Presenters

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Financial Disclosures

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Why primary care?

- 121,000,000 visits (< 15 years old)
- 64,000,000 visits (< 4 years old)
- Type of insurance
  - 60% private insurance
- Routine infant/child well-child check
  - 34,000,000 visits/year*
- Reasons for visit
  - Well-child checks (routine, health supervision)
  - Sick visits (acute)
  - Treatment of chronic conditions

* 11 recommended visits in the first 4 years (7 in the first year)
Early Childhood Behavioral Health Integration

Screening
• Developmental
• Pregnancy related depression (PRD)
• Psychosocial/Environmental

Case-based consultation/Intervention
• Typical developmental concerns (feeding, sleeping, milestones)
• Behavioral concerns (tantrums, adjustment, adversity)
• Family factors
• Counseling and brief therapy services

Prevention/Health Promotion/Intervention
• Group-based (Centering Pregnancy/Parenting, well-child, Baby & Me)
• Healthy Steps for Young Children, Reach out and Read

Care coordination/Systems of Care
• Identification, triage
• Referral, closing the loop
• Community connection (Bright by Three, home visitation)
CORNET Study: Collaborative Care Levels

- **Exclusive Referral:** mental health/behavioral care is referred out to local resources

- **Traditional Care:** mental health/behavioral care is provided by the pediatrician based on the provider’s comfort level and available resources; i.e., some conditions treated and more complex conditions referred to local resources

- **Phone Consultation Model:** pediatric behavioral/mental health specialist is available for phone consultation during the visit, which provides guidance in evaluation and triage of these issues.

- **Enhanced Care:** pediatric behavioral/mental health specialist has an office in the pediatric clinic setting that allows for easy referral, but requires a return visit to see the specialist

- **Integrated / Collaborative Care** Co-location of developmental, behavioral, and mental health consultants, or direct service providers available for consultation at the time of identification by the pediatric provider without the need for a return visit
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  - CLIMB to Community
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- Denver Post Season to Share
- Community First Foundation
  - BHIPP:0-5
Child Health Clinic

• Children’s Hospital Colorado
• Large urban primary care teaching clinic
• Low income = >90% Medicaid/SCHIP
• 29,000 visits per year
• 60% of visits for zero to 3 years
• 56% Hispanic, 40% Spanish Primary Language
• Pod based clinic design
• Dissemination to community based clinics
Our Team

Administration:
- Maya Bunik, MD, MSPH
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- Ayelet Talmi, PhD

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- Amy Nash, MD
- Rupa Narra, MD
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- Sita Kedia, MD
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CLIMB…how we started

• Partnership of Psychiatry and Pediatrics
• Initial Health Foundation funding

Started with:

• Developmental screening (>85% rates)
• Added pregnancy-related depression screening
• Built foundation of collaboration and co-management of two disciplines
• Planned for sustainability with funds from ASQ & Dept of Peds making it whole
Program and Services

• Developmental Screening Initiative (Child)
• Pregnancy related depression (PRD) screening (Caregiver, Child, Family)
• Healthy Steps for Young Children & MIECHV (Child, Caregiver, Family)
• Baby & Me at the CHC (Child, Caregiver, Family)
• Case-based consultation (Child, Caregiver, Family)
• Care coordination, triage, and referral (Child, Caregiver, Family)
• Psychopharmacology consultations (Child)
• Counseling and brief therapy services (Child, Caregiver, Family)
• CLIMB to Community pilot (Child, Caregiver, Family)
• Training and education (Providers/Health Professionals)
  ▪ Formal didactics
  ▪ Precepting trainees
  ▪ Collaborative care
## Medical and Psychiatric Diagnoses (by age)

<table>
<thead>
<tr>
<th>Medical Dx</th>
<th>Total</th>
<th>0-3</th>
<th>3-6</th>
<th>6+</th>
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<tr>
<td>Well Child Check</td>
<td>3885</td>
<td>2685</td>
<td>167</td>
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<tr>
<td>Asthma</td>
<td>364</td>
<td>34</td>
<td>28</td>
<td>302</td>
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<tr>
<td>Weight Issues</td>
<td>340</td>
<td>19</td>
<td>29</td>
<td>292</td>
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<tr>
<td>Feeding problems</td>
<td>265</td>
<td>241</td>
<td>3</td>
<td>21</td>
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<td>Failure to Thrive</td>
<td>145</td>
<td>117</td>
<td>5</td>
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<thead>
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<th>Psychological Dx</th>
<th>Total</th>
<th>0-3</th>
<th>3-6</th>
<th>6+</th>
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<tr>
<td>ADHD</td>
<td>1135</td>
<td>1</td>
<td>11</td>
<td>1123</td>
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<tr>
<td>Mood Disorder</td>
<td>387</td>
<td>2</td>
<td>1</td>
<td>384</td>
</tr>
<tr>
<td>Behavior problems</td>
<td>340</td>
<td>19</td>
<td>29</td>
<td>292</td>
</tr>
<tr>
<td>Developmental Delay</td>
<td>252</td>
<td>88</td>
<td>23</td>
<td>141</td>
</tr>
<tr>
<td>Other mental health concern</td>
<td>110</td>
<td>8</td>
<td>13</td>
<td>89</td>
</tr>
<tr>
<td>PTSD</td>
<td>49</td>
<td>0</td>
<td>0</td>
<td>49</td>
</tr>
</tbody>
</table>
Consultation Type by Age (%)

* Mothers of patients birth to 4 months were screened for pregnancy-related depression
* Mothers of patients birth to 4 months were screened for pregnancy-related depression
CLIMB Recommendations Made by Age Group (%)

* Mothers of patients birth to 4 months were screened for pregnancy-related depression
Developmental Screening and Closing the Referral Loop

Figure 1. Early Intervention Referrals for Abnormal Screening Results: Completed Evaluations and PCP Documentation

ASQ and EI Findings

• Developmental screening and referral is necessary but not sufficient.
• Success of developmental screening process depends on enhancing referral completion.
• An intervention providing phone follow-up and assistance with referral yielded higher rates of referral and greater provider knowledge of referral outcomes.

A Step in the Right Direction
Healthy Steps for Young Children (www.healthysteps.org)

• Provide enhanced developmental services in pediatric primary care settings;
• Focus on developing a close relationship between the clinician and the family in order to address the physical, socioemotional, and cognitive development of babies and young children;
• Currently used in 18 residency training programs nationally
• MIECHV funding to expand our program and develop new sites across Colorado
• Baby & Me at the CHC
• (Child, Caregiver, Family)
Content analysis of well-child visits, Healthy Steps vs. control

<table>
<thead>
<tr>
<th>Topic</th>
<th>Control</th>
<th>Healthy Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast Feeding</td>
<td>17%</td>
<td>70%</td>
</tr>
<tr>
<td>Postpartum depression</td>
<td>11%</td>
<td>48%</td>
</tr>
<tr>
<td>How parent is feeling</td>
<td>6%</td>
<td>75%</td>
</tr>
<tr>
<td>Child Care</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>Home Safety</td>
<td>6%</td>
<td>56%</td>
</tr>
<tr>
<td>Temperament</td>
<td>0%</td>
<td>28%</td>
</tr>
<tr>
<td>Promoting healthy eating</td>
<td>6%</td>
<td>28%</td>
</tr>
<tr>
<td>Sleep</td>
<td>0%</td>
<td>63%</td>
</tr>
<tr>
<td>Daytime/Nighttime routines</td>
<td>0%</td>
<td>35%</td>
</tr>
<tr>
<td>Importance of Play</td>
<td>3%</td>
<td>33%</td>
</tr>
<tr>
<td>Social Skills</td>
<td>3%</td>
<td>38%</td>
</tr>
<tr>
<td>Language Development</td>
<td>8%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Baby & Me at the CHC
Pregnancy-Related Depression

- Formal screening at well-child visits from birth to four months using *Edinburgh Postnatal Depression Scale* (Cox et al., 1987)

- Primary care services
  - Training for providers
  - Psychoeducation
  - Support to mothers
  - Referral
  - Electronic medical record

- System changes
  - Capacity building

- *(Caregiver, Child, Family)*

And How are You Doing?

In the past 7 days:

1. I have been able to laugh and see the funny side of things
   - As much as I always could
   - Not quite so much now
   - Definitely not so much now
   - Not at all

2. I have looked forward with enjoyment to things
   - As much as I ever did
   - Rather less than I used to
   - Definitely less than I used to
   - Hardly at all

3. I have blamed myself unnecessarily when things went wrong
   - Yes, most of the time
   - Yes, some of the time
   - Not very often
   - No, never

4. I have been anxious or worried for no good reason
   - No, not at all
   - Hardly ever
   - Yes, sometimes
   - Yes, very often

5. I have felt scared or panicky for no very good reason
   - Yes, quite a lot
   - Yes, sometimes
   - No, not much
   - No, not at all

6. Things have been getting on top of me
   - Yes, most of the time I haven’t been able to cope at all
   - Yes, sometimes I haven’t been coping as well as usual
   - No, most of the time I have coped quite well
   - No, I have been coping as well as ever

7. I have been so unhappy that I have had difficulty sleeping
   - Yes, most of the time
   - Yes, sometimes
   - Not very often
   - No, not at all

8. I have felt sad or miserable
   - Yes, most of the time
   - Yes, quite often
   - Not very often
   - No, not at all

9. I have been so unhappy that I have been crying
   - Yes, most of the time
   - Yes, quite often
   - Only occasionally
   - No, never

10. The thought of harming myself has occurred to me
    - Yes, quite often
    - Sometimes
    - Hardly ever
    - Never
Pregnancy-Related Depressive Symptoms Guidance

For anyone who works with women of childbearing age or their children:

- Depression is the most common complication of pregnancy.
- Maternal and paternal mental health affect child/health’s development.

**Background**

**Protective Factors**
- Balanced nutrition, physical activity and healthy sleep
- Family planning for an intended pregnancy
- Perinatal & infant social and material support
- Parenting confidence
- Recognition of traditional postpartum cultural practices
- Positive parenting role models
- Support of breastfeeding decision
- Healthy co-parent involvement

**Risk Factors**
- Personal history of major or postpartum depression
- Family history of postpartum depression
- Team pregnancy
- History of substance use or interpersonal violence
- Unplanned/unwanted pregnancy
- Complications of pregnancy, labor/delivery or infant’s health
- Fetal/Newborn loss
- Infant relinquishment
- Difficulty breastfeeding
- Sleep deprivation
- Major life stressors

**Pregnancy-related depressive symptoms can occur during pregnancy through one year postpartum**
- Anxiety symptoms commonly co-occur
- May include intrusive/irrational thoughts
- Mom may appear detached/hypervigilant
- Suicidal ideation may be present

**Baby Blues** (~80% of women may experience)
- Birth to 2 weeks postpartum
- Resolves in approx. 14 days
- Ructuating emotions
- No suicidal ideation

**Starting the Conversation**

1. **Address Stigma**
   - "Many women feel anxious or depressed during pregnancy or postpartum."
   - "A woman deserves to feel well."
   - "Many women experience treatment options are available.

2. **Explore Expectations**
   - Pregnancy and postpartum experiences and expectations vary.
   - "What are you thinking about being pregnant as a new mother?"
   - "What has surprised you about being pregnant as a new mom?"
   - "What has it been like for you to take care of your baby?"
   - "What barriers or challenges related to pregnancy or soon after the baby is born are you facing?"

3. **Explore Social Support**
   - "Who can you talk to that you trust?"
   - "How have your relationships been going since becoming a parent or a new mom?"
   - "Who can you turn to for help?"

**Screening**

When implementing screening, consider other services & resources that may be needed:
- Medical providers to prescribe medication
- Mental health and psychiatric services
- A partner to address suicide risk

**When to Screen**
- Preconception & Interconception
- Each trimester throughout pregnancy
- At postpartum visits
- Well child visits up to 1 year postpartum

**Who Could Screen**
- Medical providers
- Mental health providers
- Community-based providers
- Early childhood practitioners

**What Brief Screening Tool to Start With**

Edinburgh-3 Brief Screen in the past 7 days:
1. I have blamed myself unnecessarily when things went wrong.
   Yes, most of the time (1) No, some of the time (2) Not very often (3) No, never (0)
2. I have been anxious or worried about things that would normally not worry me.
   No, not at all (0) Hardly ever (1) Yes, sometimes (2) Yes, very often (3)
3. I have felt that I could not get going.
   Yes, all of the time (1) Yes, some of the time (2) No, not much (3) No, not at all (0)

Score a 4+ should receive further screening and assessment.

Refer women with depressive symptoms to a medical or mental health provider for further assessment.

Other tools validated for pregnancy and postpartum.

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BHIPP: 0-5
Behavioral Health Integration for Pediatric Populations: 0-5
BHIPP:0-5 Practices

• Nine metro-area practices
  ▪ Private and non-profit pediatric PC
  ▪ Safety net clinics
  ▪ Family medicine

• Baseline data collection
  ▪ Population Data
  ▪ Screening Processes
  ▪ Behavioral Health Activities
Technical Assistance Team

• Early childhood behavioral health integration:
  ▪ Identifying current and desired EC care delivery model
  ▪ Collection and evaluating data
  ▪ Training and skill building for EC service delivery
  ▪ Developing processes and implementing EC practice change

• Practice transformation
  ▪ Building data systems for collection/extraction, reporting, rapid cycle QI
  ▪ Change management
  ▪ Risk stratification
  ▪ Parent/patient engagement
  ▪ Team-based care
  ▪ Population health
Systems Issues

- LAUNCH and LAUNCH Together
- Maternal Infant Early Childhood Home Visitation (MIECHV) federal funding
- State Innovations Model (SIM) - $65M
- Office of Early Childhood
- Accountable Care Collaboratives (ACCs)
- Behavioral Health Organizations (BHOs)
First 1,000 Days

Improving young child and family outcomes and mitigating toxic stress through innovative programming, internal quality improvement efforts and partnerships that recognize the importance of gestation through age two.

40,000
Children’s Hospital Colorado’s population under the age of 2

57% PUBLIC INSURANCE

9,000 – 11,000 children expected to have at least one risk factor for Adverse Childhood Experience (ACE)

117,000 visits under the age of 2

100+ suggested strategies analyzed and compiled into five priority areas

GOALS

- Increase universal awareness of the First 1,000 Days of life using a broad media campaign to reach parents, then provide internet and text-based resources to those who seek deeper understanding.
- Increase healthcare provider awareness and understanding of the importance of the First 1,000 Days by offering thorough and impactful training to all levels of medical staff and eventually extending the training to providers at pediatric and family practices outside of CHCO network.
- Improve CHCO’s position as a policy advocate by assessing the hospital’s own internal policies, particularly those that impact the parents of young children, and creating a “best in class” work environment for those parents.
- Implement universal psychosocial screening using standardized tools in key departments within CHCO. Provide targeted interventions, at the appropriate level of intensity, to those families whose personal circumstances are negatively impacting the health of their children.
- Expanded partnerships with pre-natal providers in order to reduce premature births, increase referrals to pediatric settings that prioritize social and emotional health, and ensure more babies and young parents have medical homes.

OUTCOMES

- Create universal awareness through public engagement and a shared messaging campaign.
- Develop and deliver health care professional trainings internally, adapt and deliver health care professional trainings externally, cultivate an advanced practitioner cohort to expand capacity and leadership.
- “Best in Practice” organization, improved employee population health, position CHCO as an advocate for state/national change.
- Design and implement screening protocols; identify families with psychosocial concerns; identify resources and create a response system to provide families with supports and services to address their needs; Provide immediate, impactful interventions to families who need them.
- Design and implement family level interventions for families identified; reduce premature birth; secure medical homes; increase partner providers.
Young Mind’s Matter

- Obstacles & Opportunities:
  - Access and Delivery Models
  - Financing
  - Workforce & Systems Capacity
What we learned along the way

Challenges

- Design a service that uniquely meets needs
- Attend to implementation and process details
- Train in the model
- Whose patient is it?
- Long-term sustainability

Lessons

- Build relationships, meet often, engage stakeholders
- Set up systems that allow for ongoing evaluation, QI, and scholarship
- Practice change requires practice
- Develop protocols together
- Pilot, partner, and proactively seek funding
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Thank you.

Questions?