Every Child Succeeds
Evidence-based Home Visitation Innovation

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Every Child Succeeds

- Community-based home visitation
- Public-private partnership
- 1st time mothers w/demographic risks, enrolled prenatal through 3 months of age
- Ohio & Kentucky, 6 counties
- 2 models: Healthy Families America & Nurse Family Partnership, 2 ½-3 years
- Web-based data system (eECS), QI Program, research focus
CHARACTERISTICS OF ECS MOTHERS

Average age: 19 years

Race:
- Caucasian: 64%
- African American: 33%
- Other: 3%

Demographic Risk Factors
- Unmarried: 96%
- 18 years or younger: 35%
- Low Income: 78%
- Late, inadequate, no prenatal care: 27%

Other Risk Factors
- Other social challenges: 75%
- Socially isolated: 75%
- Multiple stressors: 78%
- Trauma history: 69%
eECS: Web-based system for data collection & dissemination

Home Visitor
Supervisor
Manager

IHPHSR

ECS Administration
& Evaluation Team

Data quality
Program monitoring
Outcomes
Reports
Finance
Model fidelity
Program evolution
Research

Service enhancement
Supervision
Quality indicators
Quality improvement
Course of Depression (BDI > 13) from Enrollment to 9 months in ECS (N = 806)

- 55.8%: ND--ND
- 19.2%: D--ND
- 15.6%: D--D
- 9.4%: ND--D
- 44.2%: are depressed in 1st year of service

88% do not get mental health treatment

Ammerman, Putnam, et al., in press
Home Visitation & Maternal Depression

• Home visitation has little to no impact on maternal depression:
  – Hawaii Health Start Evaluation
  – Alaska HFA Evaluation
  – New York HFA Evaluation
  – Massachusetts HFA Evaluation
  – Early Head Start Evaluation

• With ECS alone the Beck Depression Inventory decreased only 2 points over 9 months
In Home-Cognitive Behavior Therapy (IH-CBT) Features

- **Adapted**: uses evidence-based treatment (CBT) adapted to home visiting context
- **Innovative setting**: psychotherapy provided in the home by trained masters level therapist
- **Intensive**: 15 weekly sessions, booster session one month later
- **Fits population**: first-time, at risk mothers identified with depression postpartum
- **Integrated**: works closely with home visitor through centralized cases notes, email/telephone, and shared 15th session
Clinical Features of MIDIS Subjects: Current and Lifetime Comorbid Psychiatric Disorders

Comorbid: 59.3%
Mean #: 1.39 (1.37)
Pre-Post Comparisons of IH-CBT & Controls on MDD Diagnosis

\[ X^2 = 13.9, \ p < .001 \]
Summary

• Prevention programs such as ECS attract a sizable clinical population—this creates both challenges and opportunities.
• Depression in the sample is highly comorbid, particularly with PTSD.
• IH-CBT effectively reduced depression as measured by clinician ratings and self-report.
ECS Reduces Infant Mortality

**Updated Infant Mortality Rates**

<table>
<thead>
<tr>
<th></th>
<th>Number of Infant Deaths per 1,000 Births</th>
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</thead>
<tbody>
<tr>
<td>ECS</td>
<td>4.7</td>
</tr>
<tr>
<td>KENTUCKY</td>
<td>6.9</td>
</tr>
<tr>
<td>OHIO</td>
<td>7.8</td>
</tr>
<tr>
<td>HAMILTON COUNTY</td>
<td>9.7</td>
</tr>
<tr>
<td>CITY OF CINCINNATI</td>
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</tbody>
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**DATA SOURCES**

City of Cincinnati: Ohio Department of Health, 2004
Hamilton County: Ohio Department of Health, 2006
Kentucky: Kentucky Department for Public Health, 2005
Ohio: Ohio Department of Health, 2006

ECS: "Intensive Home Visiting Is Associated with Decreased Risk of Infant Death", Pediatrics, Donovan et al., 2007
Design & Case Selection

1665 ECS Cases
4995 matched case controls
(3:1) match

2,308 enrolled in ECS 2000-2002

- 927 linked to 2000 or 2001 Ohio birth certificate
  - 927 included in study data set
- 766 linked to 2000, 2001 or 2002 Kentucky birth certificate
  - 738 included in study data set
- 615 no matching birth certificate identified
  - 28 excluded because birth did not occur in Ohio or Kentucky

"Intensive Home Visiting is Associated with Decreased Risk of Infant Death", 
*Pediatrics*, Donovan et al., 2007
Predicted Probabilities of Infant Death

“Intensive Home Visiting is Associated with Decreased Risk of Infant Death”, *Pediatrics*, Donovan et al., 2007
Conclusions

• Home visitation can address major public health problems, e.g., maternal depression & infant mortality

• Home visitation program can reach high risk families who are least likely to use center-based services

• Home visitation programs can take advantage of web-based, data-driven management to improve quality and target services