



Child FIRST Overview

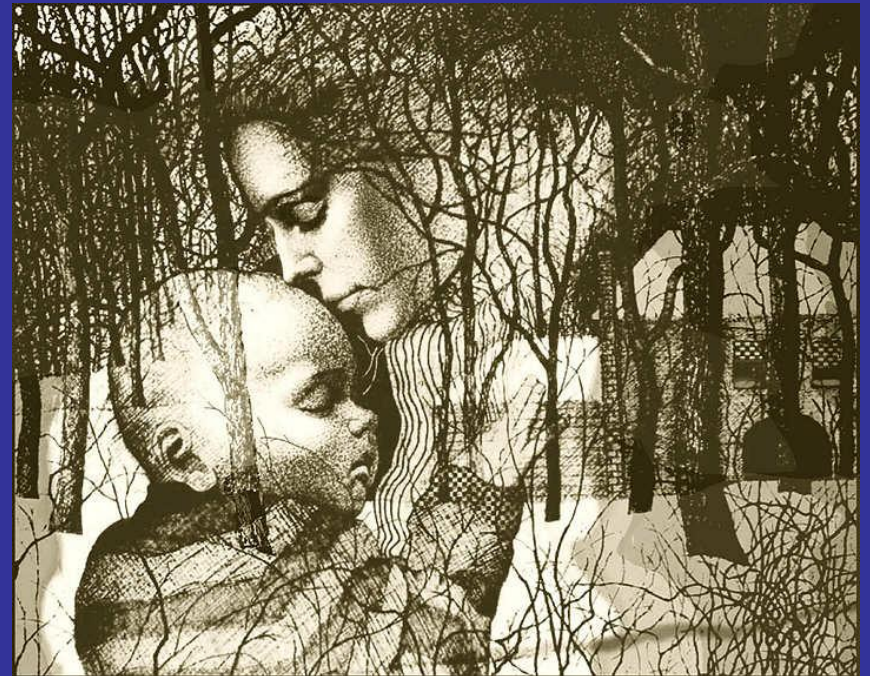
Early Childhood Alliance

September 1, 2011

The Goal of Child FIRST Is To Prevent:

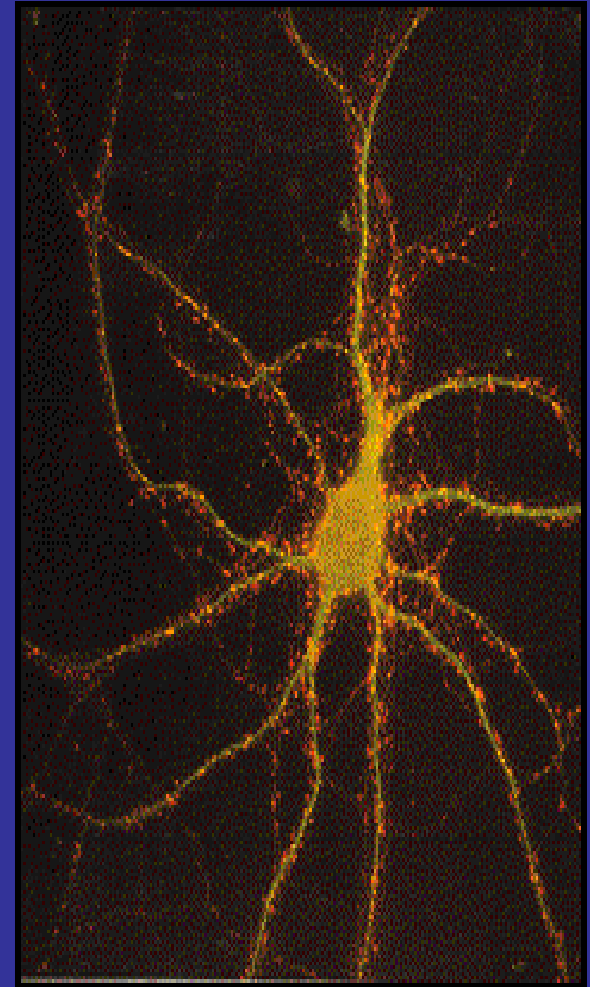
- Emotional and behavioral disturbance
- Developmental and learning problems
- Abuse and neglect

We must identify and intervene early, if we are going to prevent these very serious problems.



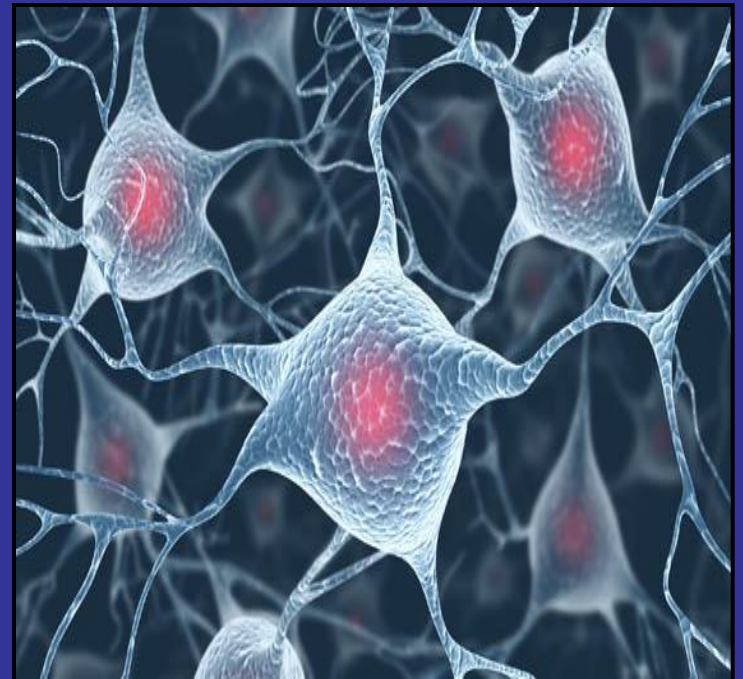
Brain Development

- By 8 months of age, brain synapses have increased from 50 to 1000 trillion.
- By 3 years, 80% of brain growth is complete.



Nature AND Nurture

- What happens in the environment turns genes on and off.
- When the same experience happens again and again, the brain becomes hard-wired.



Early Experiences Can Transmit Across Generations

Maternal diet change during pregnancy causes changes to offspring's **fur color, obesity, and cancer risk** in genetically identical mice.



Source: Jirtle & Skinner (2007)

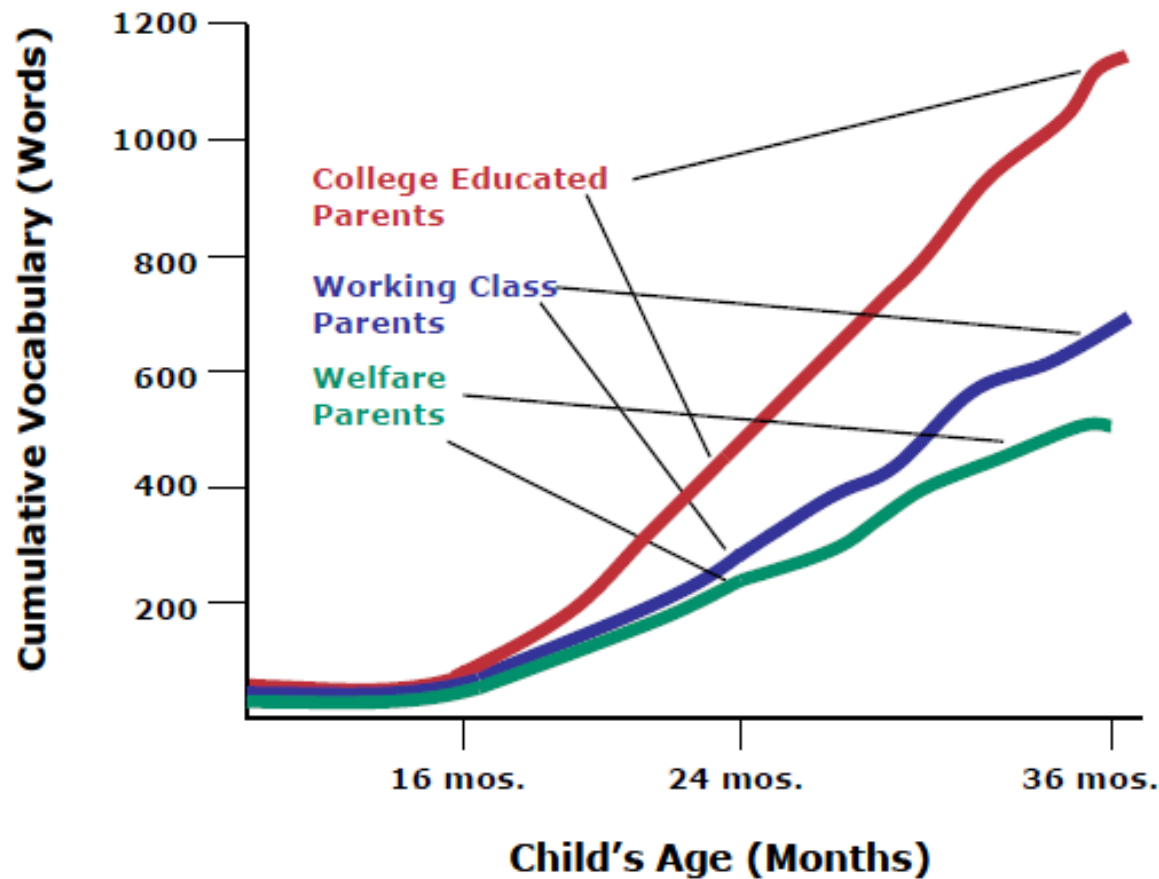
Power of Nurturing Relationships

- It is the **back and forth interaction of contingent, reciprocal responses** between parent/caregiver and child – the “serve and return” – which largely determines how the wiring of the brain will take place.

Caregiving Environment and the Achievement Gap

- By age 2 years, children talked to frequently have 300 more words.
- By age 3 years, children of professional parents have 1,100 words; those with parents on Welfare have only 525 words.
- By age 4 years, children of professionals have experienced almost 45 million words; those with parents on Welfare have experienced only 13 million words.

Barriers to Educational Achievement Emerge at a Very Young Age



Source: Hart & Risley (1995)

- This brain architecture is the foundation for all future learning.
- An infant's **early experiences** build the architecture of the brain.
- Whether it will be **strong and solid**, or **weak and fragile** is determined by the child's **early** experience.

Question?

What happens to brain development in the face of **multiple psycho-social risks**, when early experiences are threatening, unpredictable, neglectful, or abusive?

TOXIC STRESS



Prolonged, repeated activation of the body's stress response system **damages** the developing brain!

Environmental Risks

- Extreme poverty
- Domestic and community violence
- Abuse and neglect
- Parental mental health issues, especially depression and post traumatic stress disorder
- Substance abuse
- Homelessness
- Teen and single parenthood
- Isolation and lack of social supports
- Lack of education and illiteracy
- Unemployment
- Health and dental issues
- Poor quality child care
- Lack of basic needs: food, clothing, heat, furniture
- Incarceration



Risk and Brain Development

- Children who are not touched have brains which are 20-30% smaller.
- 40% of depressed mothers have babies with decreased brain activity.



Biologic Effect of Profound Neglect



This 11 year old girl is the size of a 4 year old.

She has markedly reduced brain function and growth.

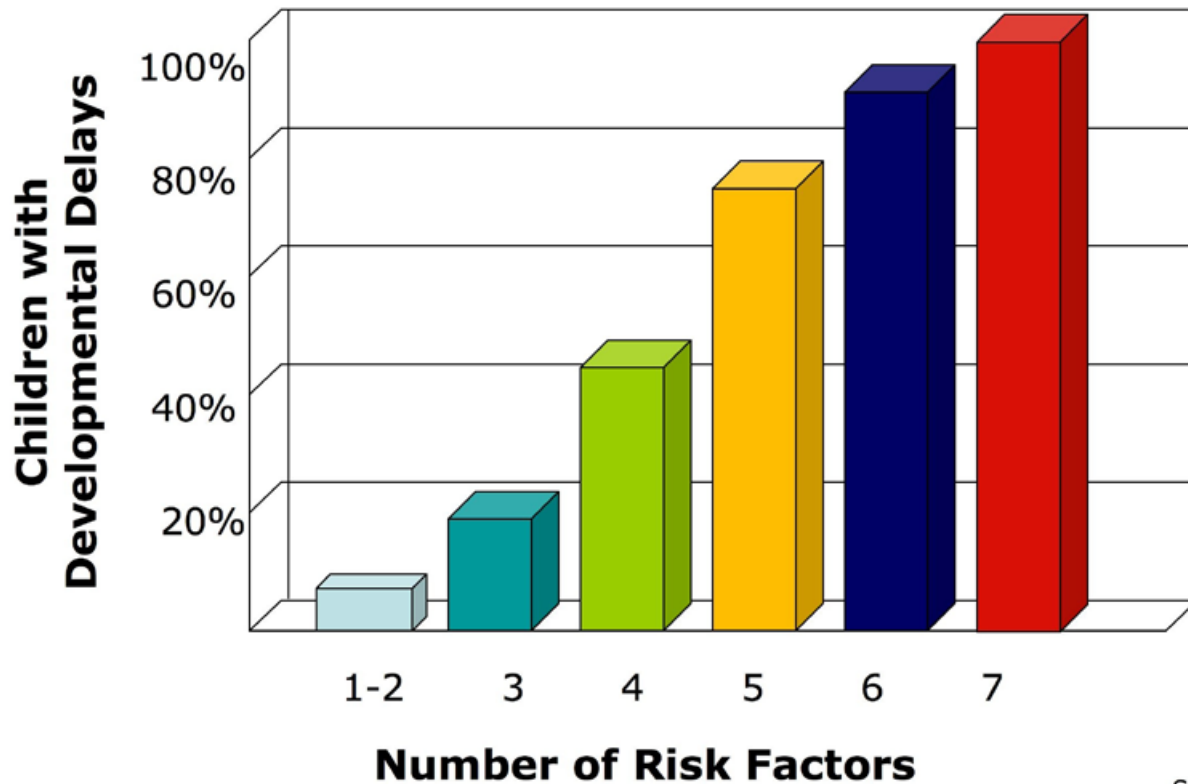
Cumulative, Long-Term Response to Environmental Risks

- Children with 4 risk factors were 10 times more likely to have a psychiatric impairment as those with 0-1 risk factors.
- Emotional or behavioral problems at age 3 years
→ 50% psychiatric diagnosis by kindergarten or 1st grade.





Significant Adversity Impairs Development in the First Three Years



Consequences of Toxic Stress

- **Mental health problems:** Depression, anxiety, substance abuse, post traumatic stress disorder
- **Learning problems:** Difficulties with memory, attention, information processing
- **Physical health problems:** Heart disease, cancer, and diabetes

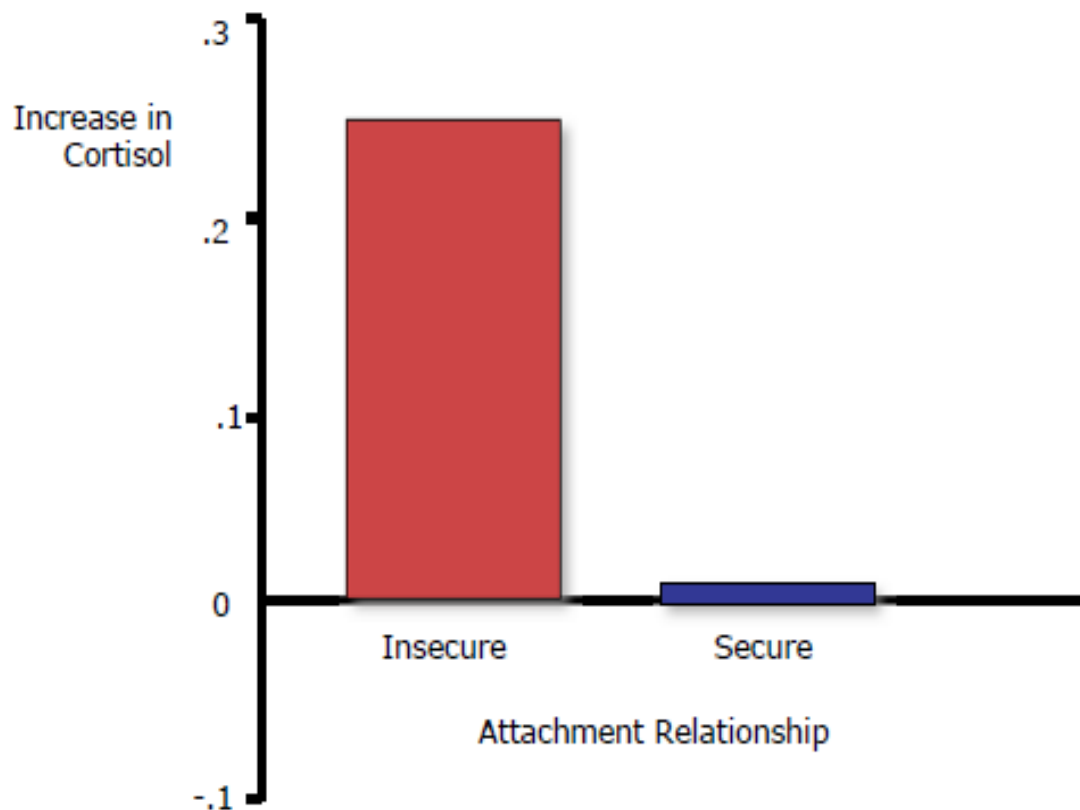
Responsive Caregiving Relationship

Buffers the effects of exposure to **toxic stress** and protects the developing brain.

Turns toxic stress into **tolerable stress**.



Secure Relationships Calm Children's Stress Hormone Response



Source: Nachmias et al. (1996)

School Success

**Language & Cognitive
Development**

**Social - Emotional
Health**

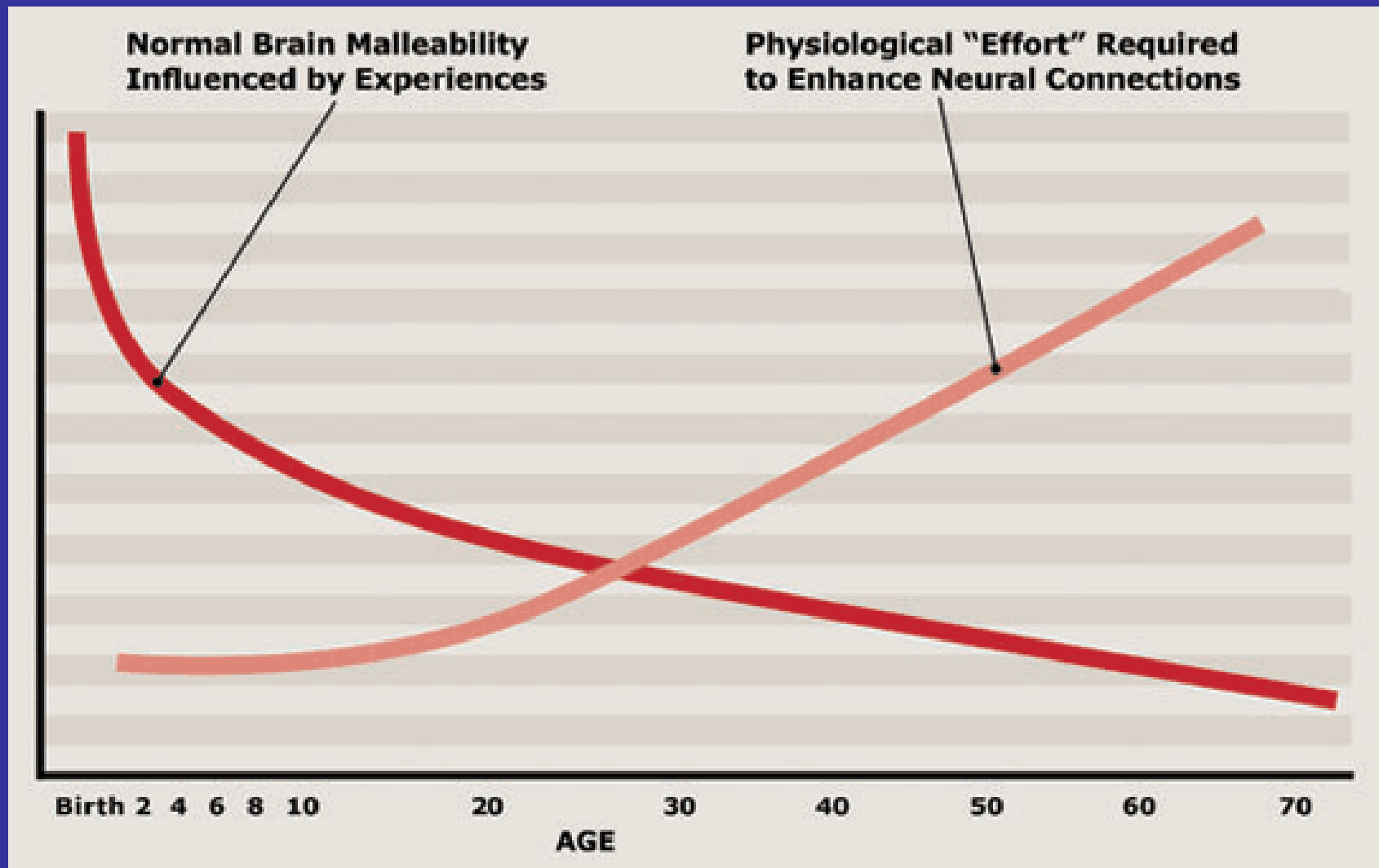
Physical Health

**Nurturing
Relationships**

We Must Intervene Early

- **Change in brain structure is easy early in development.**
- Change in brain structure is increasing difficult as the child grows older.
 - **Later treatment is extremely costly!**
 - **Later outcomes are poor!**

Interaction between Brain Plasticity and Age





Goal of Child FIRST is to reach the **MOST VULNERABLE** young children to:

- Build strong families
- Prevent emotional and behavioral disturbance
- Prevent developmental and learning problems
- Prevent abuse and neglect

(1) Decrease environmental stress and connect children and families to needed services and supports

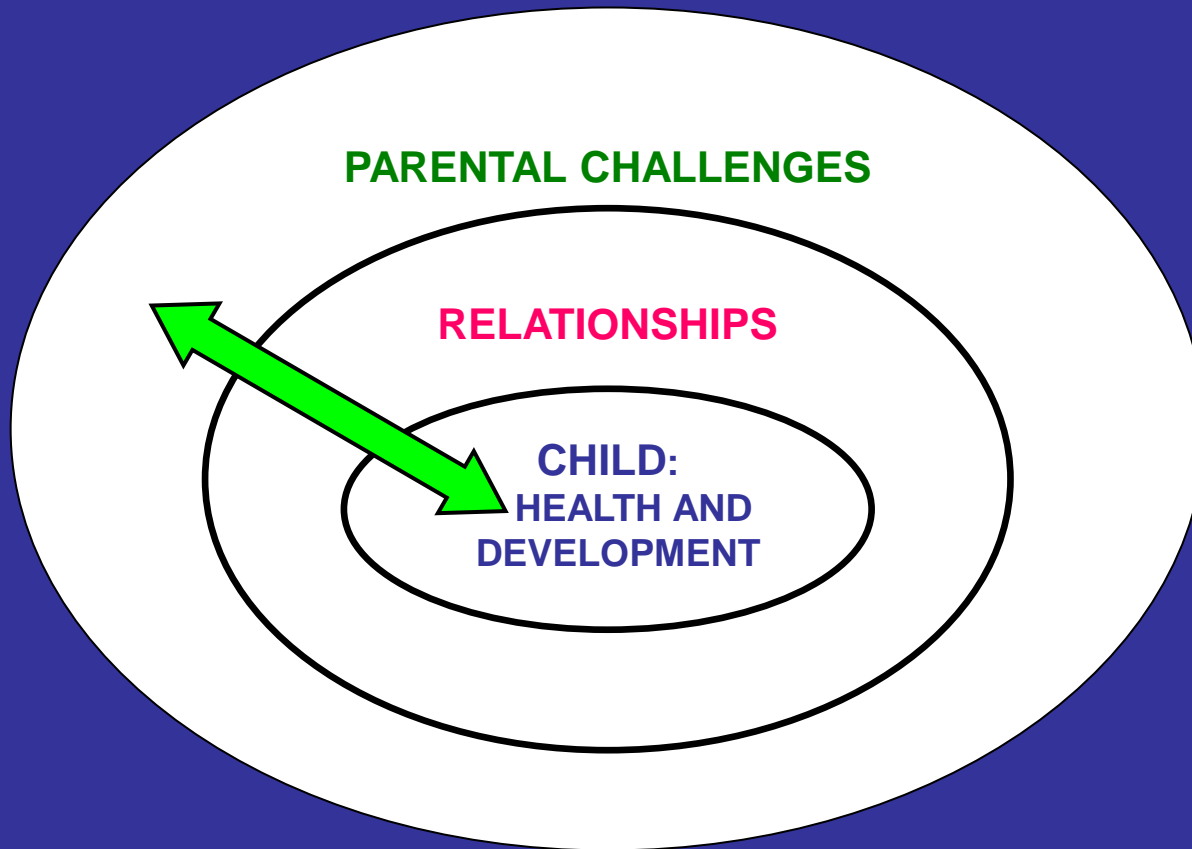
- System of care approach
- Broad collaboration of community providers
- Enhance, coordinate, and link existing community services
 - Virtual “one stop shopping”
 - Prevents duplication, inefficiency, gaps

(2) Facilitate the development of responsive, nurturing parent-child relationships

- **Buffers the developing brain from toxic stress.**
- Decrease in emotional and behavioral disturbance, cognitive disability, need for child protection, and health problems.



Ecological Approach



Target Population: Children

- Prenatal to 6 years
 - May begin intervention at any time
- Any problem that threatens healthy development, especially:
 - Emotional/behavioral problems
 - Developmental/learning problems
 - Abuse and neglect
- Serve families with multiple children

Target Population: Parents

- Parents with multiple challenges:
 - DCF involvement
 - Substance use
 - Depression and other mental health problems
 - Domestic violence
 - Homelessness
 - Poverty
- No exclusions except geographic area

Staff

- Highly trained and experienced team works with the family:
 - Masters level mental health and developmental clinician
 - Bachelors or Associates level care coordinator
- Multi-ethnic, multi-lingual
- Weekly individual and group reflective supervision

Components of Child FIRST Home-Based Intervention

- Referrals from broad array of community providers serving both children and adults
- Sustained engagement process
- Comprehensive assessment of strengths and needs of all members of the family
- Broad, well-coordinated family-driven Plan of Care, including all family members

Child FIRST Home-Based Intervention

- Parent guidance
- Parent-child, two generation, psychotherapeutic intervention
- Mental health consultation in early education
- Hands-on care coordination and case management to access services and supports



Services

- Primary and specialty pediatric care
- Early care and education
- Birth to Three
- Special education
- Child mental health
- Parenting groups
- Family Resource Centers
- Parent mentors and aides
- Adult mental health
- Substance abuse treatment
- Adult health care
- Legal aide
- Domestic violence services
- Housing / shelters
- Job training
- Computer training
- Food stamps / SNAP
- Food banks
- HUSKY
- GED
- Literacy
- ESL
- WIC
- TANF
- SSI
- CSHCN
- Clothing and furniture
- Toys and books

Child FIRST Randomized Trial

[*Child Development*, January/February 2011]

- Ethnicity/race:
 - 59% Latino, 30% Black, 7% Caucasian
- Risk factors:
 - 94% public assistance
 - 67% unmarried
 - 64% unemployed
 - 54% depression
 - 53% did not complete high school
 - 44% history of substance abuse
 - 25% history of homelessness

Child FIRST

Results of Randomized Trial

At 12 Month Follow-up:

- Child FIRST children were significantly less likely to have aggressive and defiant behaviors. (Odds ratio = 4.8)
- Child FIRST children were significantly less likely to have language problems. (Odds ratio = 4.2)

Child FIRST

Results of Randomized Trial

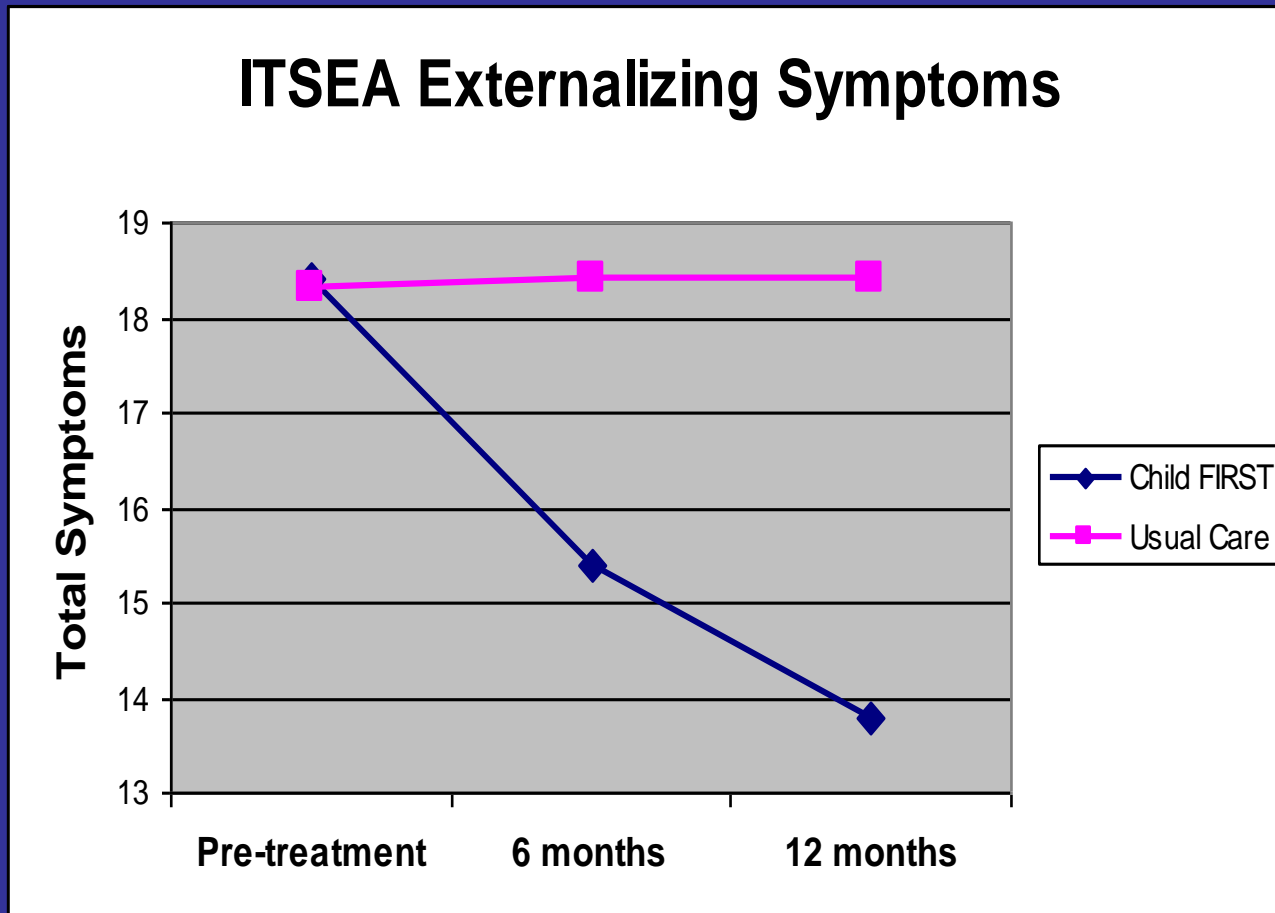
- Child FIRST mothers had significantly lower levels of depression and mental health problems (Odds ratio = 4.1)
- Child FIRST families were significantly less likely to be involved with DCF by parent report. (Odds ratio = 4.1)

Child FIRST

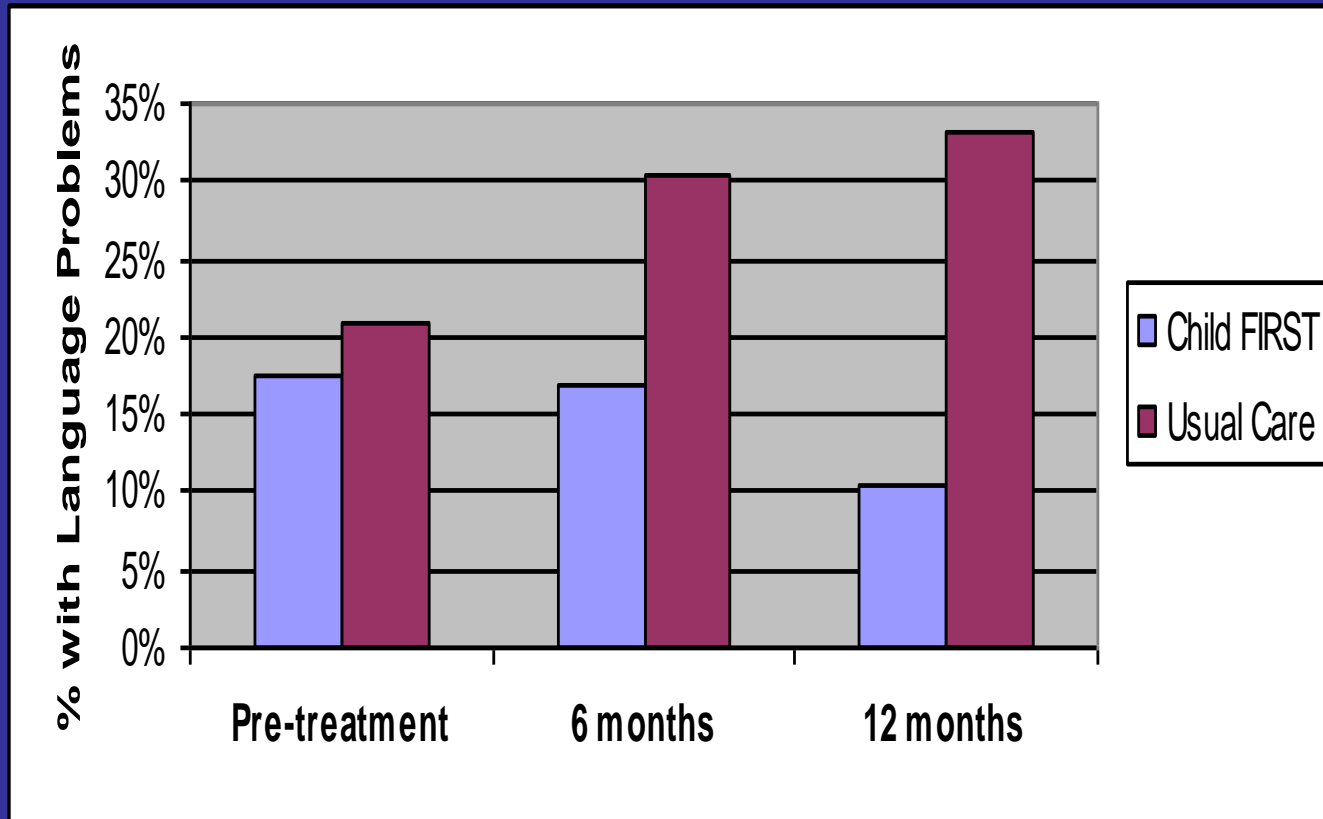
Results of Randomized Trial

- Child FIRST families had **markedly increased access to community-based services (91% vs. 33%)**.
- Child FIRST families had **very high Parent Satisfaction: Mean of 4.6 (range 1-5)**

Child Mental Health Problems

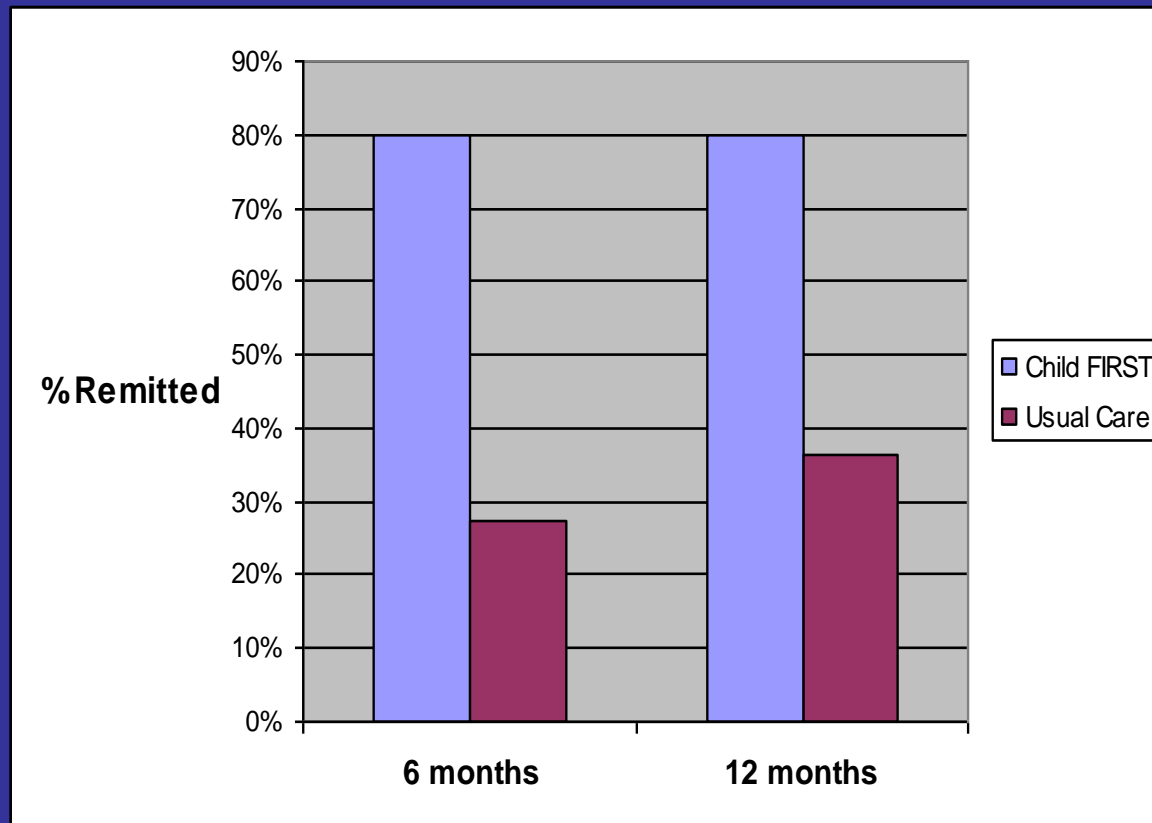


Child Language Problems



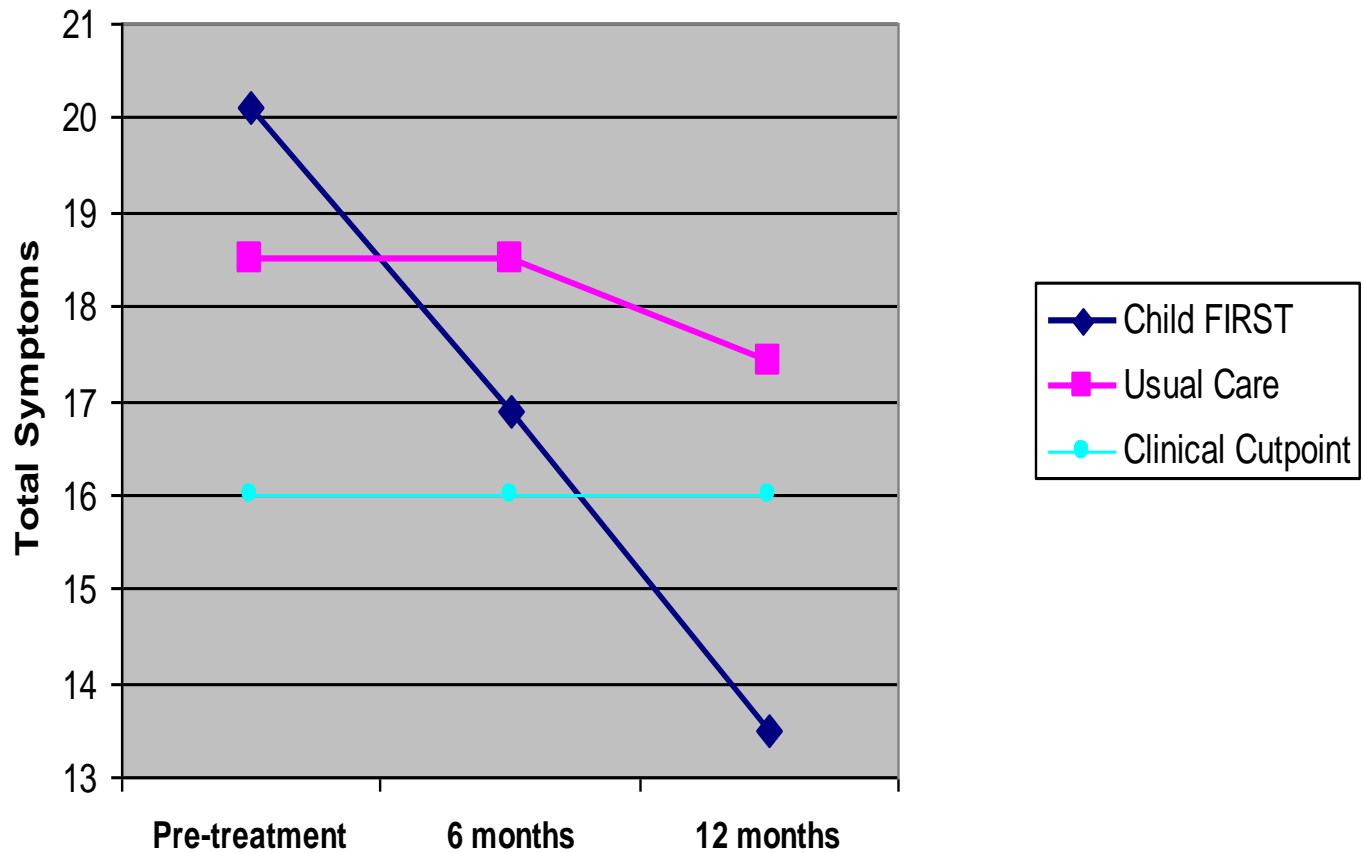
Child Language Development

Remittance of Language Problems: Normal Language in Children with Baseline Language Problems

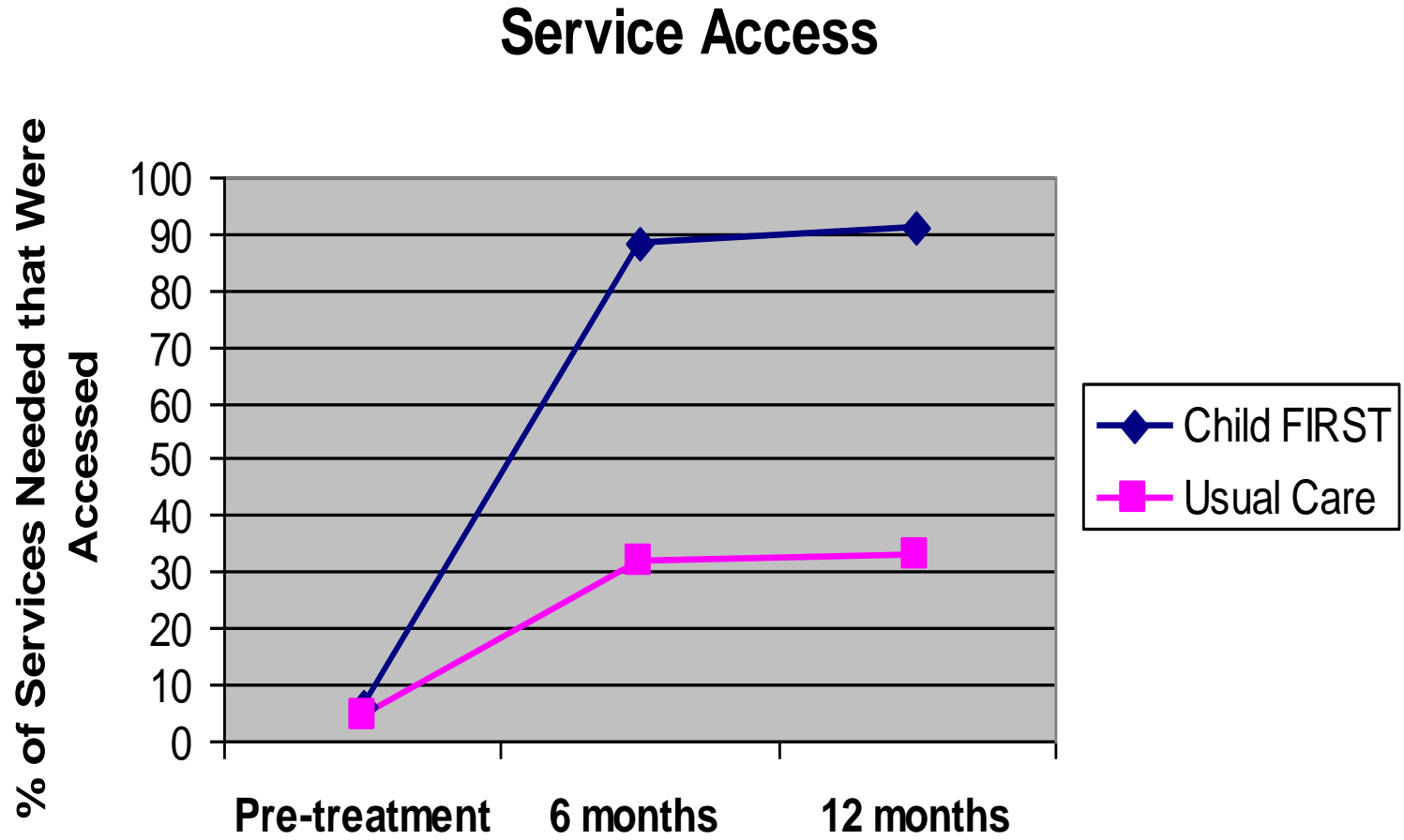


Maternal Depression

Depressive Symptoms on the CES-D



Access to Services



Fiscal Impact

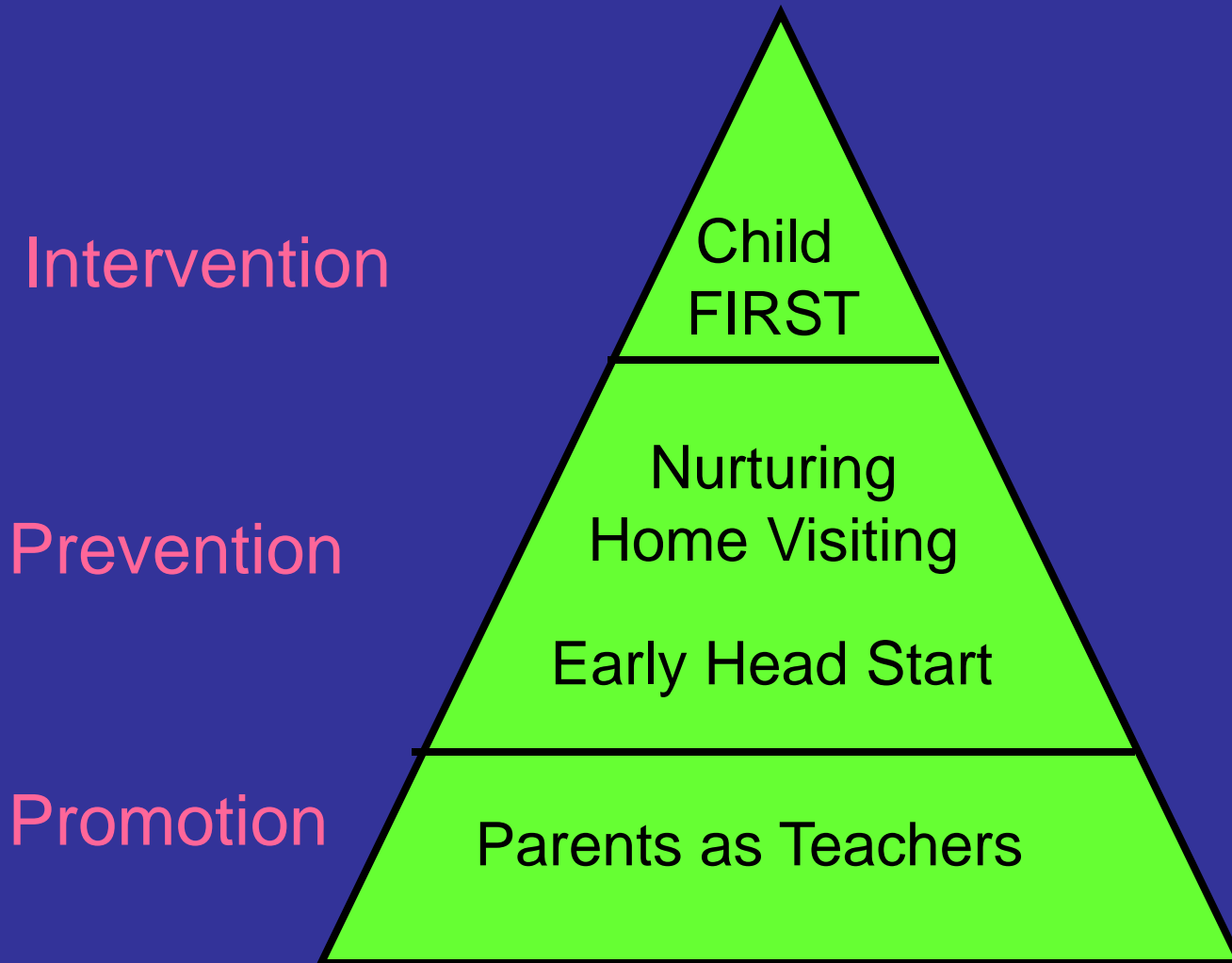
- Child FIRST costs about \$6,600 for the average child and family of four, for 6 – 12 months of intervention.
- In contrast:
 - \$97,000/year for a Level 2 Group Home
 - \$455,000/year for State Juvenile Training School
 - \$920,000/year for inpatient psychiatric hospitalization



Early Childhood System of Home Visitation

- Close collaboration among all four CT home visiting models to create a ***continuum of care.***
- Nurturing, Early Head Start, and PAT provide primary prevention.
- Child FIRST can partner with them to serve the **most vulnerable children.**
- Leverage additional Medicaid reimbursement through the partnership.

Continuum of Care



Child FIRST Replication

- Funded by RWJF, with 18 matching Connecticut funders.
- DCF is the lead agency.
- Current Child FIRST sites:
Greater Bridgeport, Hartford, New Haven, New London County, Norwalk, and Waterbury.
- New sites: New Britain and 3 others
- Goal is to have statewide coverage:
One Child FIRST program in each DCF Area.

Achievement Gap

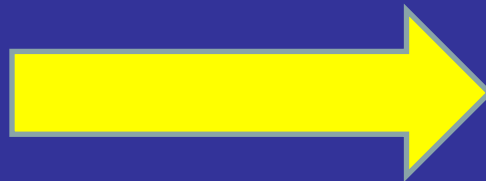
- If we want to close the achievement gap...
- If we want to decrease racial and ethnic disparities...

We must stop blaming parents and schools.

We must:

DECREASE STRESS

BUILD NURTURING RELATIONSHIPS



STRONG, HEALTHY BRAIN DEVELOPMENT!!!!



