Getting to Outcomes: Early Results from a Randomized Control Trial of the Healthy Families Oregon Program:

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Background: Healthy Families Oregon

- Started 1993 –modeled on Healthy Start Hawaii
- Target population: First time parents of newborns, “high risk”
- Legislatively mandated performance benchmark evaluation
- HFA multi-site statewide system accreditation in 2007 & 2012
  - County based system, programs in all Oregon 36 counties
- Performance measurement increasingly questioned by legislation
- Strong program commitment to randomized evaluation
- Funded in 2010 by Children’s Bureau
Study Goals & Questions

1. “Gold standard” randomized study

2. Policy-relevant, cost-related outcomes:
   • Child maltreatment
   • Linkages/use of self-sufficiency resources
   • Linkages/use of to health care services

3. Early parenting outcomes within a statewide, accredited HFA program

4. “What works for whom?”
Methodology – Two Outcome Studies

Study 1: Administrative Data Study

✓ “Gold Standard” Randomized Trial
✓ Intent-to-treat sample
✓ Large sample to detect small effects
✓ Relied on state agency datasets:
  1. Child welfare data
  2. Substance abuse treatment data,
  3. Self sufficiency program data
  4. Medicaid billing records data
Study 2: Telephone Interview Study

- Important program outcomes NOT in state databases
- What early changes might lead to later outcomes?
- What services did control families get?
RCT: Target Population & Sample

- Study implemented in 7 of Oregon’s HFO programs – with many unserved eligible families
- Study 1: Full sample n=2727 (1438 program, 1289 control)
- Study 2: Subsample n=803 (403 HFO, 400 control)
HFO: Target Population: High Risk First Time Parents

- Eligibility Screening - “The New Baby Questionnaire”
- 10 Risk Factors At Randomization (Self-Report)
- 2 or more RF or Substance Abuse or Depression

1. Teen parent
2. Single parent
3. No adult employed full time
4. Late prenatal care
5. 5 or fewer prenatal visits
6. Less than HS diploma/GED
7. Parent concern with own/partner substance use
8. Family Relationship Difficulties
9. Difficulty meeting basic needs
10. Depression indicated
Recruitment & Random Assignment Process

Screened & Eligible for Program
Invited to Participate

Agreed to Program & Study
93% of Screened + Eligible Randomized

Declined Program, Declined Study or “Clinical Over Ride”
7% of Screened & Eligible Not Randomized

Got First Home Visit
44%

Never Re-contacted, Bad Phone Numbers, Could not Contact for First Home Visit

No Home Visits
56%

ALL included in RCT
Random subsample included in Telephone Interviews

<1 week – 7+ months
What Did We Learn?
Early Parenting Outcomes
Child’s 1st Birthday
Parents in HFO reported more HV services & Developmental Screenings

<table>
<thead>
<tr>
<th>Category</th>
<th>HFO</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Receiving any home visit</td>
<td>71%</td>
<td>21%</td>
</tr>
<tr>
<td>% HVS more than 1 agency</td>
<td>3%</td>
<td>13%</td>
</tr>
<tr>
<td>% Parenting Class</td>
<td>45%</td>
<td>50%</td>
</tr>
<tr>
<td>% Developmental Screening</td>
<td>94%</td>
<td>87%</td>
</tr>
</tbody>
</table>
Parents in HFO Read More Often

* $p < .05$
Parents in HFO Provided More Developmental Support – Singing, Playing, Daily Activities

Dev. Support
1=rarely/never  3=sometimes  5=often
*p<.05
Trend Indicating Parents in HFO Had Less Parenting Stress

*\( p = .069 \), trend

PSI

HFO Control

2.02 2.19

*Where are YOU on the stressed out mom scale?*
What Outcomes Did Not Show Effects at 1 Year?

- Breastfeeding – trend for teenaged moms screened prenatally
- Immunizations, regular doctor, health insurance coverage
- Family Functioning (Protective Factors Scale)
- Parenting/Child Development Knowledge (Protective Factors Scale)
What Did We Learn?
Child Welfare, Self-Sufficiency & Health Services at Child’s 2\textsuperscript{nd} birthday
What to Do About Low Program Participation?

• Create a second comparison group – visited vs. not visited “Propensity Score Matching”

• Lose “gold standard” design

• Lower power (smaller sample, n=500 per group matched)

• Gain ability to look at “minimum dose” group for HFO
Effects on Child Welfare Reports
Full Randomized Sample (and PSM)

367 (out of 2,727) children had a founded or unfounded report

367 (out of 2,727) children had a founded or unfounded report

Ever Reported

- Not Significantly Different

14% (HFO) vs. 13% (Controls)

367 (out of 2,727) children had a founded or unfounded report

Ever Unfounded*

- Not Significantly Different

9.70% (HFO) vs. 7.90% (Controls)

6.30% (HFO) vs. 6.00% (Controls)

Ever Founded

- Not Significantly Different

6.30% (HFO) vs. 6.00% (Controls)

Full Randomized Sample (and PSM)
Effects on Visited vs Non Visited Families Placement Outcomes (N= 40 Children)

- 101 children were placed out of home – 3.7% overall

- 90% Placed with Kin
- 62% Placed in Stranger FC
- 36.80% Controls
- 68.40% Reunified
- 28.60% Controls

4/5/2016
Evidence for Surveillance Effects

- 81% of *unfounded reports* while enrolled in HFO
- 89% of *founded reports* were when they were *not* receiving home visits
- More founded reports on families with more/specific risk factors

Size & Timing Consistent with Prior Research

- NFP – 5 years until CW impacts
- EHS – 5-9 Years
- HFNY – Only for prior CW/highest risk
- HFMA – Surveillance first 3 years
Effects on Other Services – Self Sufficiency Services Linkages & Use

Full RCT
- More likely to be enrolled TANF 1\textsuperscript{st} time (45.2\% vs. 39.1\%)
- More days SNAP/food stamps (488 vs. 464 days)

Visited vs. Not Visited
- More days receiving TANF (187 vs. 167)
- More days employment services (111 vs. 89.2)
# Effects on Health-Related Services Linkage & Use

<table>
<thead>
<tr>
<th>Full RCT</th>
<th>Visited vs. Not Visited</th>
</tr>
</thead>
<tbody>
<tr>
<td>• No differences in health insurance enrollment or utilization, immunizations, well baby, ER visits</td>
<td>• More days health insurance coverage for mothers and babies</td>
</tr>
<tr>
<td>• HFO significantly more likely to receive AOD TX (4.9% vs. 3.8%)</td>
<td>• More medical claims for mothers and babies</td>
</tr>
<tr>
<td></td>
<td>• More well baby visits (6.4 vs. 6.1)</td>
</tr>
</tbody>
</table>
Summing it Up

Positive (Modest) Early Program Effects on:

- Early parenting – Reading, developmental support
- Parent well-being – Reduced parenting stress
- Health – Increased rate of developmental screens
- Surveillance effects on maltreatment reports
- Access to self-sufficiency resources
- Use of health services
- Access to substance abuse treatment
Digging Deeper: What Works for Whom?
Does HFO Have Different Outcomes for Different Families?

Key Subgroups

1. Race/Ethnicity:
   • White mothers vs. Latina mothers

2. Different Risk Factors
   • Depression Indicated vs. No Depression
   • Teen mothers vs. non-Teen moms
   • Lower vs. Highest Risk
Stronger Program Effect for Non-Depressed Mothers

Frequency of Developmentally Supportive Activities at 1 Year

- Low Depression
- Depression Risk

HFO Controls
Stronger Program Effects for Highest Risk Families

Parenting Related Stress at 1 Year

- <2 Risks
- 3-4 Risks
- 5+ Risks

HFO
Controls
Stronger Program Effects for Highest Risk Families

Maternal Depression at 1 Year

- <2 Risks
- 3-4 Risks
- 5+ Risks

HFO vs Controls
Stronger Program Effects for Highest Risk Families

AAPI – Belief Corporal Punishment is “Ok” at 1 Year

- <2 Risks
- 3-4 Risks
- 5+ Risks

HFO Controls
## Patterns of Maltreatment Reporting for Higher Risk Families

<table>
<thead>
<tr>
<th></th>
<th>Lower Risk (2 or fewer) N=990</th>
<th>Moderate Risk (3-4 risk factors) N=1307</th>
<th>Higher risk (5+ RFs) N=410</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HFO</td>
<td>Control</td>
<td>HFO</td>
</tr>
<tr>
<td>% Ever Founded</td>
<td>2.9</td>
<td>2.8</td>
<td>6.7</td>
</tr>
<tr>
<td>% Ever Unfounded</td>
<td>5.1</td>
<td>5.8</td>
<td>10.4</td>
</tr>
<tr>
<td>% Founded Neglect</td>
<td>2.7</td>
<td>2.6</td>
<td>7.6</td>
</tr>
<tr>
<td>% Founded Abuse</td>
<td>.6</td>
<td>.6</td>
<td>.4</td>
</tr>
</tbody>
</table>
Digging Still Deeper: What’s Going on With Highest Risk Families?
### Who Are Highest Risk Families?

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Lower Risk (2 or fewer) N=990</th>
<th>Moderate Risk (3-4 risk factors) n=1306</th>
<th>Higher risk (5+ RFs) N=410</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Hispanic</td>
<td>23.5%</td>
<td>26.5%</td>
<td>35.9%*</td>
</tr>
<tr>
<td>% Teen Mother</td>
<td>10%</td>
<td>12%</td>
<td>51%*</td>
</tr>
<tr>
<td>% Single</td>
<td>65%</td>
<td>87%</td>
<td>98%*</td>
</tr>
<tr>
<td>LS High school education</td>
<td>11%</td>
<td>34%</td>
<td>78%*</td>
</tr>
<tr>
<td>Unemployed</td>
<td>11%</td>
<td>42.5%</td>
<td>79.5%*</td>
</tr>
</tbody>
</table>
## Do They Get Different Services?

<table>
<thead>
<tr>
<th>Implementation Variables</th>
<th>Lower Risk (2 or fewer) N=237</th>
<th>Moderate Risk (3-4 risk factors) N=317</th>
<th>Higher risk (5+ RFs) n=111</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Screening:</strong> HFO Screening Done Prenatally</td>
<td>29%</td>
<td>34%</td>
<td>43%*</td>
</tr>
<tr>
<td><strong>Ever engaged:</strong> Screened, agreed to services + got first home visit</td>
<td>43%</td>
<td>45%</td>
<td>48%*</td>
</tr>
<tr>
<td><strong>Early Engagement:</strong> Number visits first 3 months</td>
<td>8.2</td>
<td>8.3</td>
<td>8.2</td>
</tr>
<tr>
<td><strong>Time in Program:</strong> Months in the program</td>
<td>14.9</td>
<td>14.9</td>
<td>13.4</td>
</tr>
<tr>
<td><strong>Total Number of Visits</strong> in 24 months</td>
<td>28.2</td>
<td>28.8</td>
<td>24.1*</td>
</tr>
<tr>
<td><strong>Visit Completion:</strong> % of expected visits received</td>
<td>75%</td>
<td>75%</td>
<td>77%</td>
</tr>
<tr>
<td><strong>Creative Outreach:</strong> # times placed on CO</td>
<td>.75</td>
<td>.92</td>
<td>1.0*</td>
</tr>
</tbody>
</table>
## Patterns of Engagement

<table>
<thead>
<tr>
<th>Engage Early, Stay in Program</th>
<th>“In and Out”</th>
<th>Leave Early</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Highest Risk</td>
<td>• Moms with AOD issues</td>
<td></td>
</tr>
<tr>
<td>• Moms with less social support</td>
<td>• Unemployed households</td>
<td></td>
</tr>
<tr>
<td>• Prenatally screened mothers</td>
<td></td>
<td>• Teen parents</td>
</tr>
<tr>
<td>• Depressed mothers</td>
<td>• Unmarried mothers</td>
<td></td>
</tr>
<tr>
<td>• Mothers reporting relationship difficulties</td>
<td></td>
<td>• Unemployed households</td>
</tr>
</tbody>
</table>

**Leave Early**
- Teen parents
- Unemployed households
- Unmarried mothers
What Does it Mean?

✓ Program makes a difference overall
✓ Greater impacts for highest risk – in areas related to maltreatment
✓ Still seeing more unfounded reports for highest risk
Thank you!

- **Children’s Bureau**: Grant #90CA1782 from the U.S. Department of Health and Human Services
- **Evaluation Team**: Jerod Tarte, Mary Beth Sanders, Paige Harrison, Ashley Snoddy
- **State Staff Team**: Christi Peeples, Linda Jones, Karen Van Tassell
- **Programs and staff in participating HFO programs**: Clackamas, Deschutes, Douglas, Jackson, Lane, Marion, and Polk Counties
- **Families** who agreed to support the evaluation, and filled out forms and completed interviews