - e.g., breastfeeding initiation, prenatal care, health insurance enrollment, home safety, and safe sleeping arrangements
- One year to complete; 2nd or 3rd year of evaluation
Secondary Data Analysis:
Option 3: Linking Welcome Baby clients to WIC, Medi-Cal, and DCFS Records

• Would provide information on clients’ ongoing use of these programs after exiting Welcome Baby, as well as reports of child abuse and neglect from DCFS
• Challenge: would require obtaining permission from agencies to access and link the data
• If linking to other data sources, client consent to link data would need to be obtained
• 18 months to complete (including obtaining data and analysis); 1st and 2nd year of evaluation
Secondary Data Analysis:
Option 4: Secondary Data Sources for Local Comparison Estimates

• National survey estimates provide unique source of comparison to WB clients on measures of child health and well-being
  • For many measures, estimates could be obtained for LA County
• National Survey of Children’s Health
  – Physical and emotional health of children ages 0-17
  – Last completed in 2012 and with national sample size of 95,677
• National Survey of Children with Special Health Care Needs
  – Prevalence and impact of “special needs” among children 0 to 17
  – Last completed in 2010 with a national sample size of 40,242
• One year to complete; final year of evaluation
Questions?