

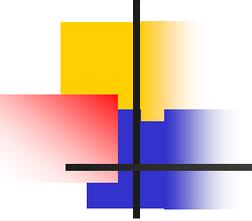
Lessons to Guide Future Head Start Research and Evaluation

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**Presentation to the Advisory Committee for
Head Start Research and Evaluation**

June 7, 2011



The Main Lesson

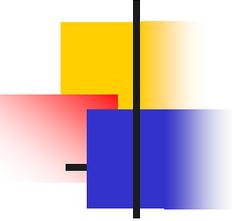
**“Every system
is perfectly designed
to achieve
exactly the results it gets.”**

Donald M Berwick, M.D.
Director, Centers for Medicare and Medicaid Services
Past President, Institute for Healthcare Improvement



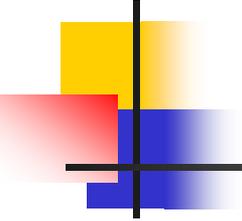
Themes

1. Relationship of the research with community context in which it occurs?
 - *Conceptually, community context is THE driving force for service delivery and impact*
2. Implications for an HS/EHS Program's Organizational Design and Approach?
 - *Multiple organizations influence a site's model and implementation system. Through this, they influence participants' actions and interactions.*



What are the Results for Home Visiting?

1. HV *can* improve outcomes, but average effect sizes are small.
2. Within EBHV model, effect sizes vary:
 - By population subgroup
 - By program site



Consider a Case Study – Healthy Families Alaska

- ❖ Statewide, state-funded program
- ❖ Required RCT, 1999 -2005
- ❖ Impact study + implementation study
 - Intended outcomes, children 2 years old
 - ❑ Child development, behavior, parenting
 - ❑ CAN, maternal depression, SU, IPV

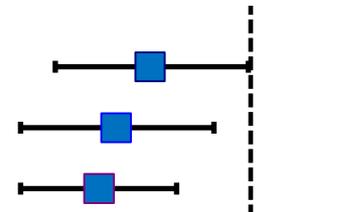
Duggan et al., *Child Abuse & Neglect*, 31 (2007) 829-852.

Caldera et al., *Child Abuse & Neglect*, 31 (2007)801-827.

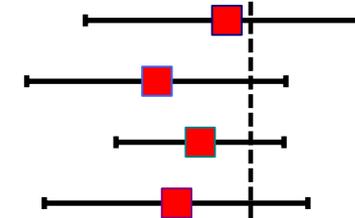
HFAK impact was stronger for one set of outcomes than the other.

HOME VISITING DECREASED THE LIKELIHOOD OF ...

**Delayed Cognitive Development
Child Behavior Problems
Poor Home Environment**



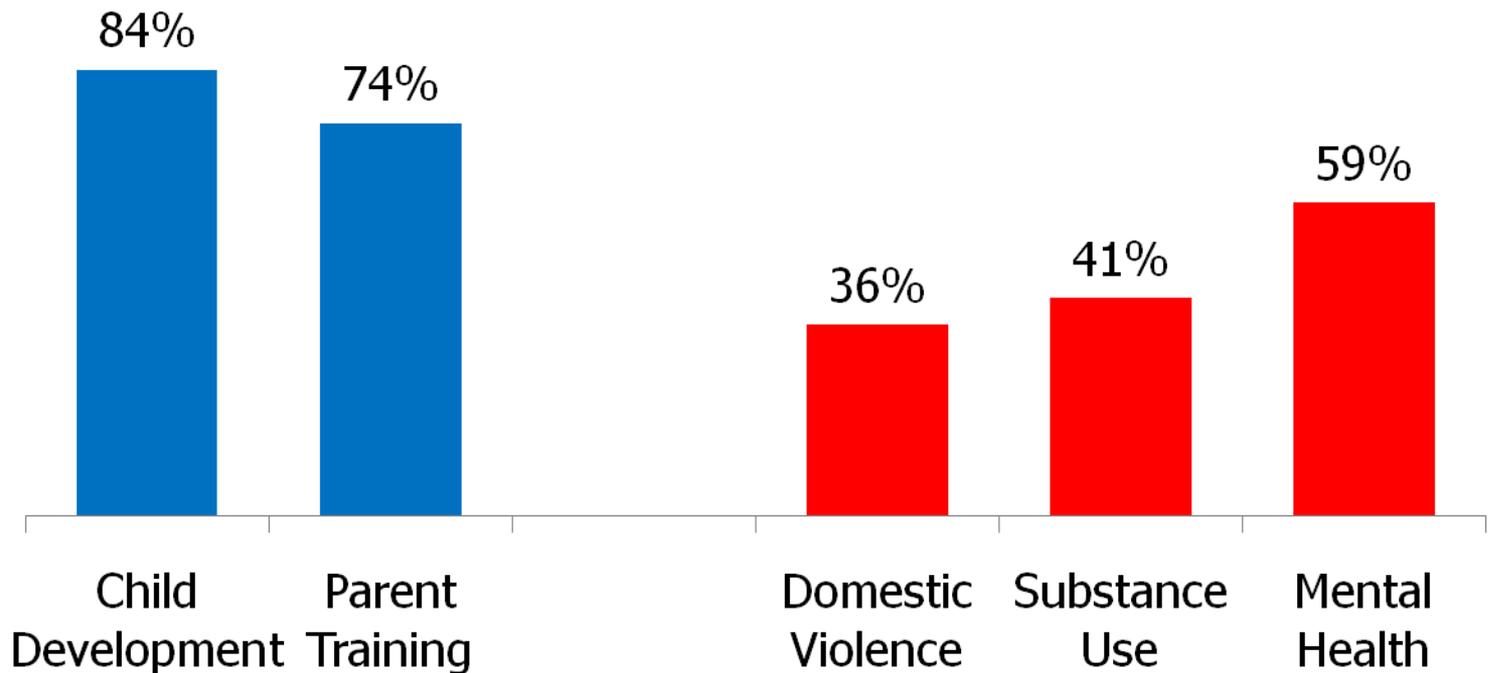
**Substantiated CAN
Depressive Symptoms
Substance Use
Partner Violence**



0.1 1 10

Adjusted Odds Ratio with 95% Confidence Interval

Actual Services for Families in HFAK – Stronger for One Set of Outcomes

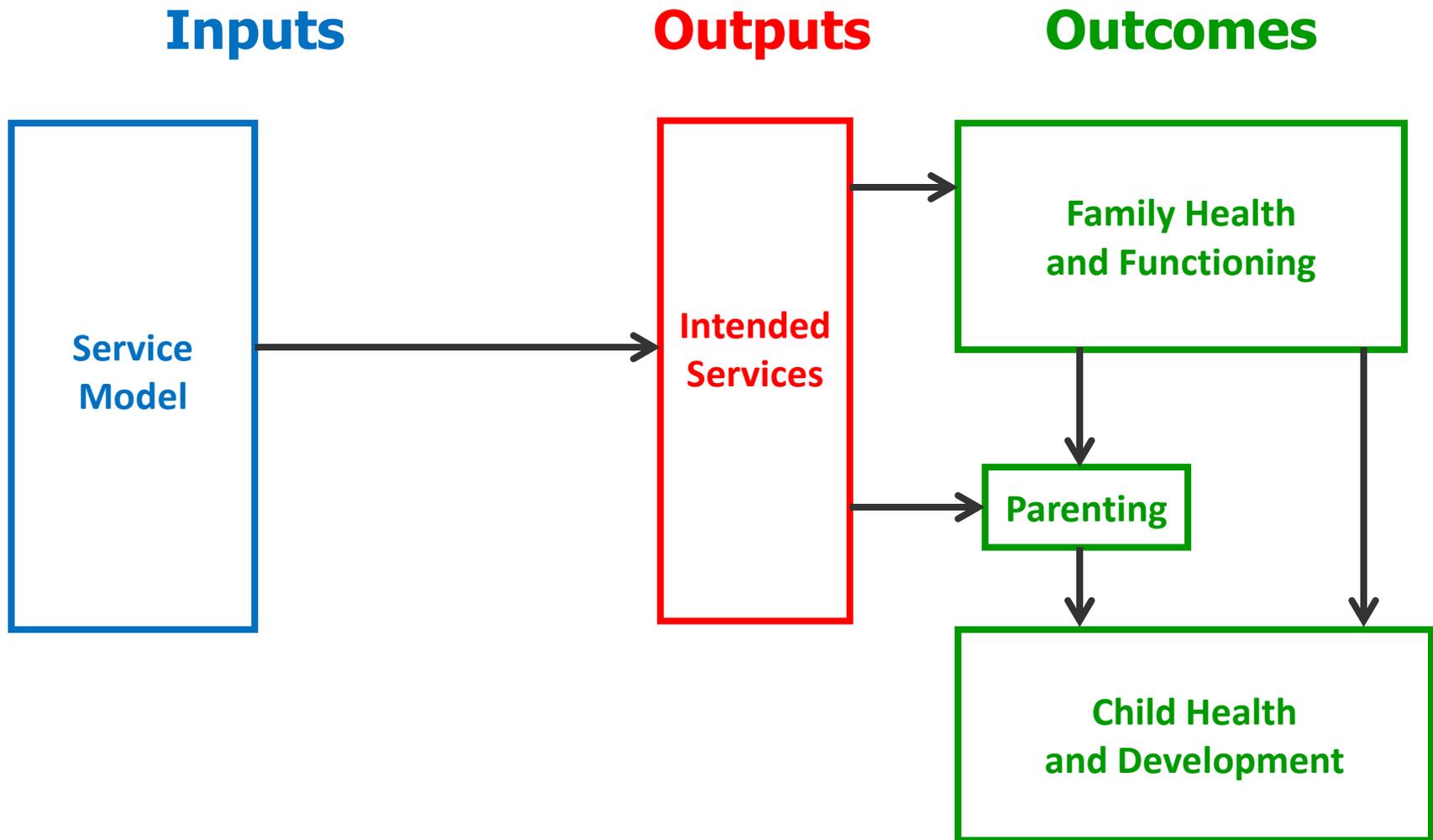


Percent of Visits with
Content

Percent of Active, Risk-Positive
Families with Any Discussion

How was the
Healthy Families Alaska system
designed to achieve

- Greater impacts
on some intended outcomes
than on others?
- Stronger services for some
outcomes than others?

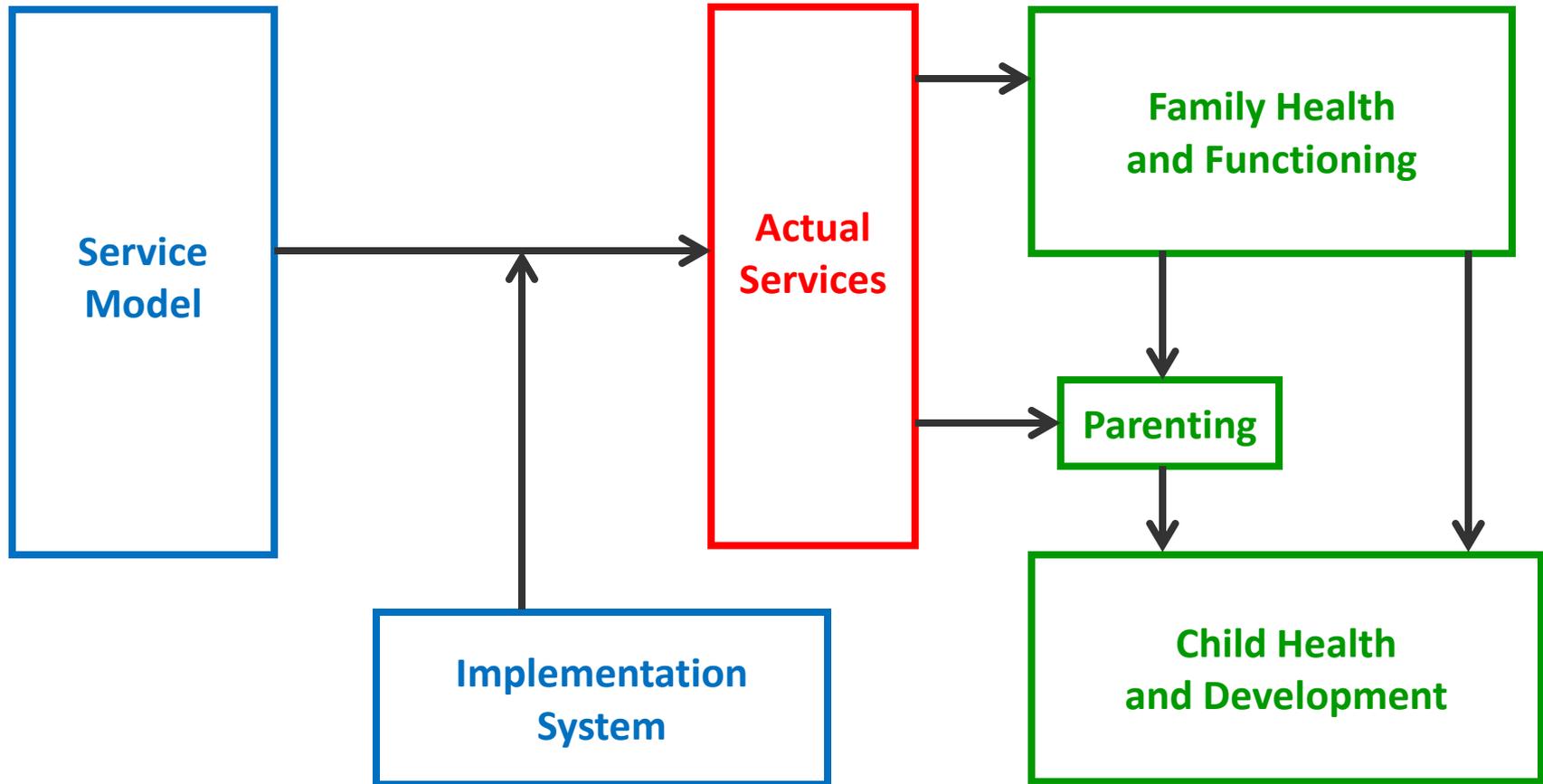


**A Generic Home Visiting Program –
The service model defines the intended services and outcomes.**

Inputs

Outputs

Outcomes

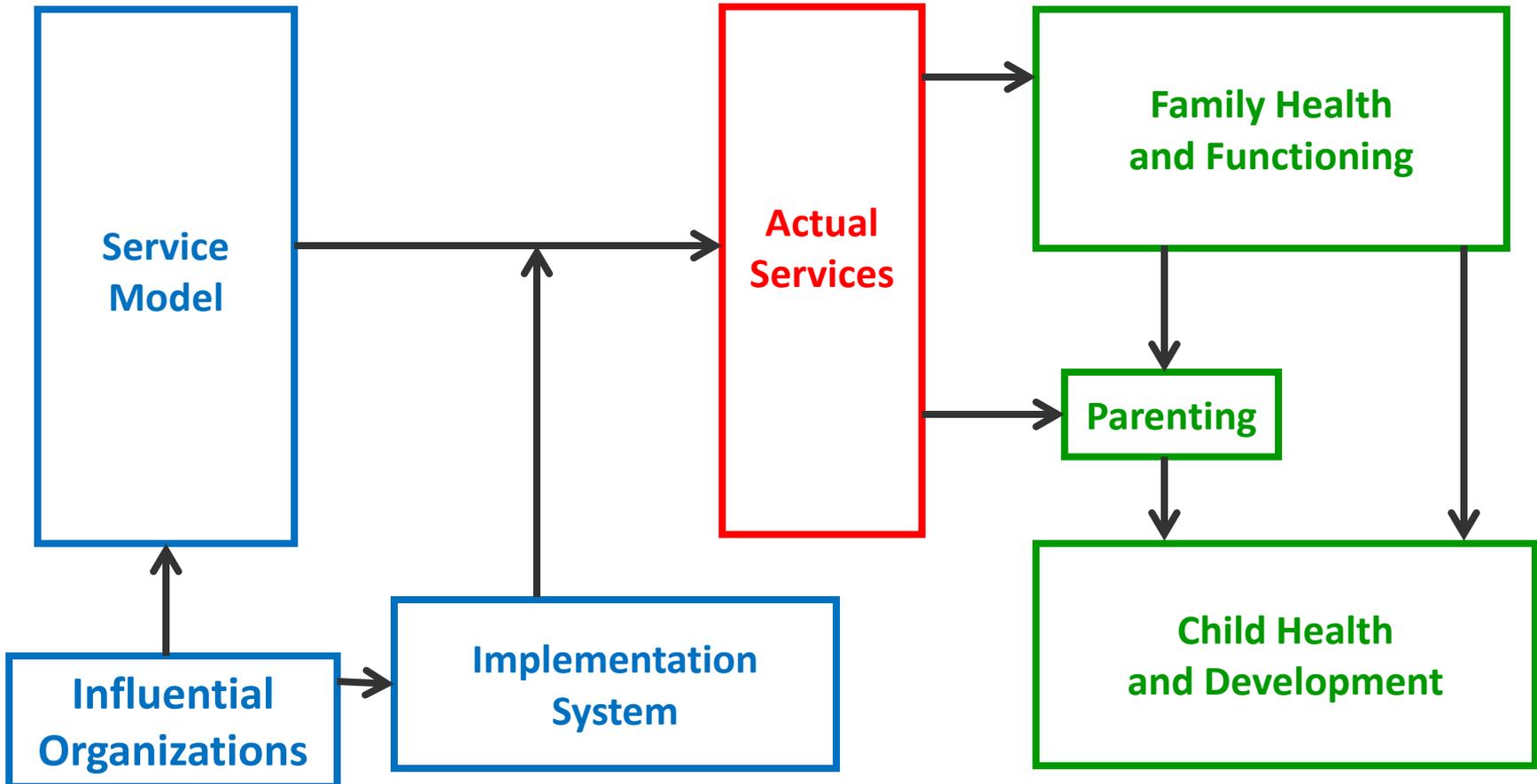


The implementation system moderates the translation from the service model to actual services.

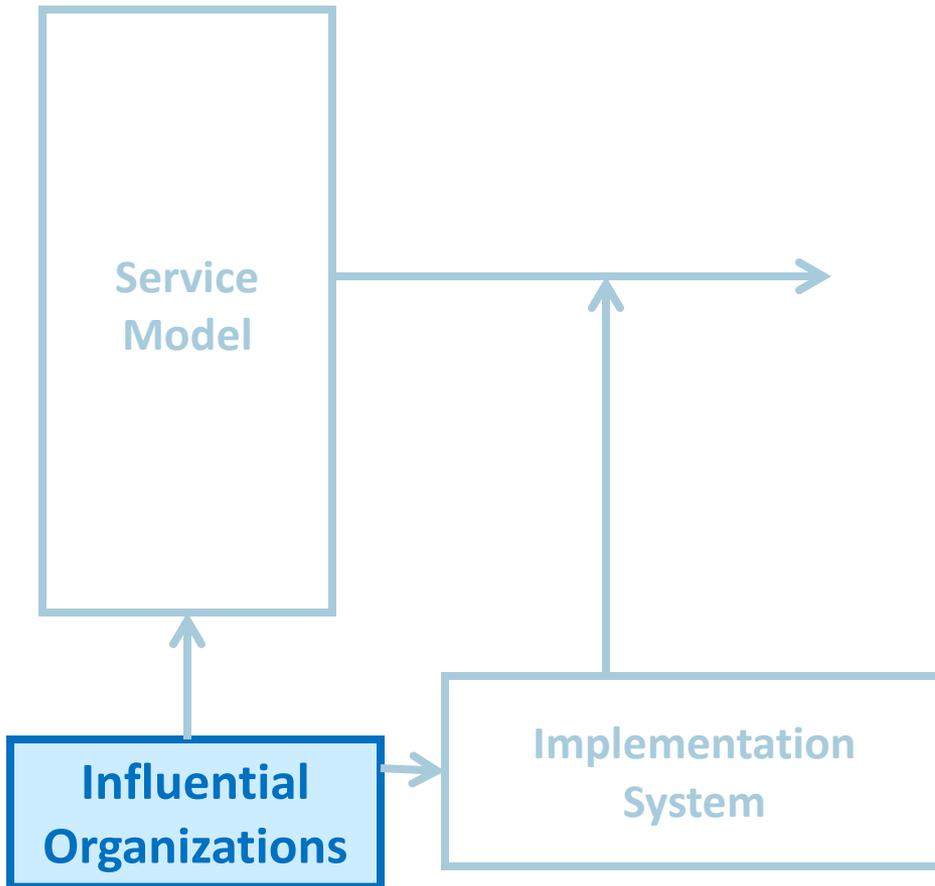
Inputs

Outputs

Outcomes



Organizational stakeholders determine the service model and implementation system.



WHO ARE THESE INFLUENTIAL ORGANIZATIONS?

Model Developer / Purveyor

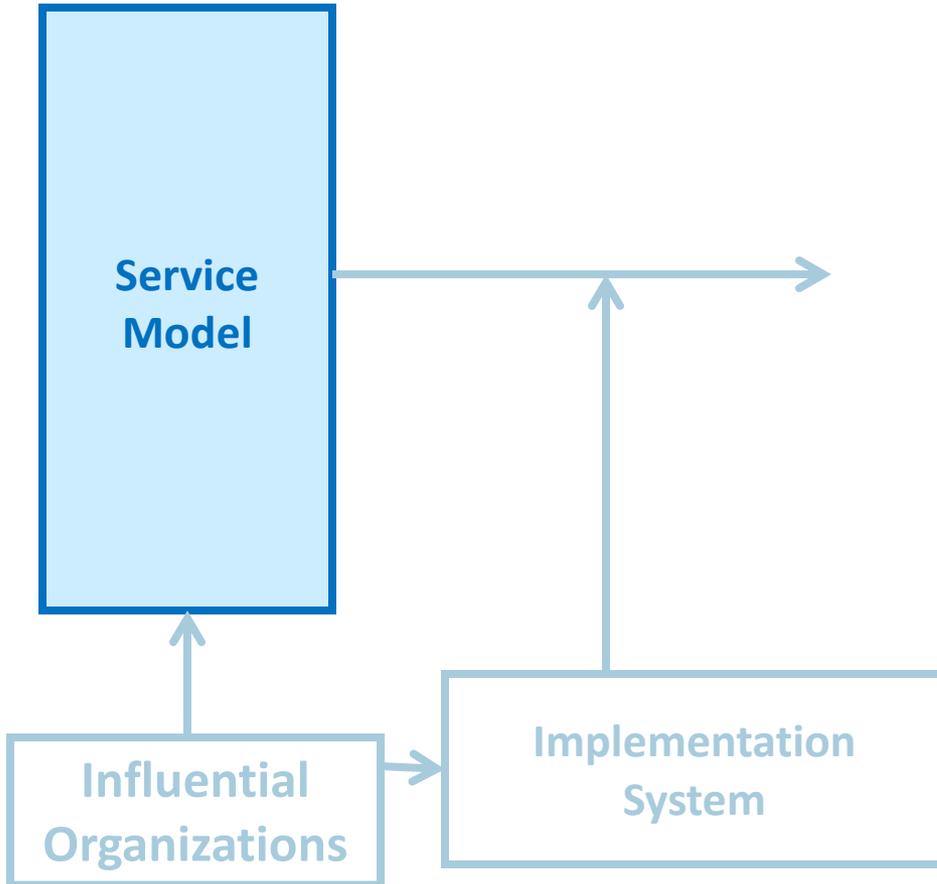
Implementing Agencies

Other Community-based Organizations

Public Agencies –
Setting Policy, Regulations

Funders

Professional Groups



Service Model

Specification of:

Goals

Outcomes

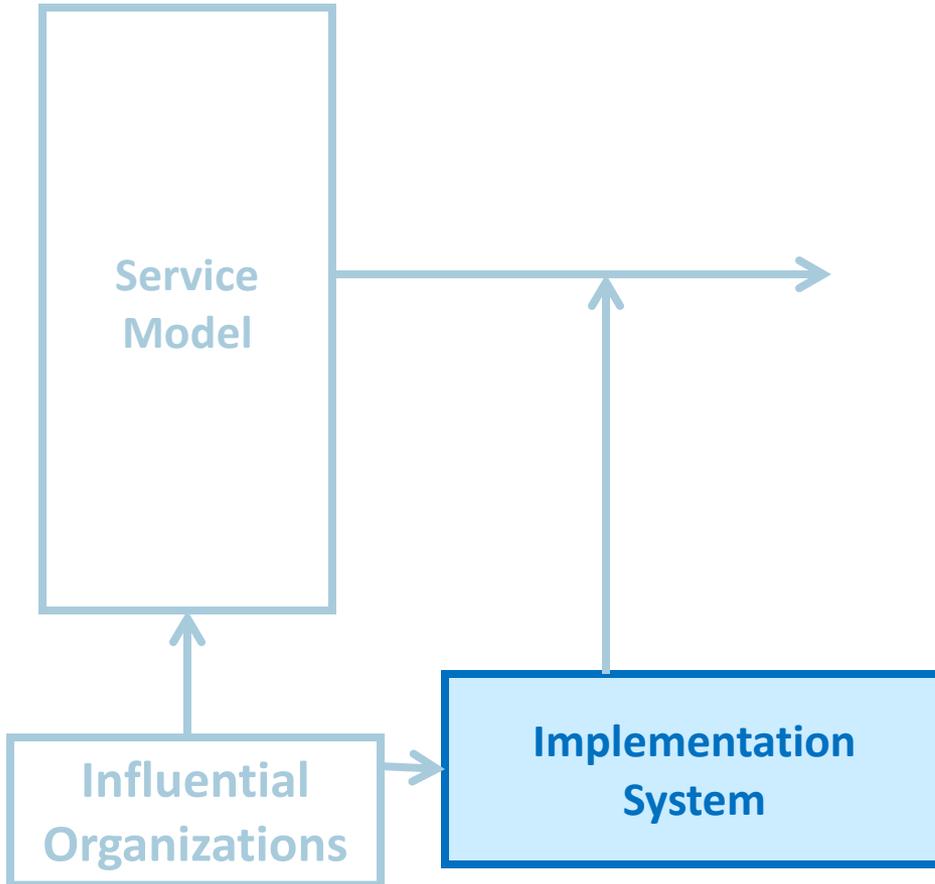
Eligible Families

Intended Dosage

Intended Direct Service

Intended Referral and
Coordination

Staff Roles, Competencies



Implementation System

Staff Selection, Training,
Supervision, Evaluation

Consultation Services

Program Evaluation

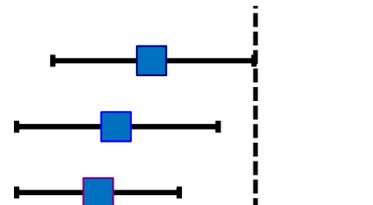
Administrative Supports

Systems Interventions

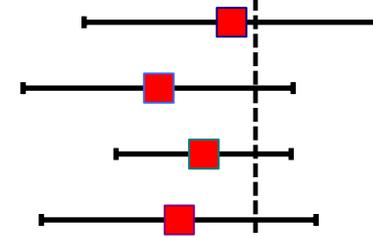
Financial Support

How did HFAK's service model and implementation system explain these outcomes?

Delayed Cognitive Development
Child Behavior Problems
Poor Home Environment

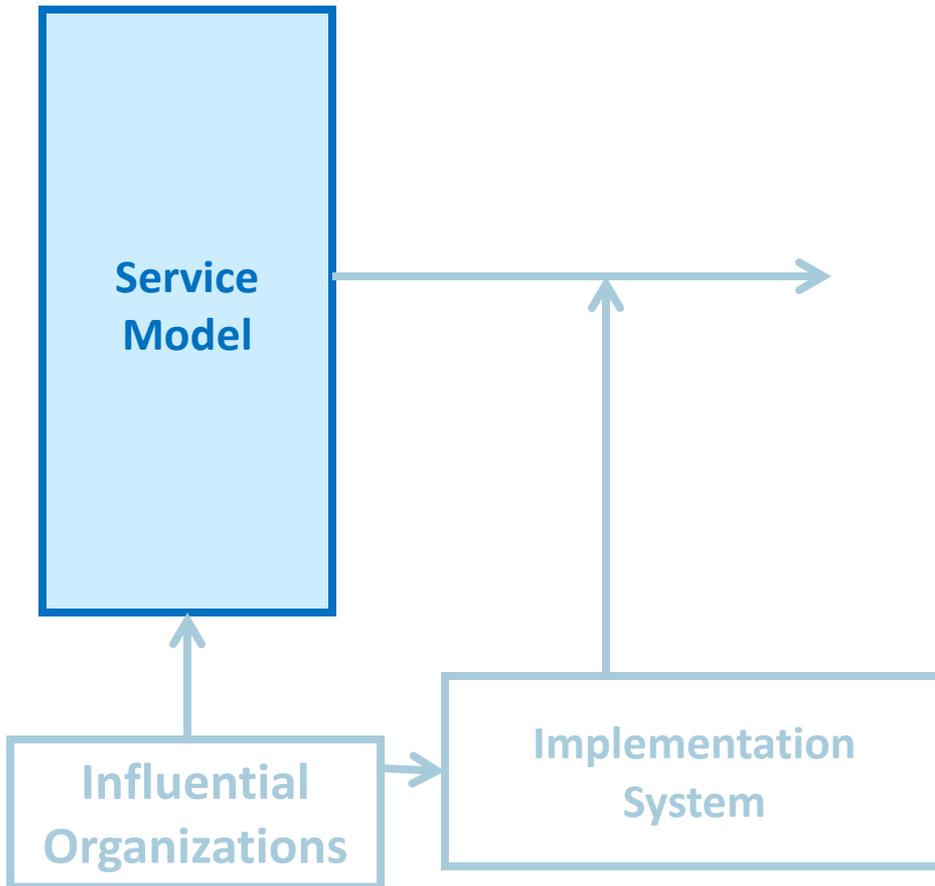


Substantiated CAN
Depressive Symptoms
Substance Use
Partner Violence



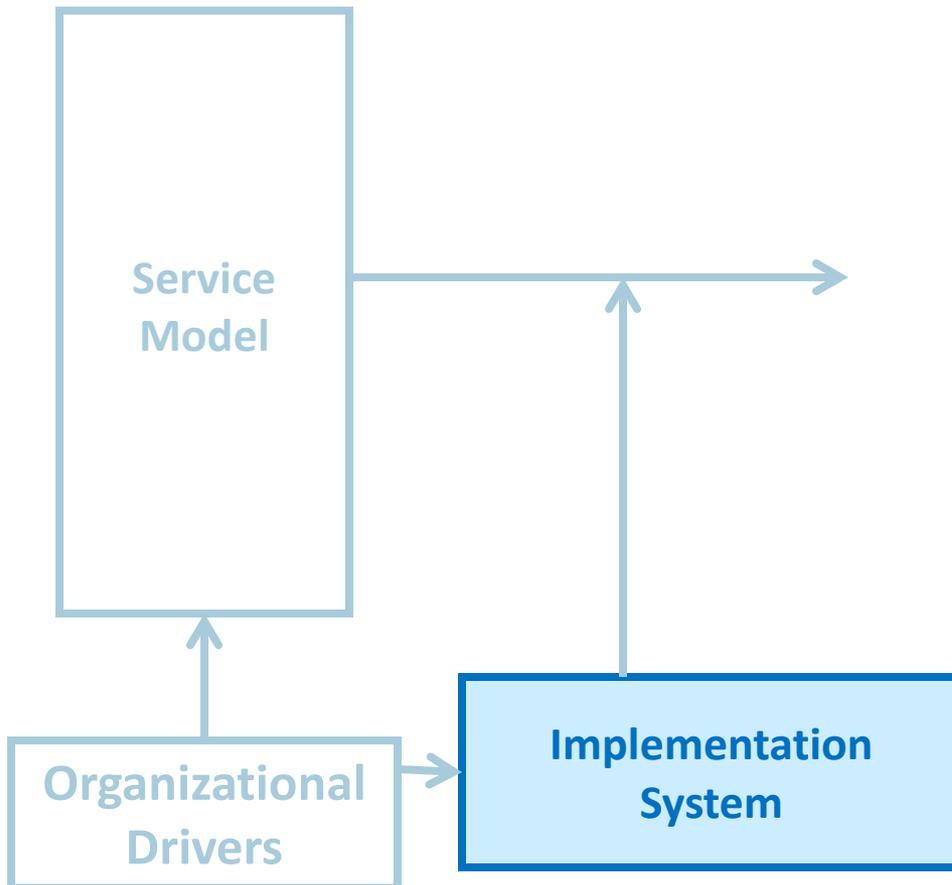
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Adjusted Odds Ratio with 95% Confidence Interval



HFAK Service Model

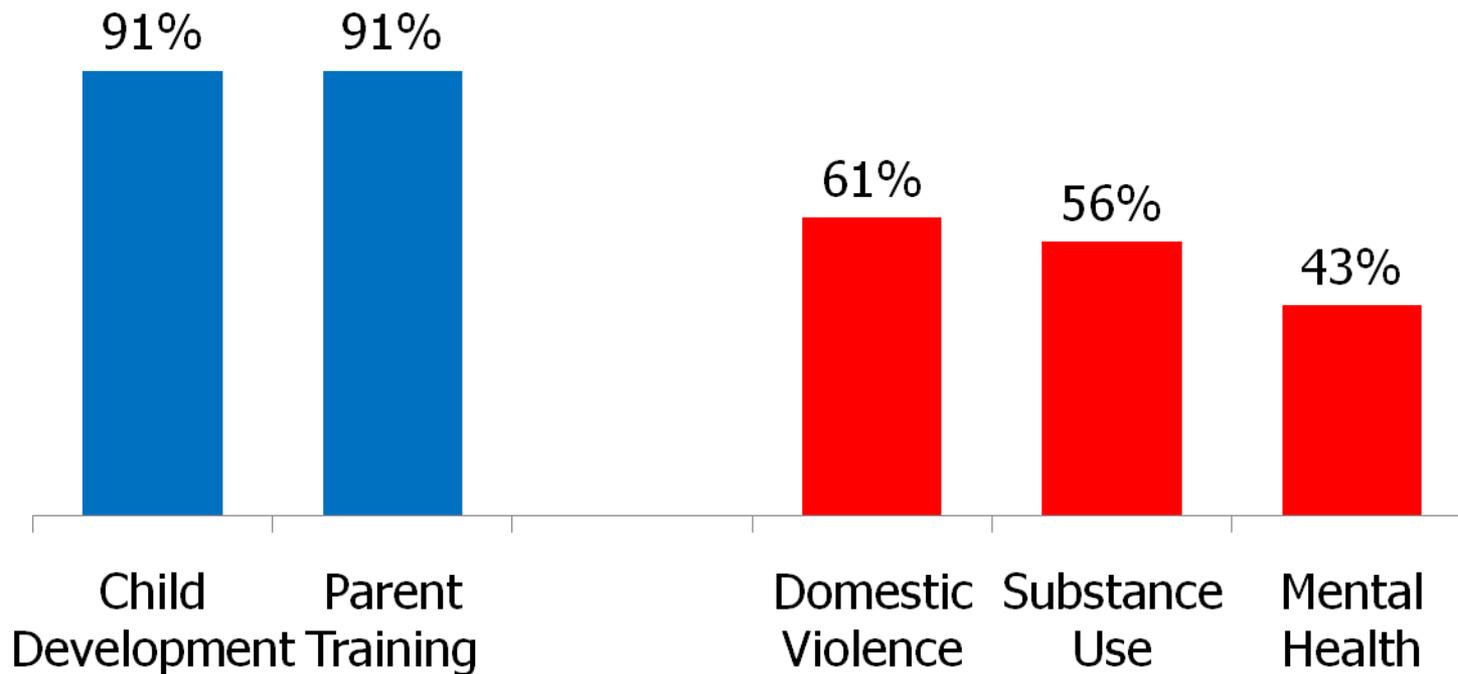
- CHILD DEVELOPMENT
Influential Organizations specified:
 - Outcome indicators
 - Expected dosage, visit content, techniques
 - Staff roles, competencies
- CHILD MALTREATMENT
They did not specify:
 - Risk reduction indicators
 - Expected dosage, visit content, techniques
 - Staff roles, competencies



HFAK Implementation System

- CHILD DEVELOPMENT
Influential organizations assured:
 - Substantial training and supervision in using a high caliber parenting curriculum
 - Access to center-based parenting programs
 - Routine feedback
- CHILD MALTREATMENT
They provided:
 - Rudimentary training for risk reduction
 - Few formal service links
 - Little/no feedback

An Illustration of these Contrasts – Home Visitors' Ratings of their Training

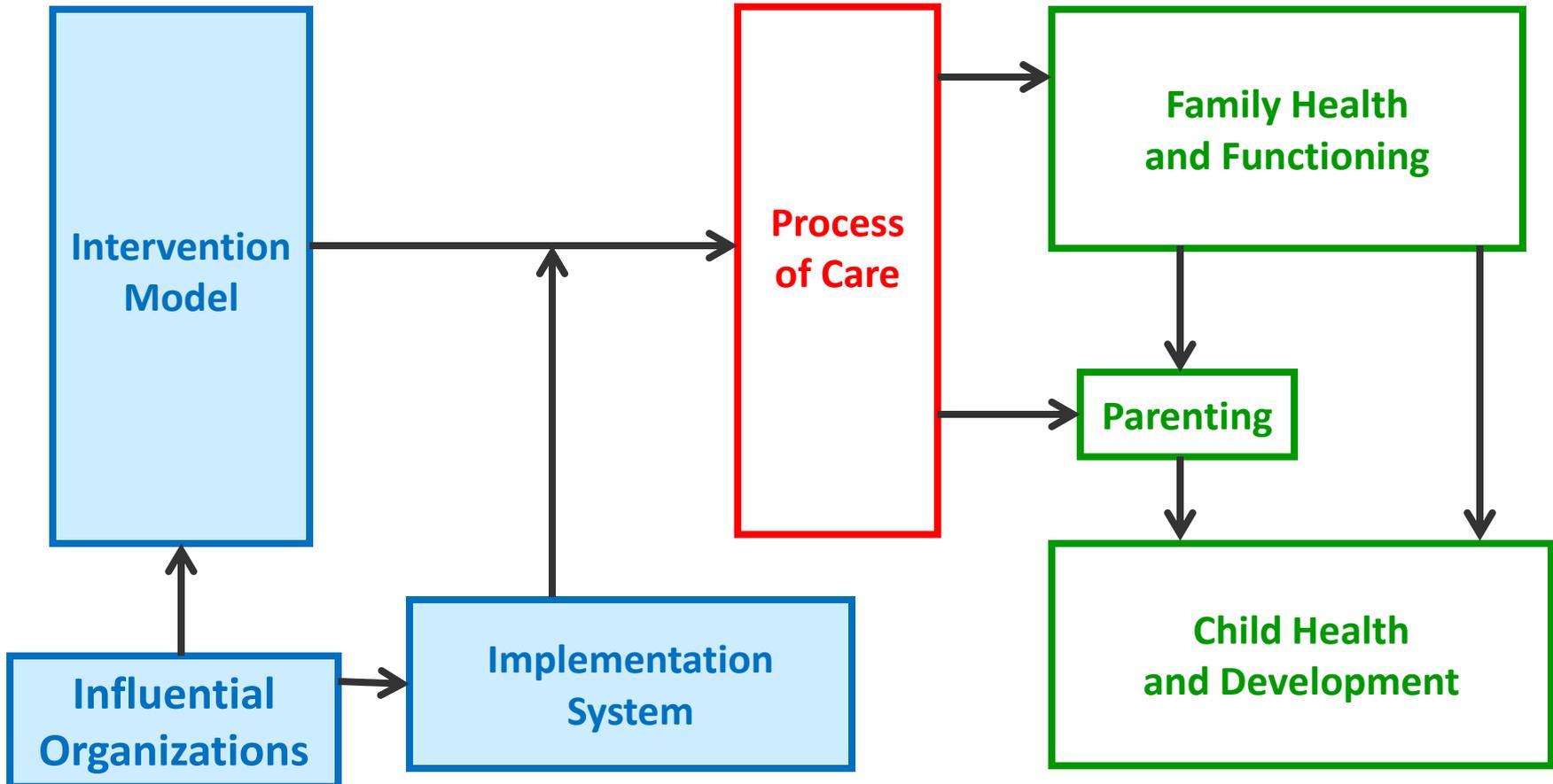


Percent Rating Training as Adequate

Inputs

Outputs

Outcomes

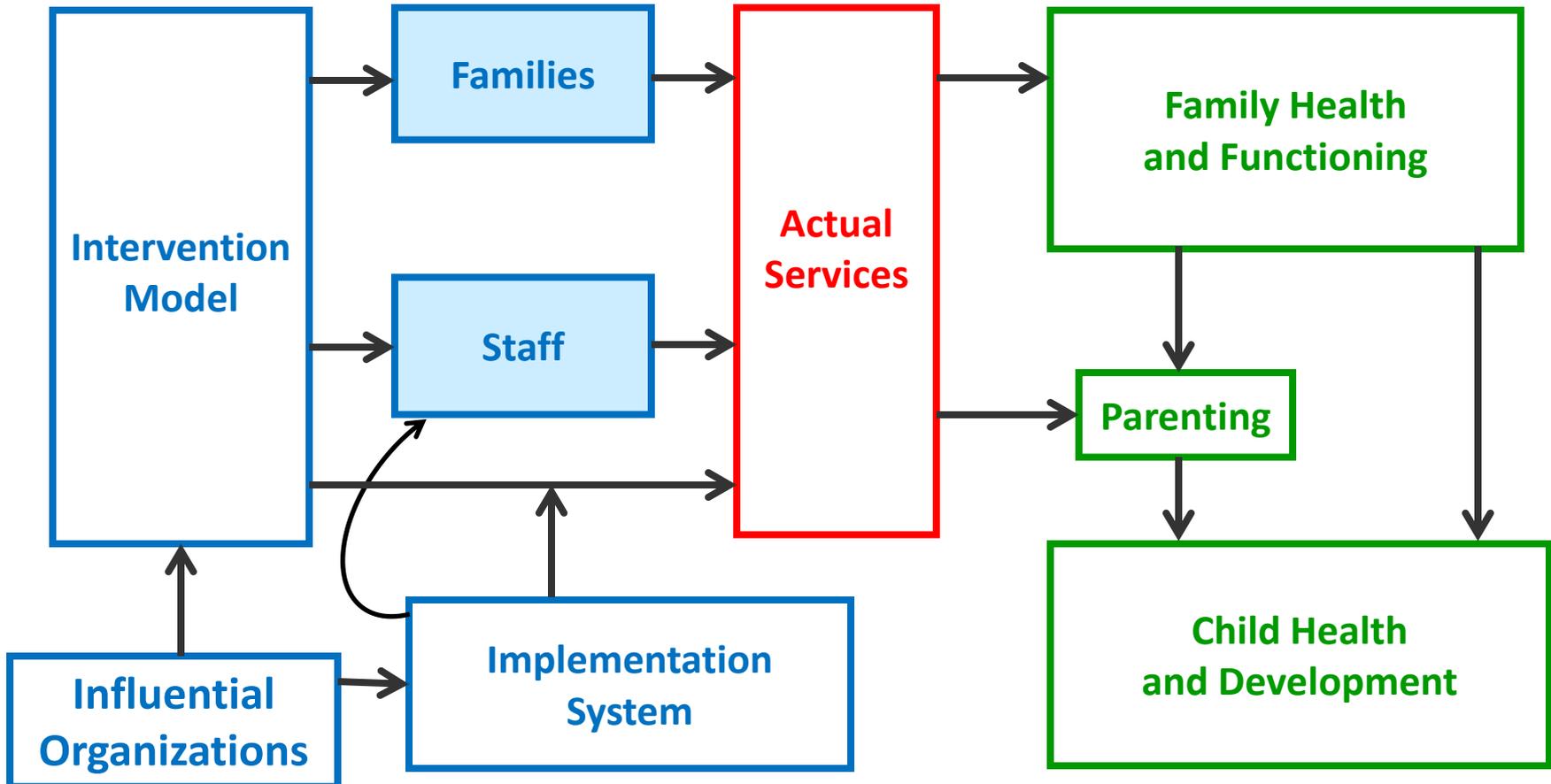


So far, we've looked only at organizational influences on the process and outcomes of home visiting.

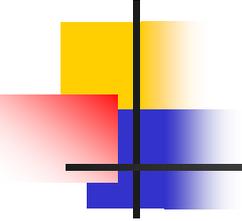
Inputs

Outputs

Outcomes



Let's look at how individuals influence services and results.



What Attributes?

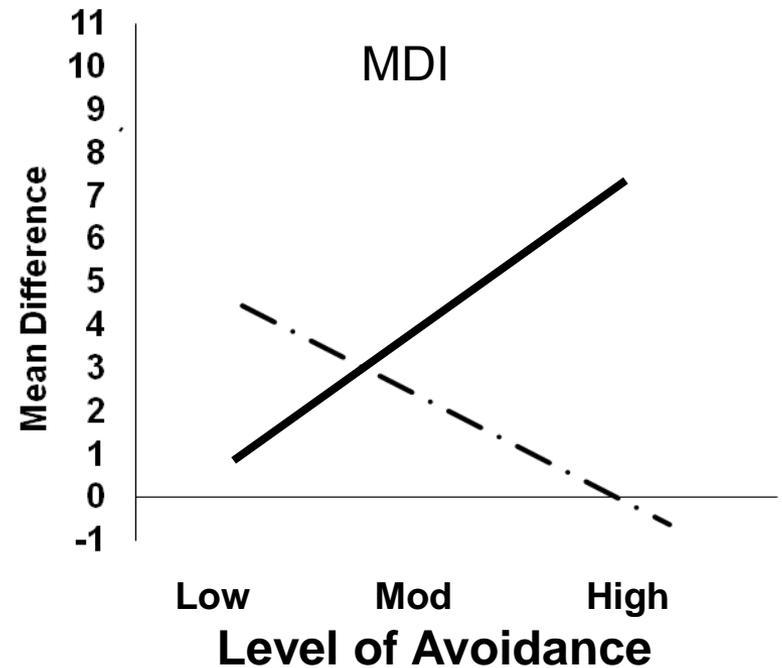
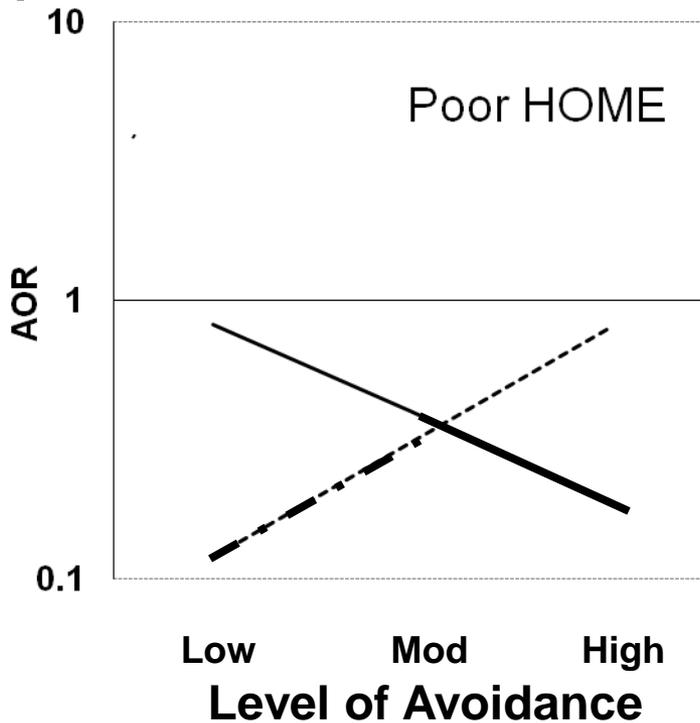
❖ Typically

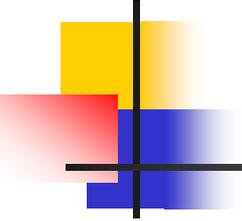
- ❖ Families – parity, maternal age, IPV, PMH
- ❖ Home visitors – prior training, race/ethnicity

But, since many HV programs are attachment-based, let's consider

- ❖ Adult Attachment / relationship security
 - ❖ Secure, anxious, avoidant, fearful

Mothers' Depression and Relationship Avoidance Moderated Impact on Outcomes





Consider another study – Hawaii's Healthy Start, mid-1990s

- ❖ Statewide, state-funded program
- ❖ Administered by Hawaii DOH
- ❖ RCT impact study + implementation study
 - At-risk families of newborns enrolled in 1994-5
 - Outcomes when children 1 – 9 years old

Duggan et al., *Child Abuse & Neglect*, 28 (2004) 597-622.

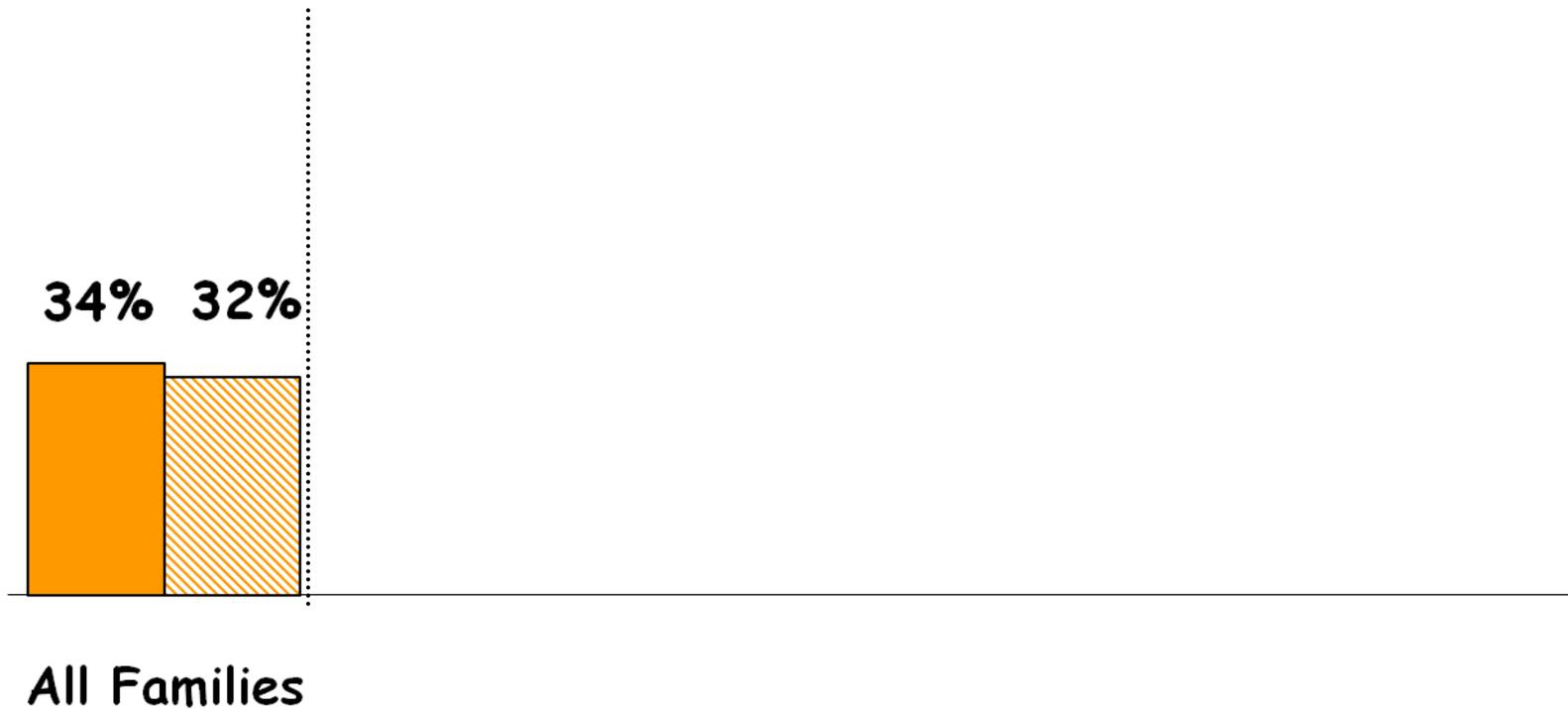
Duggan et al., *Child Abuse & Neglect*, 28 (2004) 623-643.

Burrell et al., *J Human Behavior in the Social Environment*, 19 (2009) 592-610.

McFarlane et al., *J Community Psychology*, 38 (2010) 541-556.

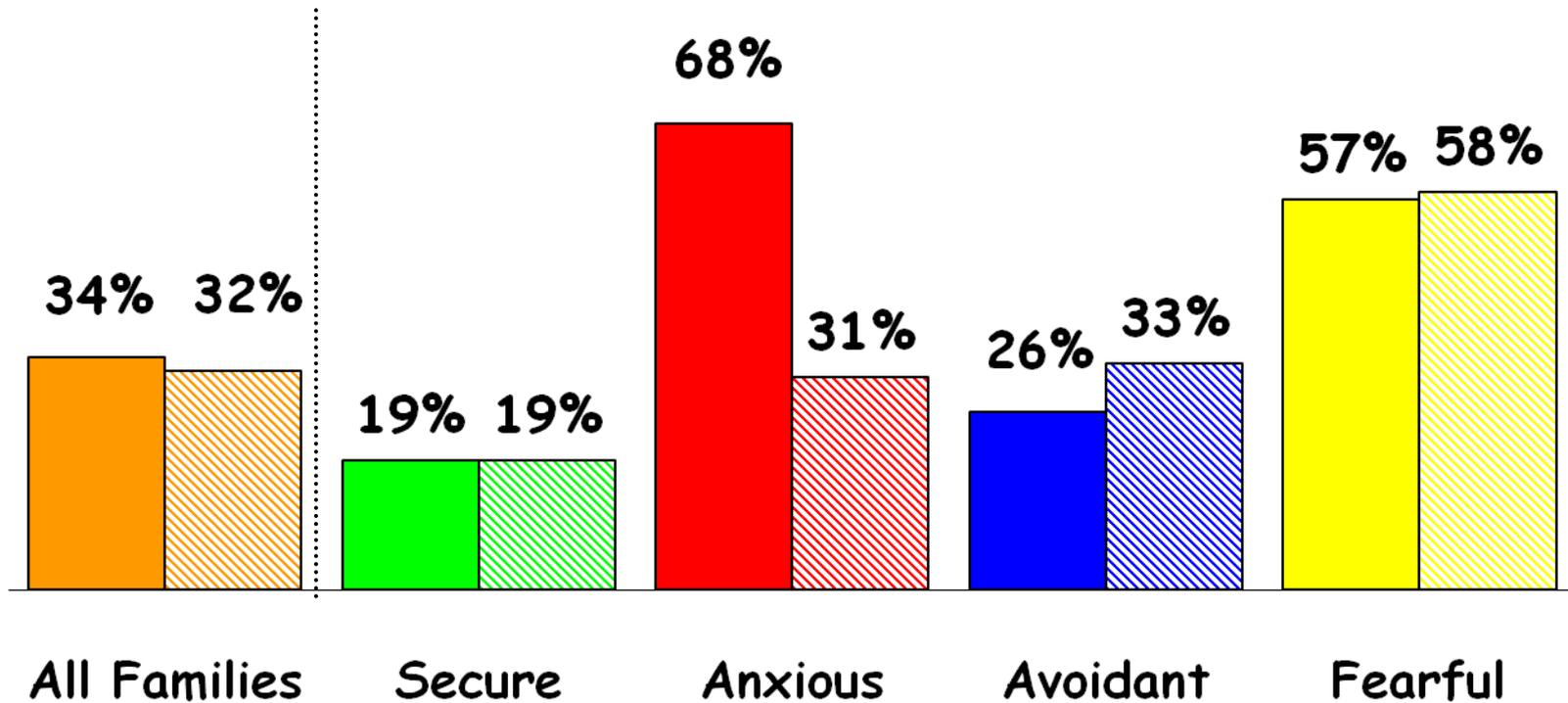
Maternal Depression as an Outcome – No Overall Impact

Solid Bar = Control; Striped Bar = Home Visited



Maternal Depression as an Outcome – Great Impact for Anxious Mothers

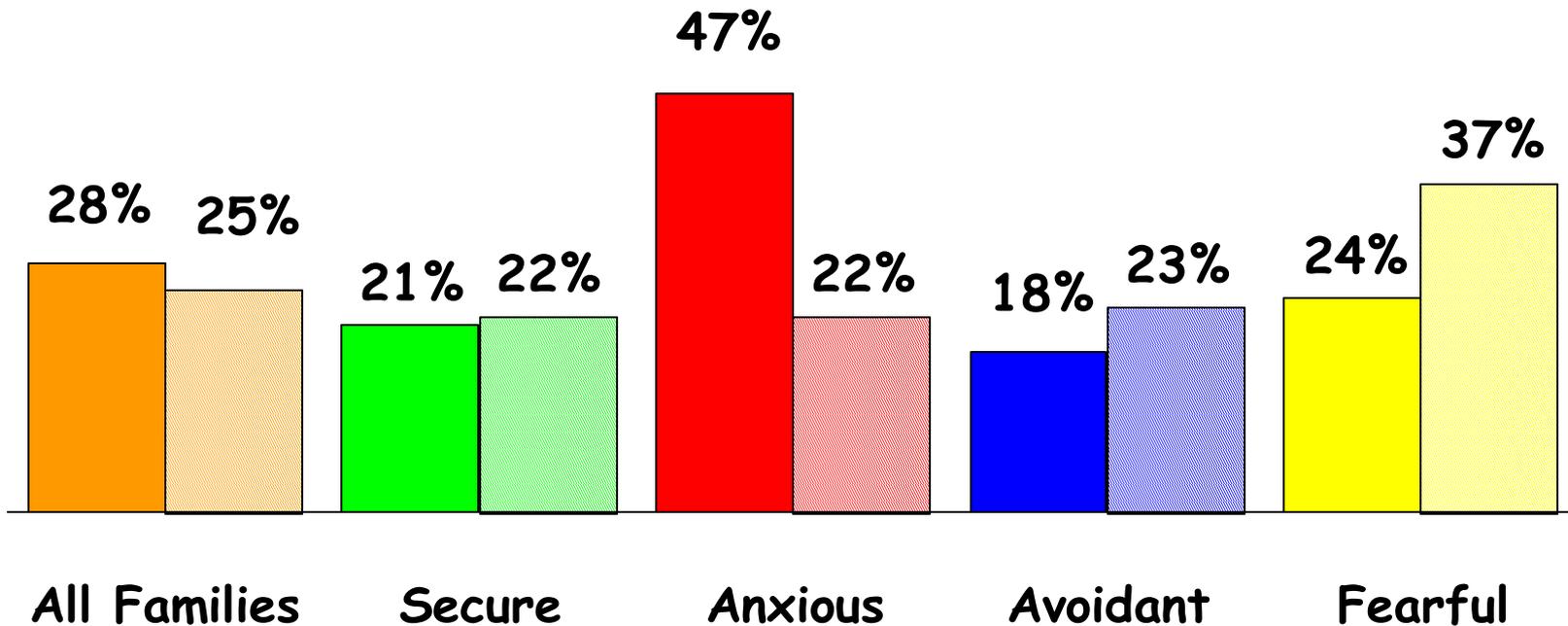
Solid Bar = Control; Striped Bar = Home Visited



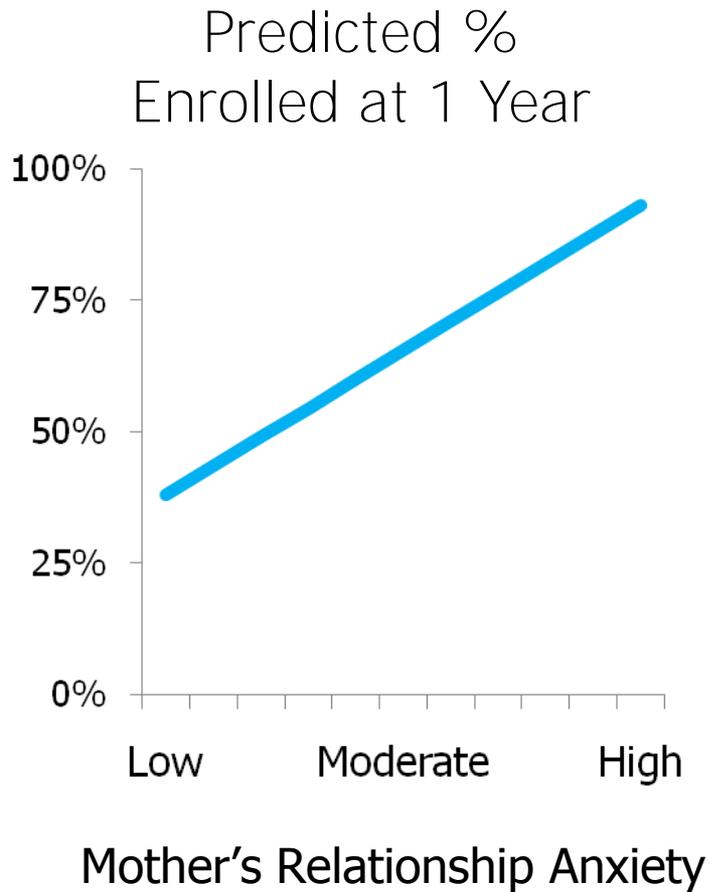
Poor Parent-Child Interaction

- Great Impact for Anxious Mothers

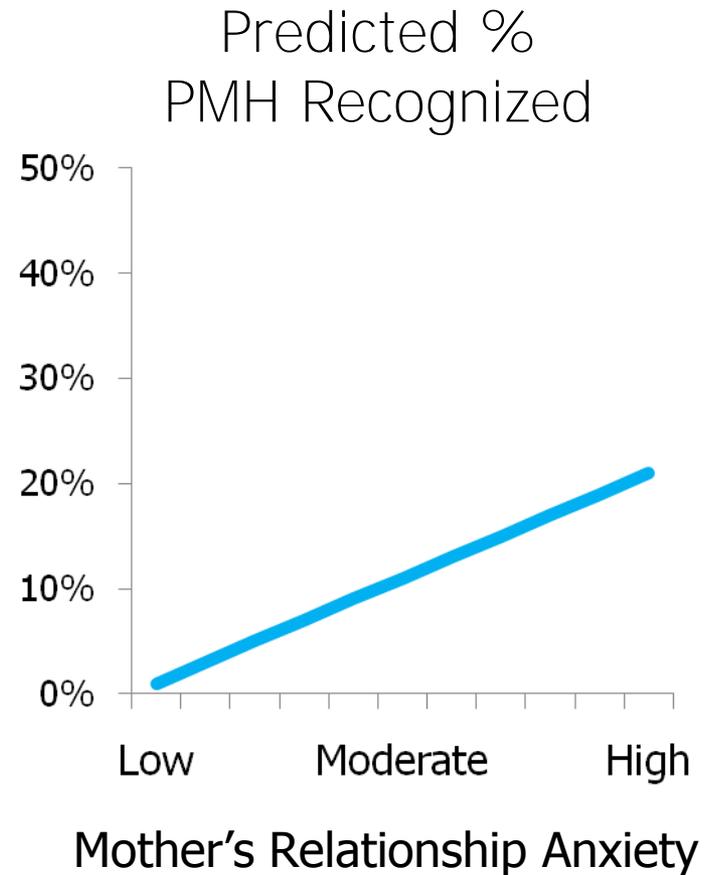
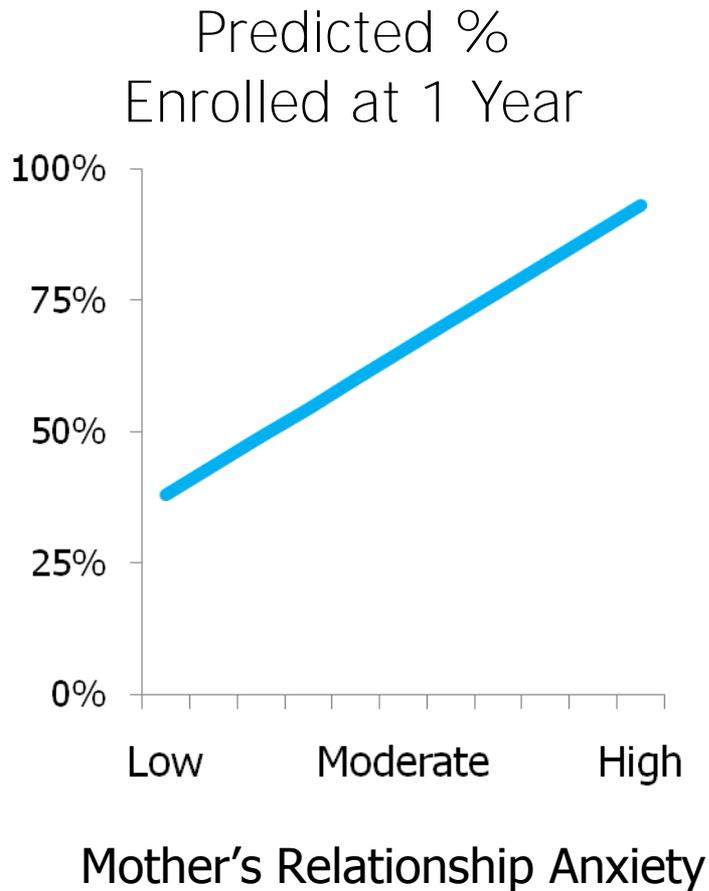
Solid Bar = Control; Striped Bar = Home Visited



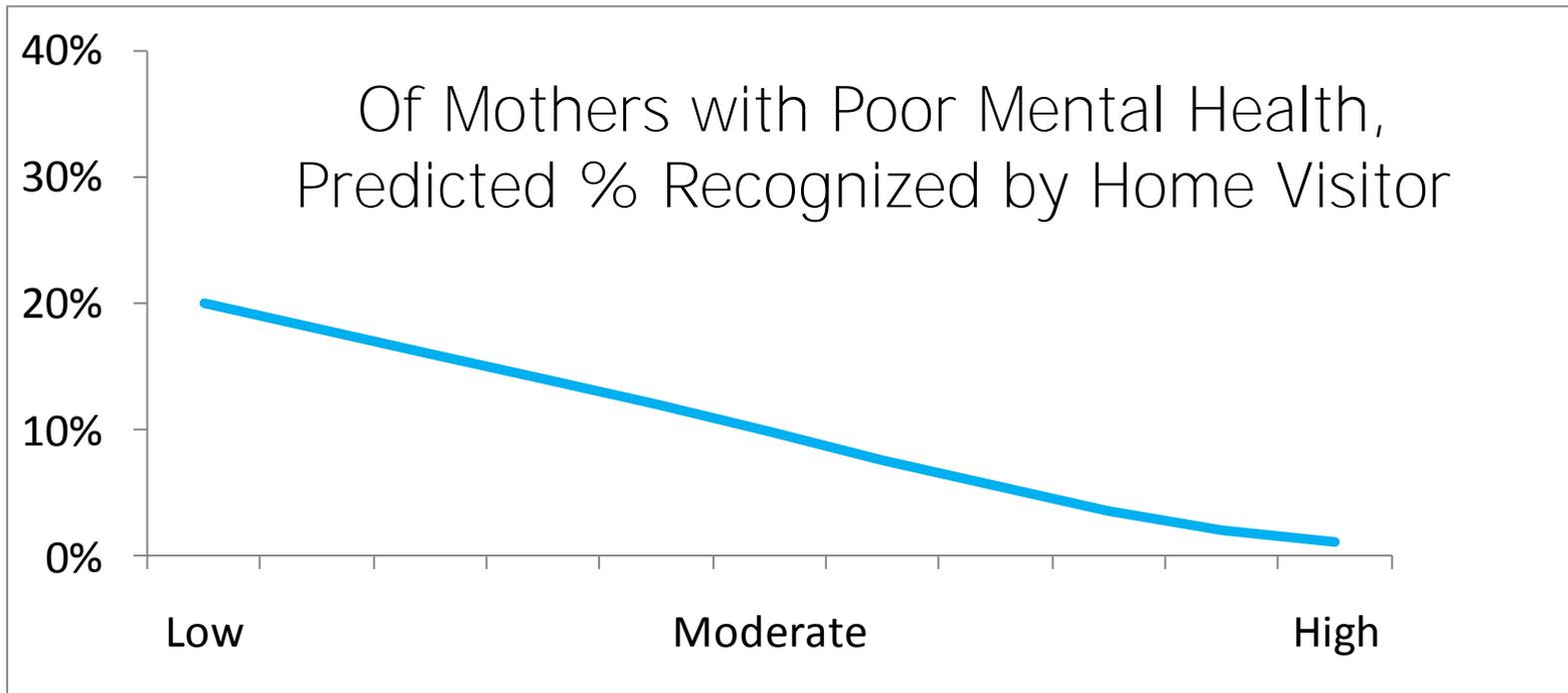
Mothers' Relationship Anxiety Influenced Their Engagement in HV



Mothers' Relationship Anxiety Influenced Their Engagement in HV

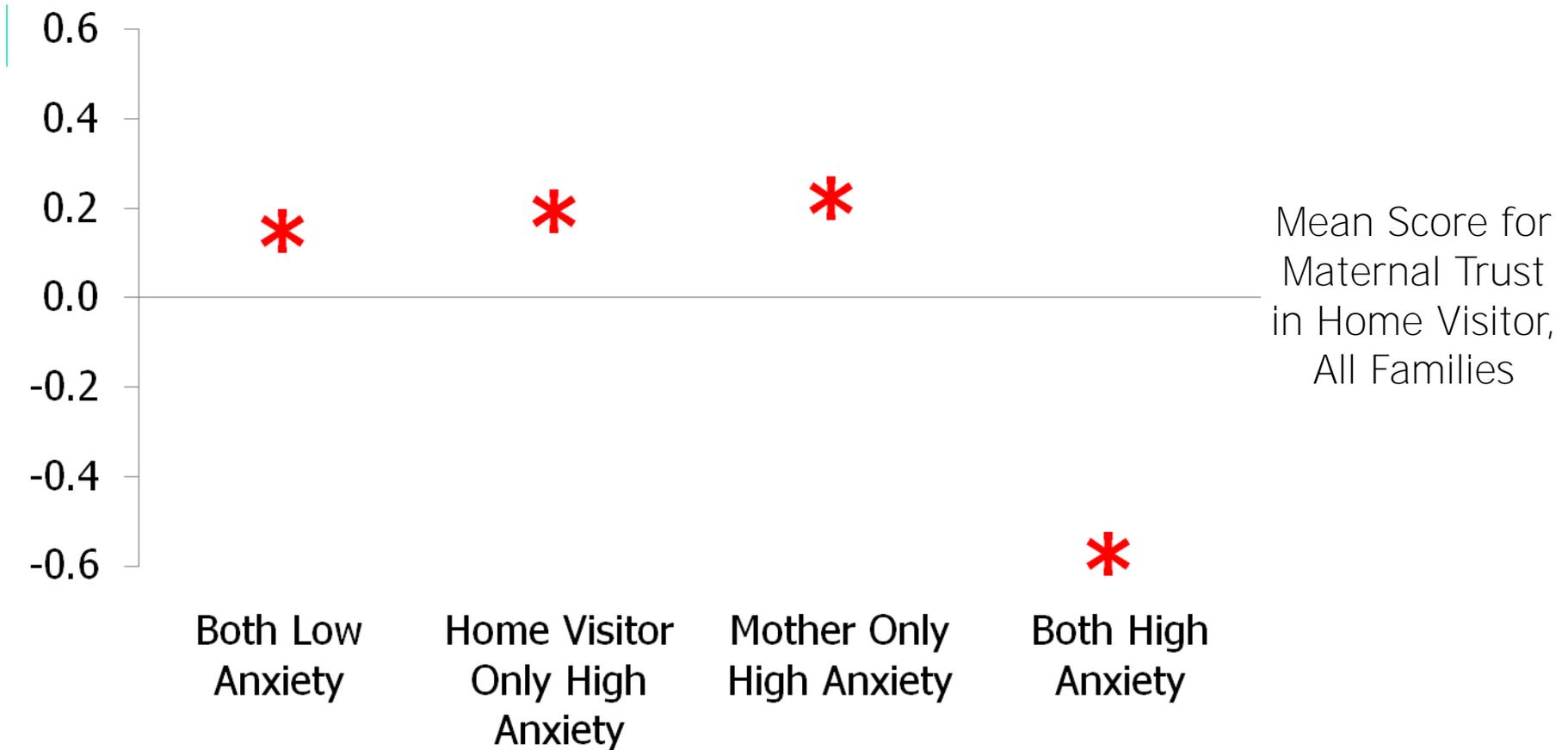


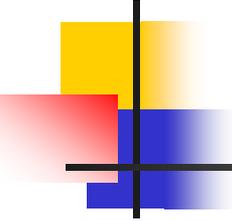
Home Visitors' Relationship Anxiety Influenced How They Provided Services



Home Visitor's Relationship Anxiety

Anxious Mother + Anxious Home Visitor = A Less Favorable "Match"

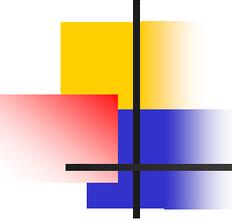




In Summary, What Lessons for HS/EHS Research and Evaluation?

Every system is perfectly designed to achieve exactly the results it gets. Study the *system*.

- Organizational stakeholders share responsibility for a **program site's service model and implementation system** for each intended outcome. Study what the organizations do, their reasons, and the results.
- **It's all about relationships. It's all about variation in how** participants carry out their roles, and the reasons for variation. This applies not only to families, but to staff. Study what they do, the reasons, and the results.



Thank You

- For this opportunity to share
- To States and communities that have embraced research to advance the field
 - Alaska
 - Baltimore City
 - Hawaii
 - New Jersey