Enhanced Engagement and Behavioral Health Integrated Centralized Intake:
Infusing Mental Health Services and Support Into Maternal and Child Health Home Visiting Programs

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Perinatal Depression: What We Know

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What is Perinatal Depression?
- 50 – 80% of all women get “the baby blues” when they are pregnant or after delivery
- About 10 – 15% of all women go on to develop major depression which can affect their own health as well as their parenting

Perinatal Depression: Who is at Risk?
- All women are at greater risk for depression in their childbearing years
- Not just “postpartum depression”
  - 12 - 14% during the last 3 months of pregnancy
  - 12 - 15% at 6 weeks after delivery
- More risks for women with life stress
  - 25 - 30% in studies of low-income urban Moms
  - 35% in a large study of low-income African-American Moms
Where do we go from here?

Partnering for Real World Strategies

Enhanced Engagement

Maternal and Child Health Home Visiting

CBPR Partnership (2006-2012)

Children's Health Involving Parents (CHIP) of Greater Richmond
- Serving "at risk" families with children age 0-6.
- Maternal and child health promotion
- Parenting skills
- Case management
- Mental health support as needed
- Nurse, social work, and paraprofessional (community health worker) team model

Enhanced Engagement Model

- Begins with assessment of depressive symptoms and stressful life events
- Uses motivational interviewing to engage women into mental health promotion intervention
- Allows choice among four, six-session modules:
Enhanced Engagement Modules:

1. Grief, loss and life transition (IPT based)
2. Relationship conflict (IPT based)
3. Adapting to new parenting (CBT based)
4. Understanding and coping with depression (CBT based)

Measures

- EPDS (Edinburgh Postnatal Depression Scale)
  - 10 question questionnaire
- CES-D (Center for Epidemiological Studies, Depression Scale)
  - 20 item version
- PHQ (Patient Health Questionnaire)
  - 9 item self-report checklist; 2 item brief screener
- BDI (Beck Depression Inventory)
- BAI (Beck Anxiety Inventory)
- Duke-UNC Functional Social Support Questionnaire
- SSQ Social Support Questionnaire
- Life Events Checklist

Pilot Study

- May 2011 – February 2012
  - 20 usual care enrolled May-August
  - 20 Enhanced Engagement enrolled Sept-Dec
- Manualized delivery of modules
- Baseline at new enrollment, follow-up at 10 weeks, chart review
- Team integration of mental health in enhanced engagement arm

Pilot Groups

Usual Care
- Unlimited mental health visits with clinical staff
- Standard assessment
- Team with nurse and outreach worker; mental health co-located

Enhanced Engagement
- Manualized intervention for symptom severity/life events
- Standardized depression screening and life events history
- Team defined as nurse, outreach worker, and mental health
Study Objectives

1. To what extent does the Enhanced Engagement intervention decrease depressive symptoms (PHQ-9) and increase social support (SSQ-R)?

2. To what extent do the narratives from the Enhanced Engagement participants thematically illustrate specific references to mental health content and/or satisfaction with services in comparison with usual care?

3. What are the observed differences between groups in terms of program utilization, cost per person of service delivery, and community mental health service linkage after 10 weeks?

Quantitative Findings

- **Intervention Group**
  - Significant decreases in depressive symptoms via PHQ-9 ($t=2.81, p=.02$) and BDI-II ($t=2.29, p=.04$)
  - Increase in perceived social support: SSQ ($t=3.04, p=.01$)
  - Depressive symptom reduction (PHQ-9) remained significantly associated with the intervention adjusting for covariation in depressive symptoms. ANCOVA ($F(1,24)=3.60, p=.05$)

- **Usual Care**
  - No significant pre-post differences in the usual care group on any instruments

Depressive Symptoms

Group x Time Interaction

Perceived Social Support

Group x Time Interaction
Qualitative Findings

- More specific recall of therapeutic content in intervention group (use of content specific language and techniques)
- High levels of self-reported improvement in mood and reduction in stress with intervention
- Strong themes of cultural respect and social support improvement in both groups

Administrative Data

- Record reviews at 12 weeks
  - Usual Care: 25 mental health visits (67% success rate)
  - Enhanced Engagement: 45 mental health visits (73% success rate)
- Per person calculated cost (inc. "crisis" time)
  - $153.30 per usual care
  - $147.50 per Enhanced Engagement

Background: Behavioral Health Integrated Centralized Intake Project

- Four year research expansion grant funded through HRSA/ACF via the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) expansion grants
- Targeted under-resourced communities in Virginia where one or more MIECHV-identified home visiting programs were in operation
- Communities applied through competitive RFP and were selected for the demonstration project
- CEnR partnership established with each identified community to develop a working Behavioral Health Integrated Centralized Intake system that met the needs and context of each community
- Co-learning and coordination among the four communities in partnership with the research team
Evaluation Components

The participatory evaluation design for this project was reviewed and approved through the DOHVE and OPRE federal review process:

- **Quantitative Components**: Change in identification of behavioral health risks and community referral; engagement of target population into home visiting and community behavioral health programs
- **Qualitative Components**: Thematic and case study analysis of community facilitators and barriers to CI and behavioral health referrals
- **Community Impact**: Change in provider readiness and enhancement in community systems for behavioral health risk screening and referral

Building Blocks of BH-CI

- Partnered to develop contextually-driven Centralized Intake, infused with first point of entry behavioral health risk screening using the Institute for Health and Recovery (IHR) Behavioral Health Risk Screening tool (perinatal depression, substance use, smoking, interpersonal violence)
- Each community developed unique aspects of their CI process, building on their context-specific expertise.
- Consistently utilized a tiered screening for risk identification, home visiting eligibility, information, linkage and “warm hand-off” to appropriate care provider(s) using Screening, Brief Intervention, and Referral to Treatment (SBIRT)
- “Risk Triggers” rather than diagnostic indicators are used to motivate clients toward service engagement.

Behavioral Health Risk Screening

- Virginia Behavioral Health Risk Screen (BHRS)
- Modified from the Institute for Health and Recovery (IHR) risk screen
- Substitutes the Edinburg 3 item screener for perinatal depression and link to EPDS, links to Relationship Assessment Tool and “4 P’s” to be consistent with home visiting program protocols
- Auto-populated screening & referral protocols based on entered risk triggers

Completion Rates

- Completion of BHRS once centralized intake was initiated: **97%**
- Completion of full depression screen when risk was triggered: **95%**
- Completion of SBIRT steps 1 - 3: **94%**
  - (State Concern; Check Response; Advise re: Risk)
- Outcome of SBIRT as psychoeducation: **70%**
- Outcome of SBIRT as service referral: **60%**
Influence of Behavioral Health

- One of the encouraging findings from the BH-CI data is that even in multi-variable models, an identified risk for perinatal depression was the strongest predictor of referral to home visiting programs beyond other systemic, geographic, site identification, as well as individual risk variables (F=32.198, p<.0005; model R²=.073).

Questions and Conclusions

- Home Visiting programs may be an important facilitator for mental health promotion and early intervention
- Service coordination for mental health may be effectively integrated as part of wider MCH/Early Childhood efforts
- Cross-sector service engagement, education, and support will be essential to future success.