

The Family Check-Up 4 Health: Integrating a Family-Focused Behavioral Intervention into Primary Care

Cady Berkel
& the Raising Health Children study team

**INTEGRATING PRIMARY AND BEHAVIORAL HEALTH
CARE THROUGH THE LENS OF PREVENTION**



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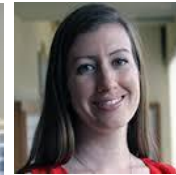
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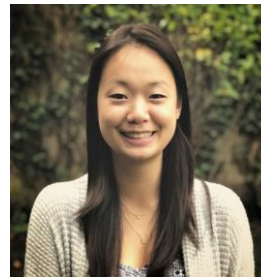
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Agenda

Rationale for the Family
Check-Up adaptation

Raising Healthy Children
study

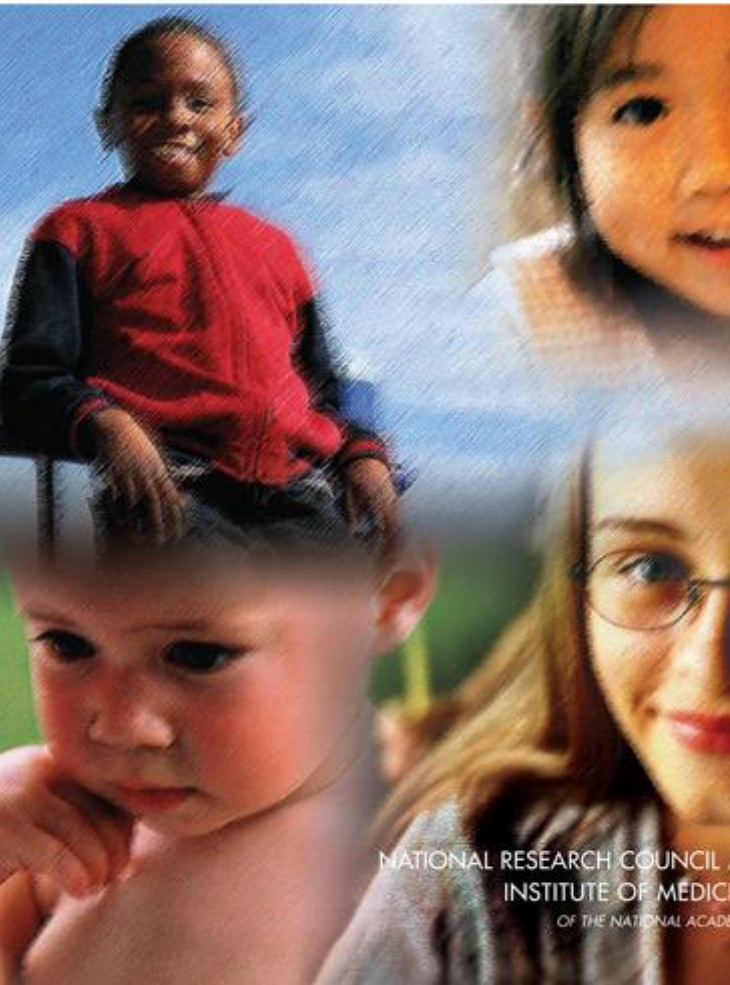
Participant characteristics

Service utilization



Preventing Mental, Emotional and Behavioral Disorders Among Young People

Progress and Possibilities



NATIONAL RESEARCH COUNCIL
INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Unrealized Potential

Evidence-based programs prevent:

- mental health problems, substance use, sexual risk behaviors, teen pregnancy, HIV & other STDs, academic underachievement, school dropout, suicide, delinquency, bullying, violence, incarceration, obesity, parental depression, family conflict, child abuse and neglect, ...

BUT...

- In general, children and families have not been able to access these programs
- Beyond the scope of academic settings to provide these services



The Potential of Primary Care

Integrated physical &
behavioral health focus

Reach

Longitudinal contact

Parent involvement

Legitimacy & trust

Existing billing structures

Family check- Up



A THREE-STEP PROCESS FOR ENGAGING FAMILIES

THE FAMILY CHECK-UP MODEL

3 STEPS

**Initial
Interview**

**Child &
Family
Assessment**

**Feedback
Session**

**Family Management Training:
Everyday Parenting Curriculum**

**Brief & Tailored
Family Management**

**Family Management
Weekly Meetings**

**Family Management
Parent Groups**

**Community
Resources & Support**

Six principles of the Family Check-up

FAMILY-CENTERED

Addresses adult leadership, services are linked to family management and child adjustment

ASSESSMENT DRIVEN

Decisions regarding intervention targets follow careful assessments

MOTIVATIONAL

Client motivation to change is a core component addressed in feedback session

TAILORED

Addresses unique needs of each child and family

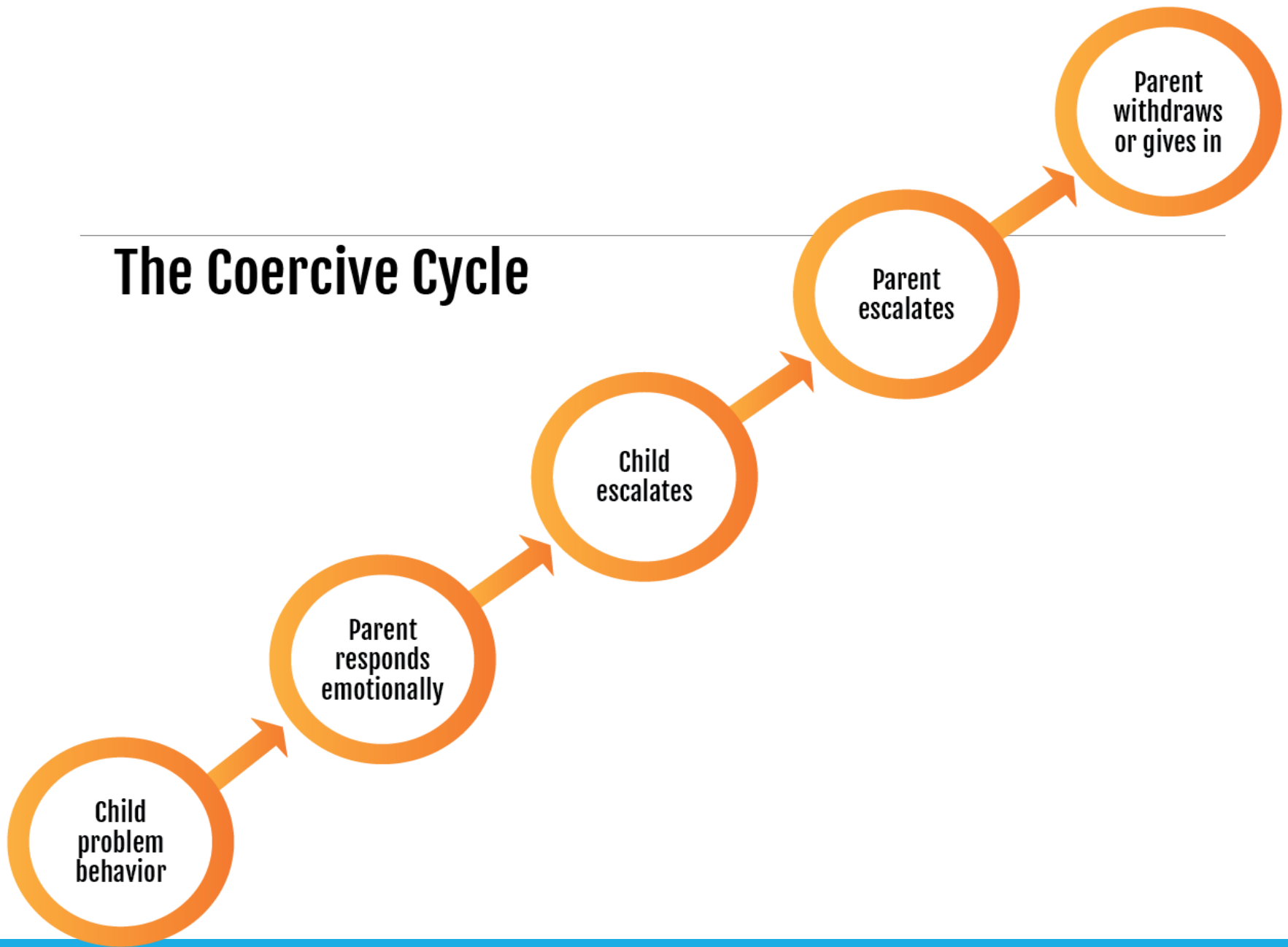
STRENGTHS-BASED

Validates existing strengths to promote change

HEALTH MAINTENANCE MODEL

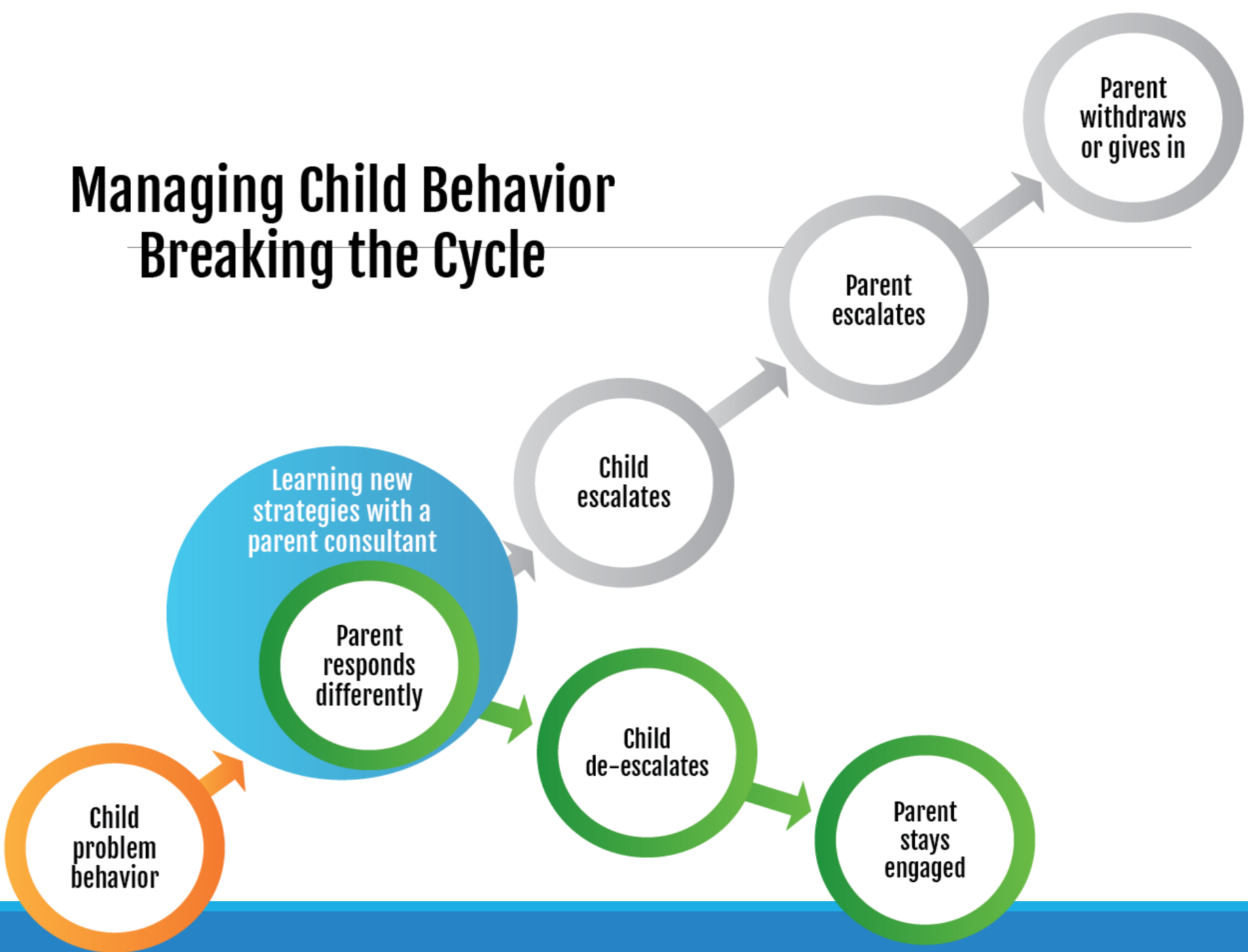
Includes periodic visits and long-term relationships with providers

The Coercive Cycle



Managing Child Behavior

Breaking the Cycle



Outcomes of Randomized Trials of the Original Family Check-Up in Early Childhood

Improvements in:

- Parenting practices
- Child self regulation
- School readiness
- Language acquisition
- Improved nutrition quality

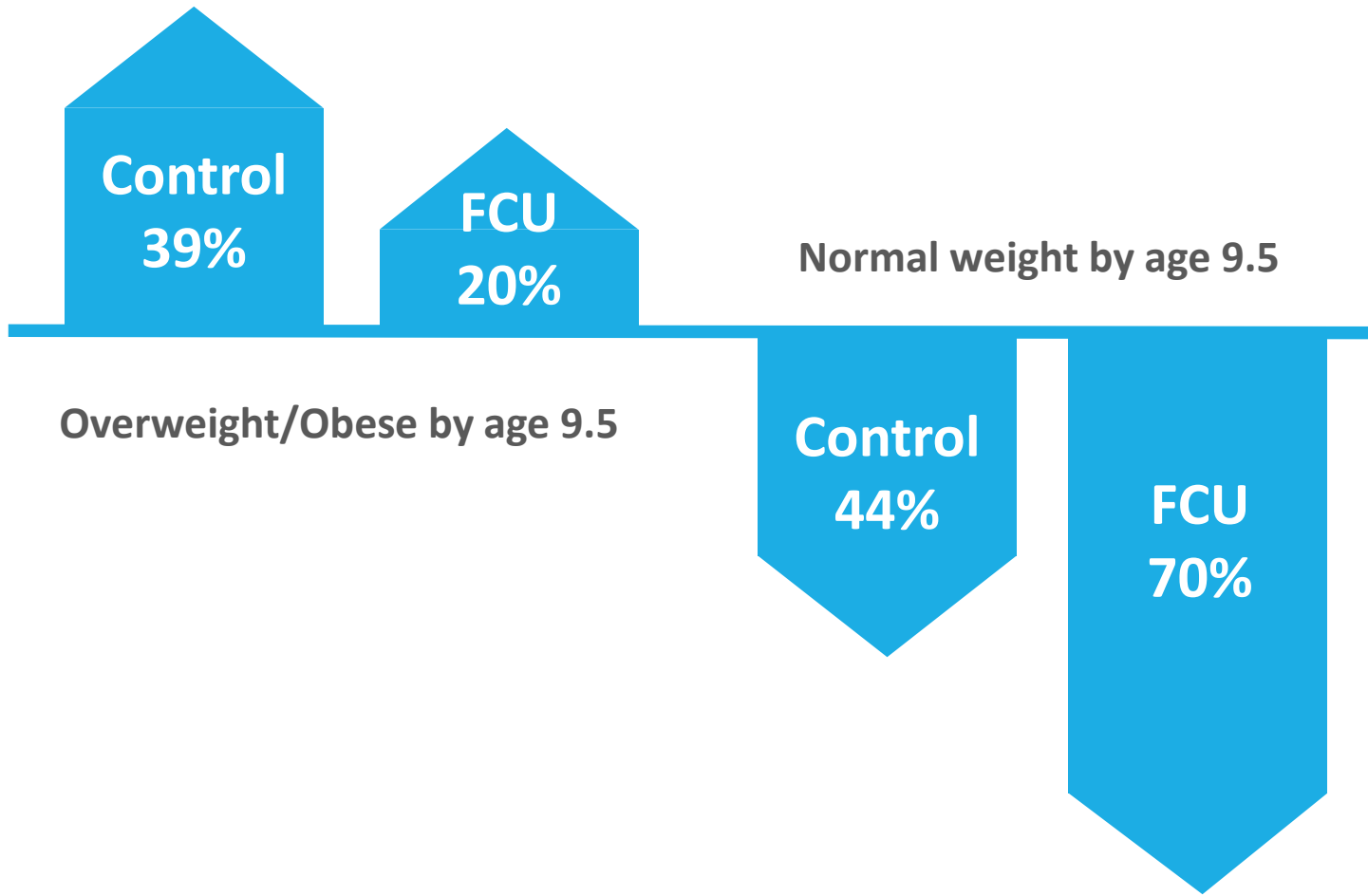
Reductions in:

- Problem behaviors (ODD, CD) at home and school
- Irritability
- Anxiety & depression (Sx & Dx)
- Child neglect
- Rates and trajectories of obesity/excess weight gain

Multisite RCT, N = 731

WIC → home visitation

Children at Risk for Obesity (age 5)



The Adaptation and Enhancement Process

Partnerships are Critical

Partnership Building (2010–2015)

Pediatrician survey (2011)

- 1) *Obesity*
- 2) *Nutrition education/diet*
- 3) *Parenting*

Key Considerations

- Space
- Staffing
- Content for obesity/nutrition/diet

Pilot feasibility trial (2013-2014)

- Acceptable
- Feasible with modifications
- Piloted implementation strategy



FCU4Health is a Bridge

FCU4Health

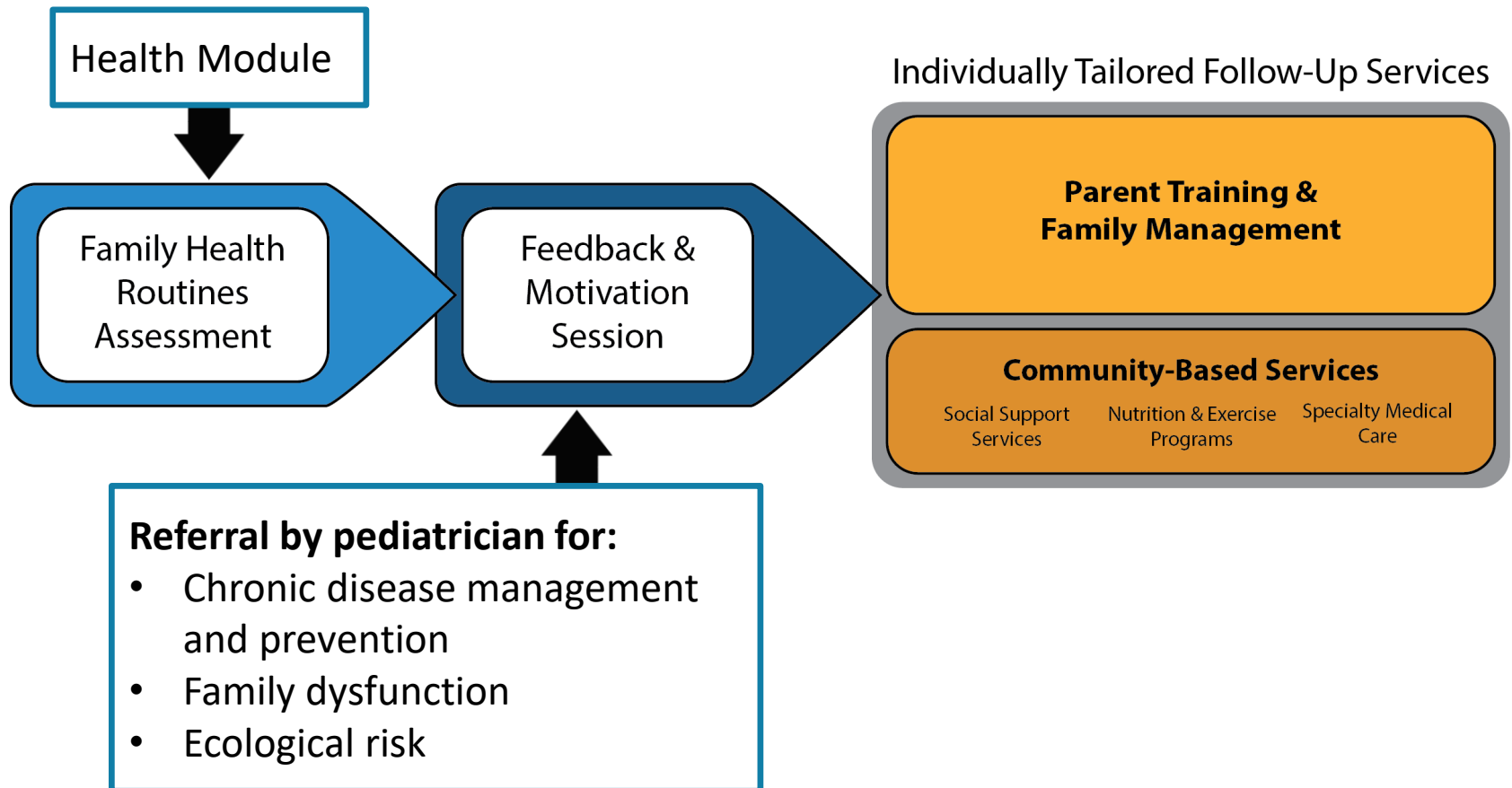


Identify Children who are Overweight/Obese
Counsel
Recommend behavior change: diet/nutrition, physical activity
Refer: specialty care, dietitian, behavioral health

Motivation to Change
Parenting Skills Training
Nutrition Education
Community Program Engagement

Motivated to Support Child Behavior Change
Effective Parenting and Family Management
Family Health Behavior Change
Engaged in Community Services

Adaptations & Enhancements



Family Health Routines Assessment Questionnaires (60 min)

Core Family Check-Up Battery

- Child behaviors
- Peer relations
- School success
- Depression/
anxiety
- Self regulation
- Parental well-
being
- Marital/
relationship
quality
- Neighborhood
resources
- Financial/life
stress
- Family and
extra-familial
support
- Family conflict/
functioning
- Family
management
skills

Family Check-Up 4 Health Module

- Child and parent(s) diet and physical activity behaviors
- Sleep management
- Mealtime routines
- Body Image & Stigmatization
- Quality of life
- **Optional:** Diabetes and asthma management

Se Habla
Español



Family: _____ Child's Age: _____ Date: _____



FCU4Health Child and Family Feedback Form

Family Health Routines

Family Health Routines	
Parent Health Behaviors	
Familiarity with Health Practices	
Other:	



Child Health Behaviors

Child Physical Activity Habits	
Child Eating Behaviors	
Child Food and Beverage Choices	
Other:	



Family Well-Being and Support

Family Stress	
Parent Well-Being	
Parent Substance Use	



Raising Healthy Children Study

Childhood Obesity Research Demonstration Project (CORD 2.0)

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Study Goals

Evaluate ability of the FCU4Health to reduce pediatric obesity

Learn about how to integrate family-centered behavioral interventions in primary care

Inclusion criteria

6-12 year olds

Elevated BMI ($\geq 85^{\text{th}}$ %)

Attending a primary care clinic

Could be identified:

- at well-check or sick visit, or through EHR
- by resident/attending pediatrician or study team

Exclusion criteria

No available primary caregiver

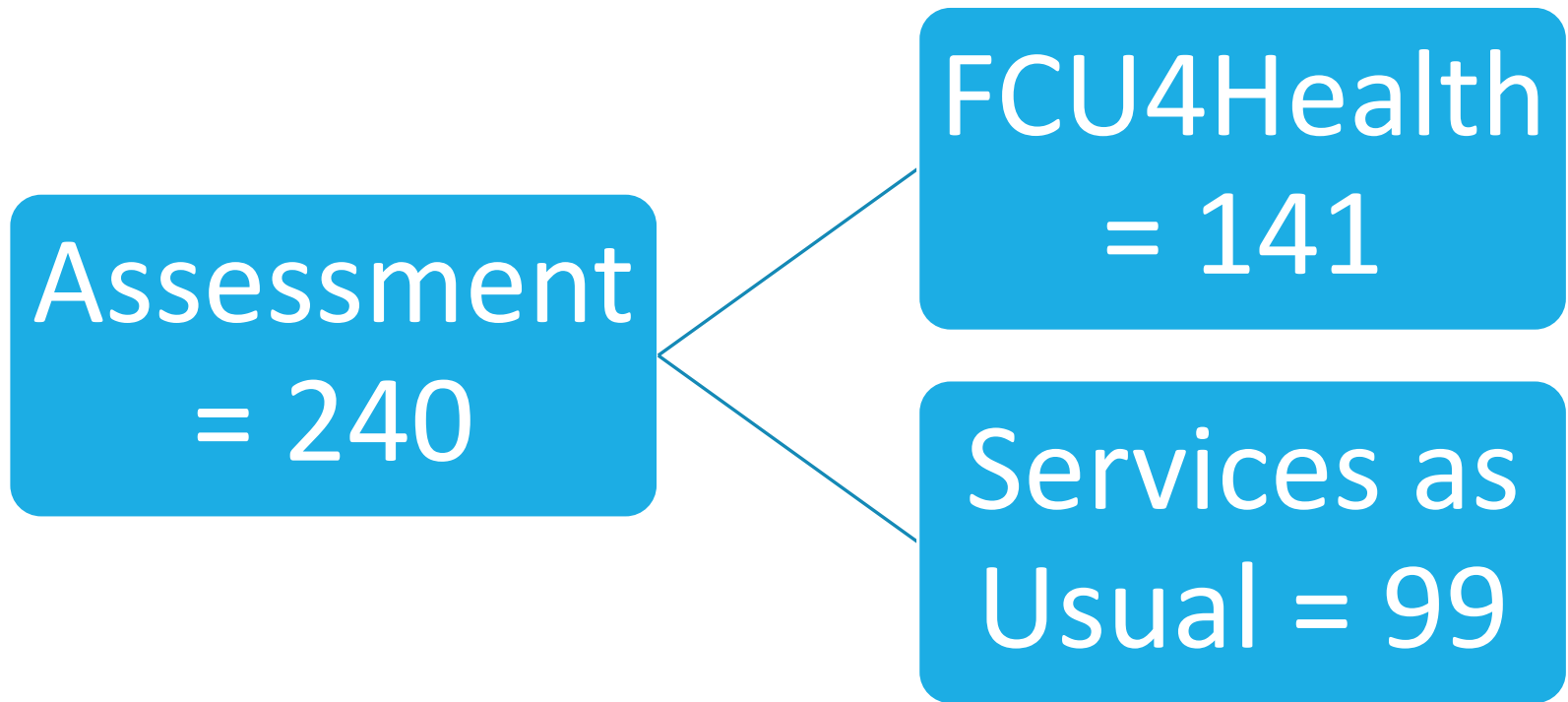
Primary caregiver did not speak:

- English
- Spanish

Service Delivery Model

	Identification	Assessment	MI-based goal setting & planning meeting	Referrals to community resources	Parenting modules
Hospital-based clinic	PCP	ASU Interviewer	ASU Coordinator	ASU Coordinator	ASU Coordinator
FQHC 1	PCP or BH	BHC in Behavioral Health	BHC in Behavioral Health	BHC in Behavioral Health	BHC in Behavioral Health
FQHC 2	PCP	CHW in Primary Care	BHC in Primary Care	CHW/BHC in Primary Care	BHC in Primary Care

Study Sample

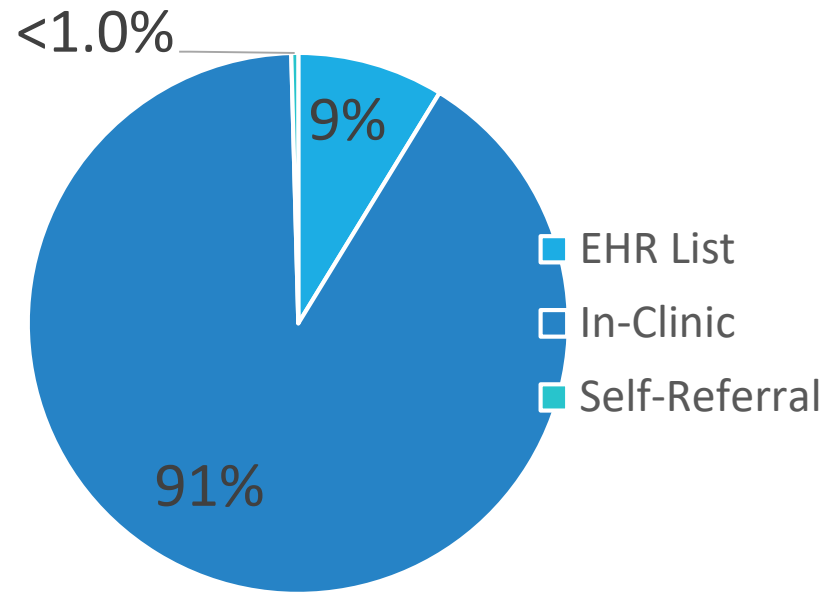
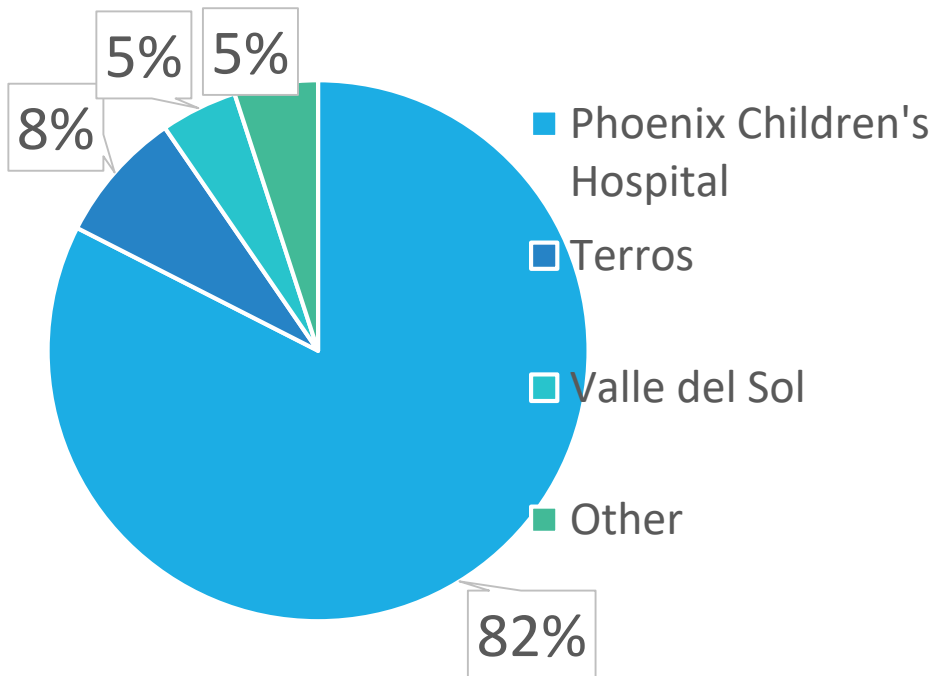


Study Timeline

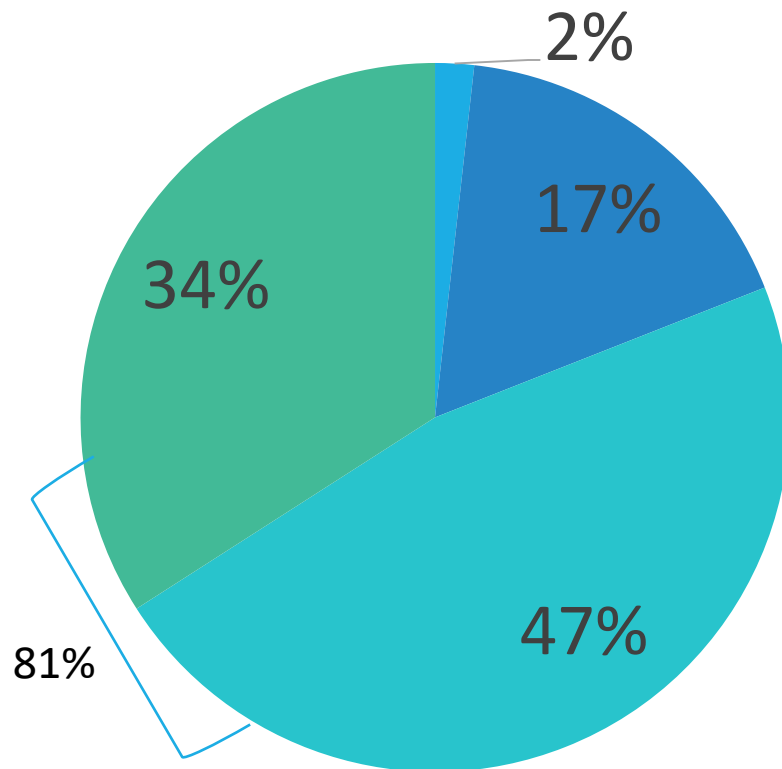
	2016	2017				2018	2019	
ASU IRB approval	July							
PCH IRB approval			May					
Enrollment		April				November		
Data collection				July				September
FCU4Health services					August		August	

Participant characteristics

Referral Source & Method



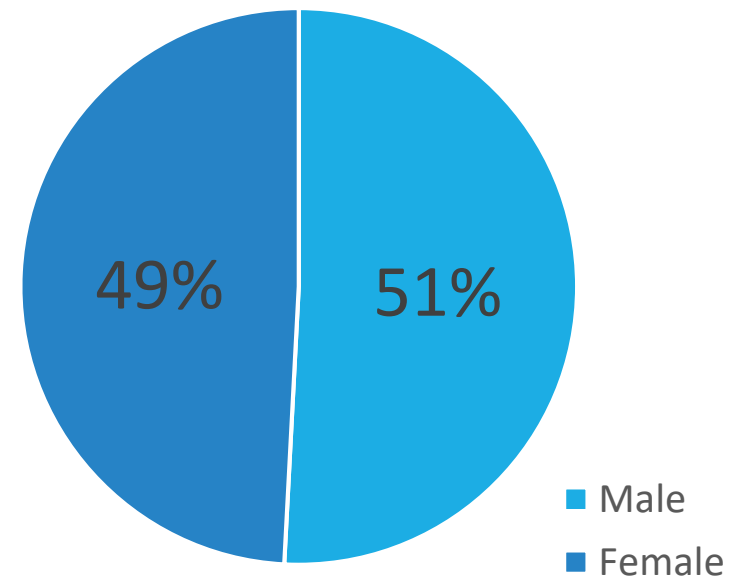
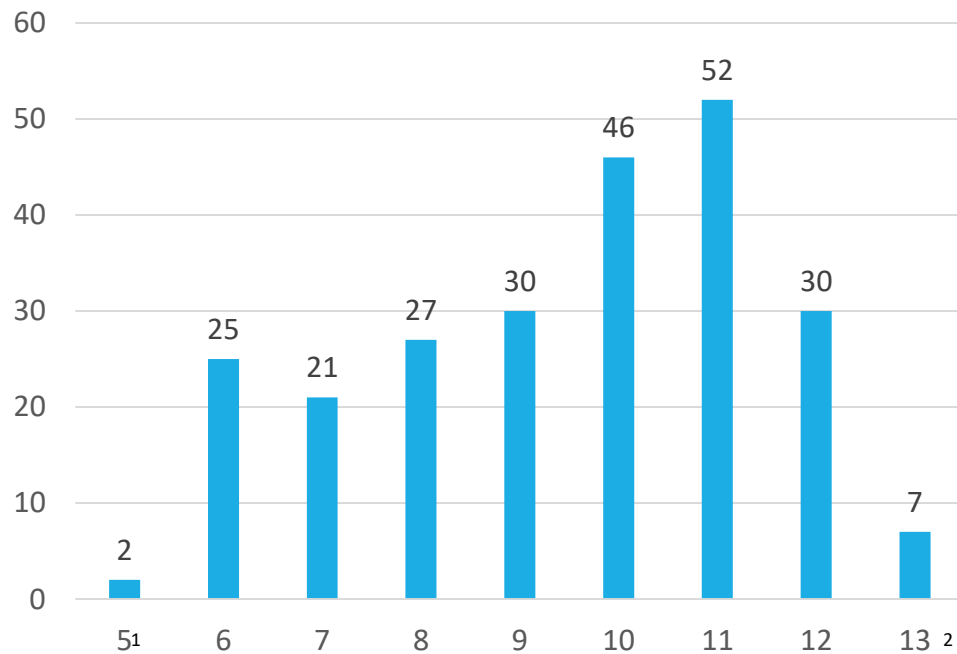
BMI Categories



- Borderline
- Overweight (85th%)
- Obese (95th%)
- Severe Obesity (120% X 95th)

¹ Child in range when referred by pediatrician; below 85thile when assessed by study team.

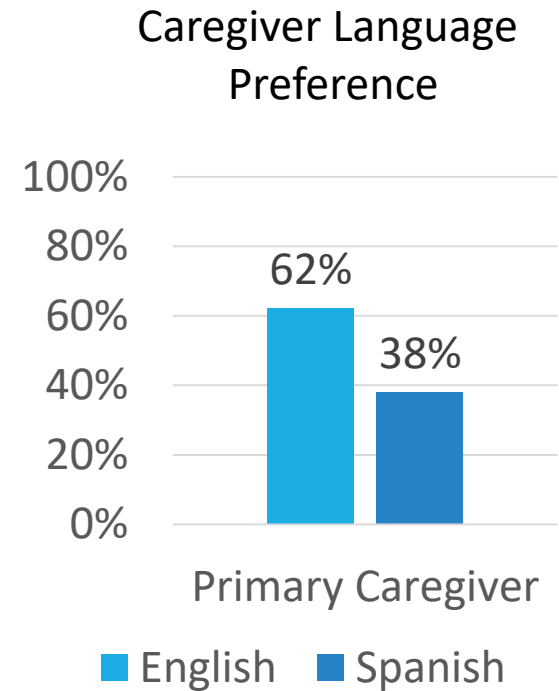
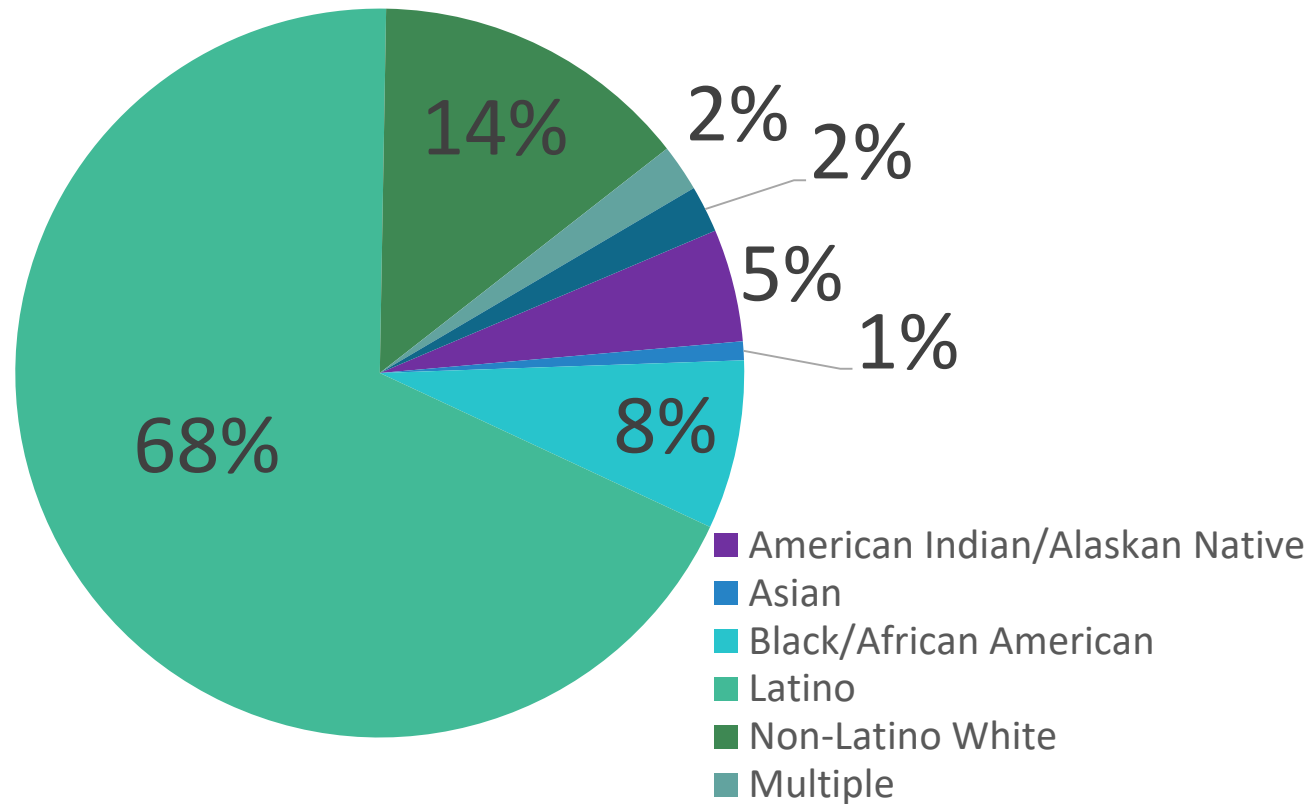
Child Age & Gender



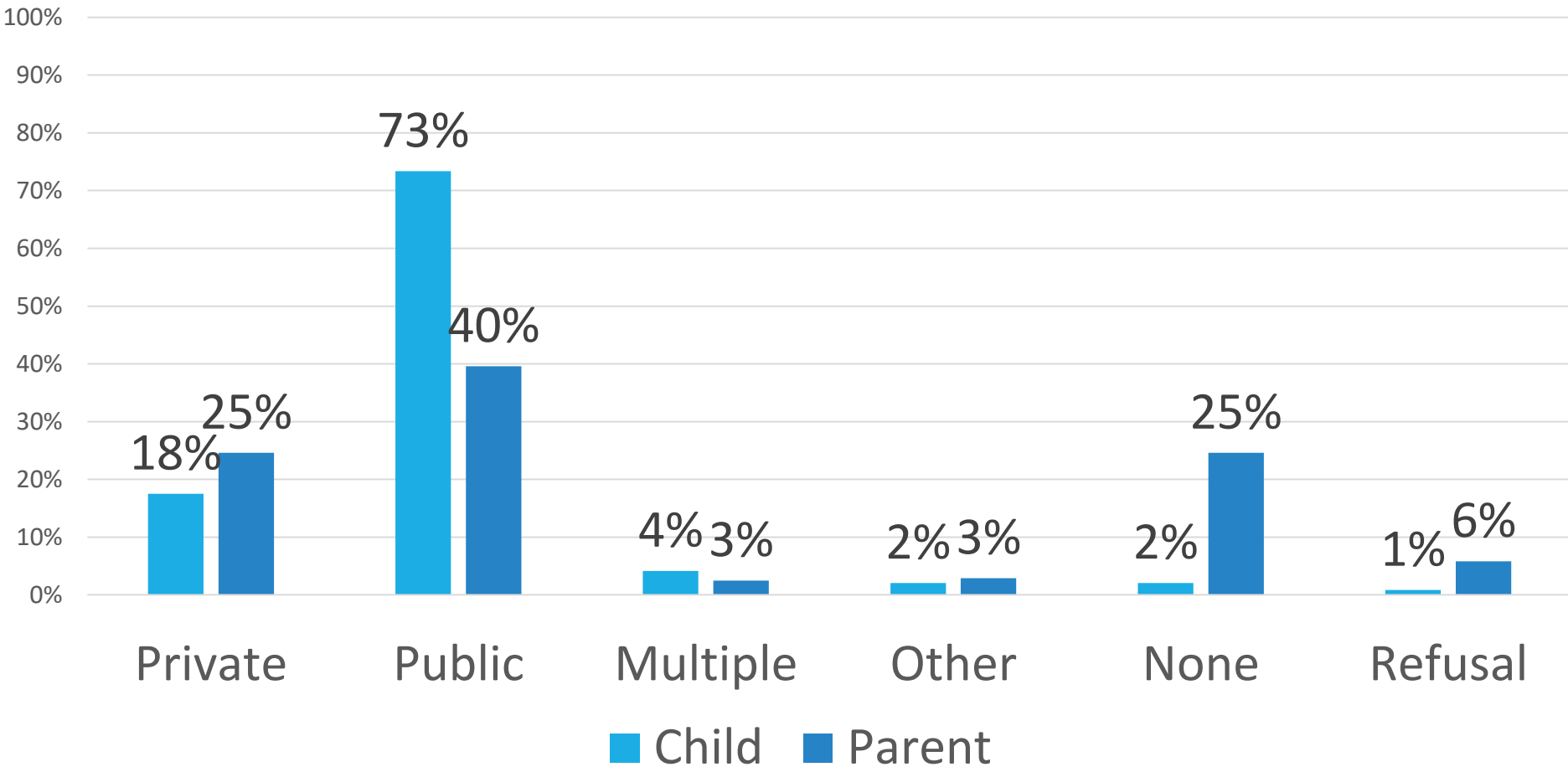
¹ Child was within 2 months of 6th birthday when referred to the study.

² Child was < 13 years of age at referral from pediatrician or first contact from study recruiters (delay between referral and interview).

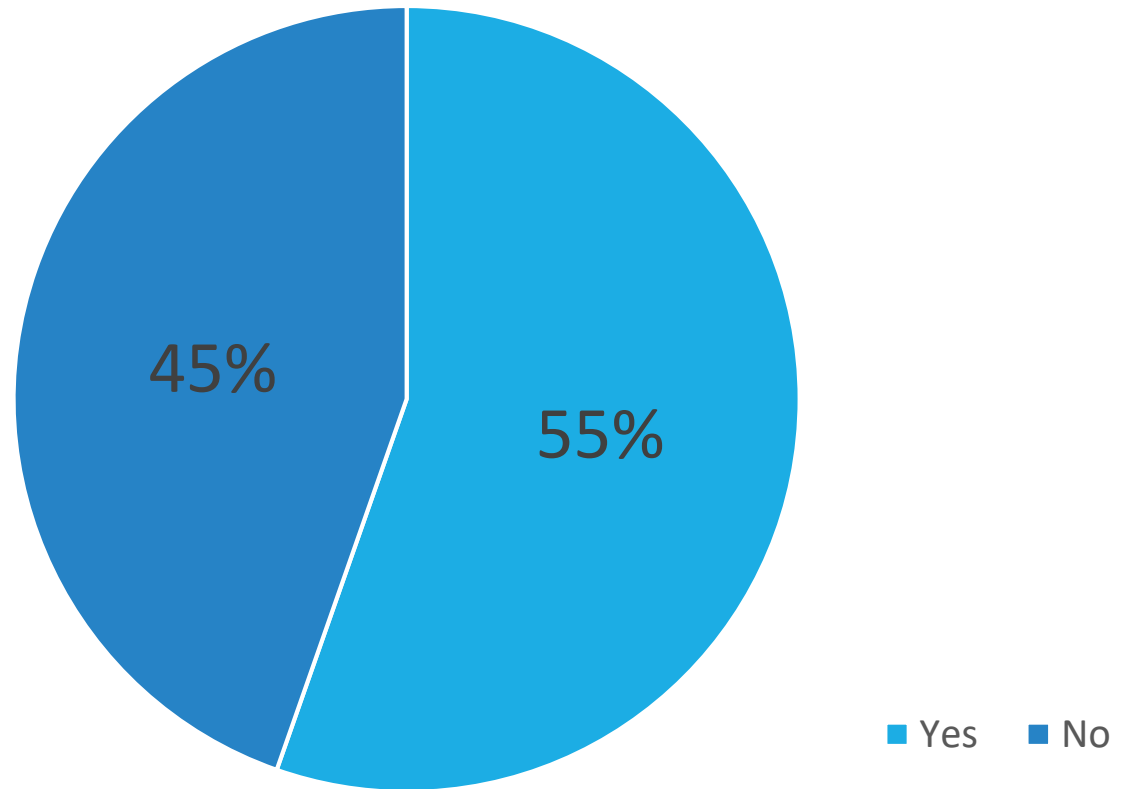
Race/Ethnicity and Language



Insurance Coverage

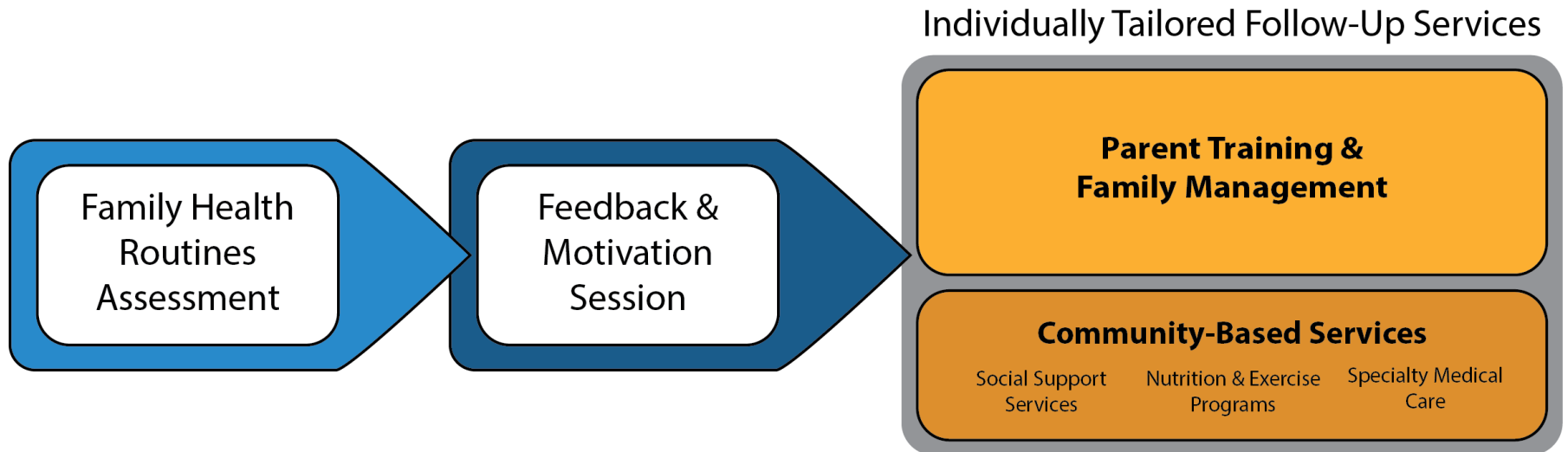


Food Insecurity

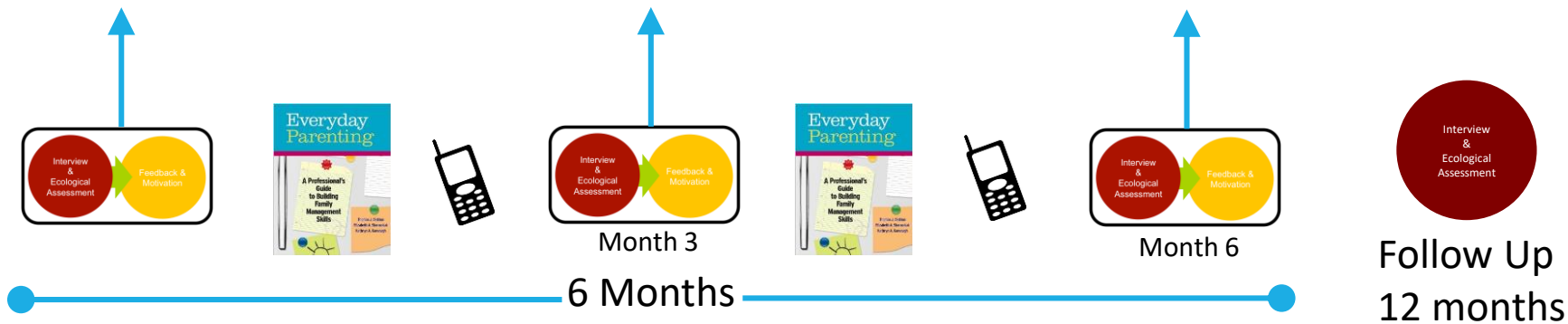


FCU4Health Service Utilization

FCU4Health Structure



Community Programs (diet/nutrition, physical fitness, recreation)



Predictors of Program Initiation

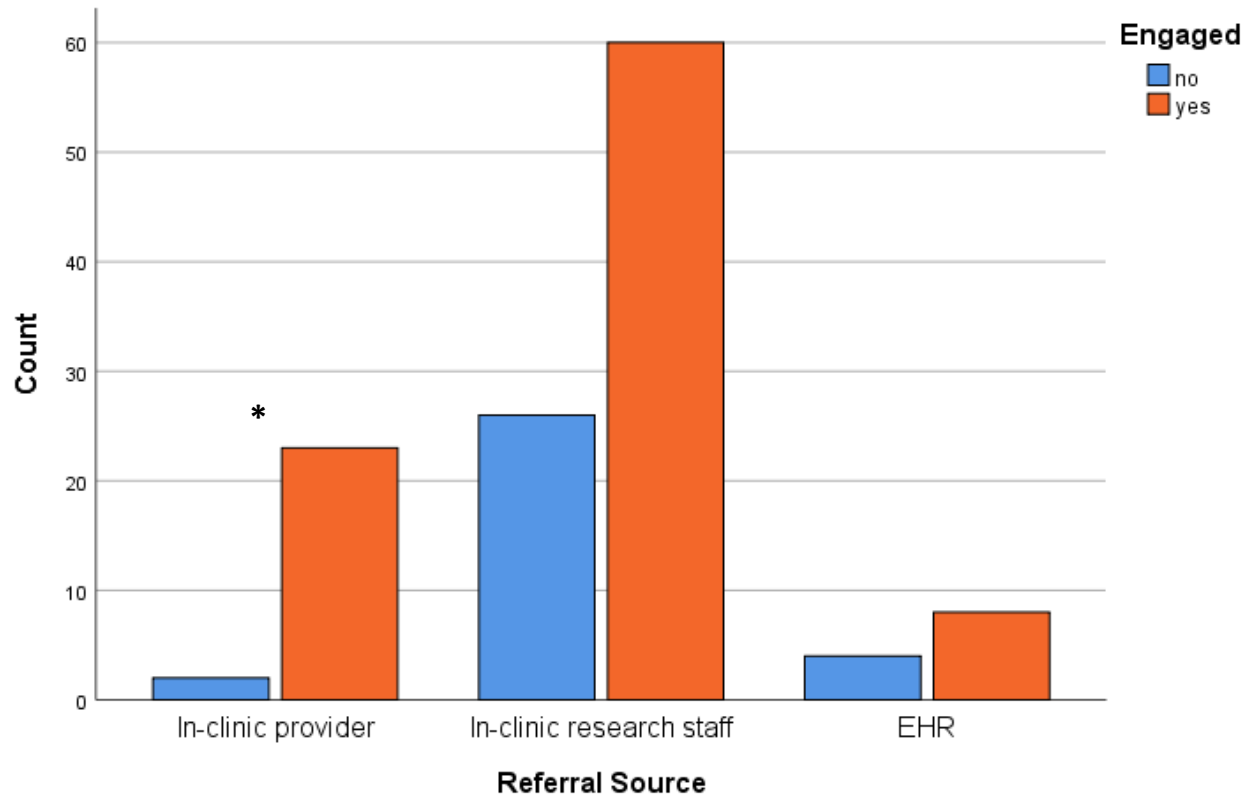


Referral source

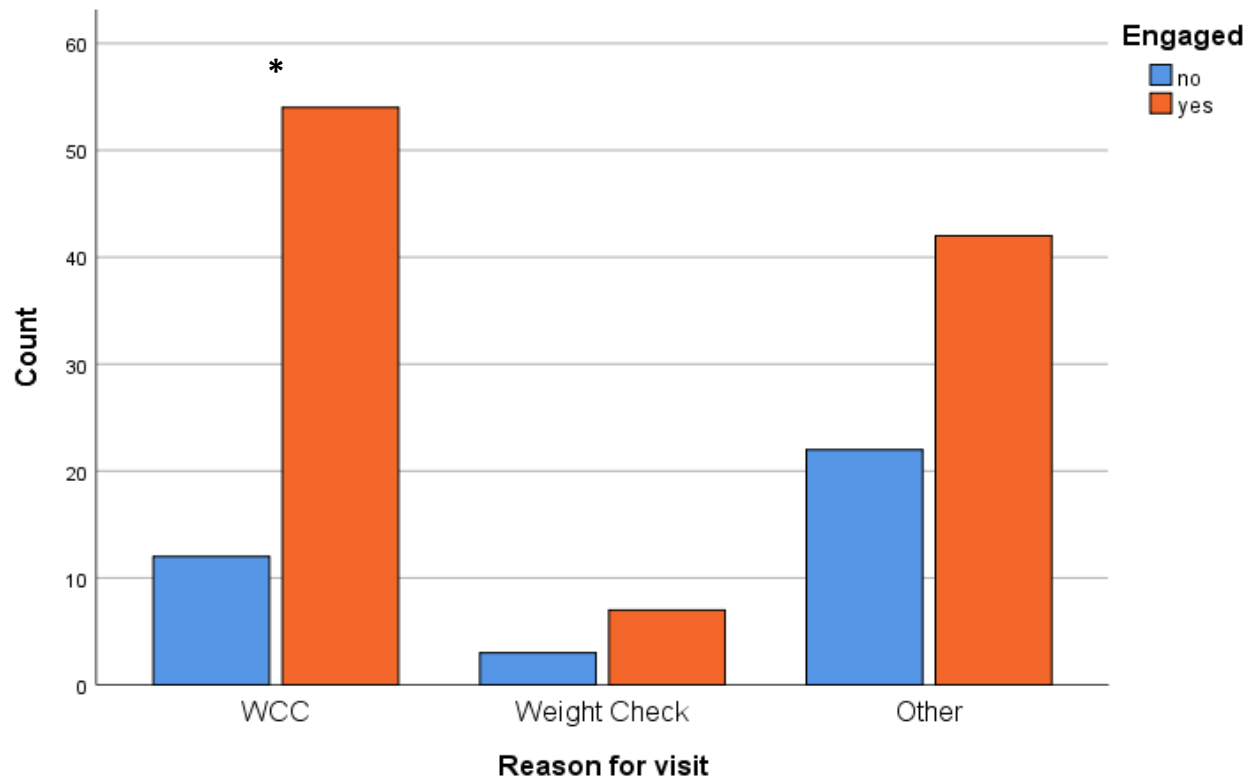


Child health

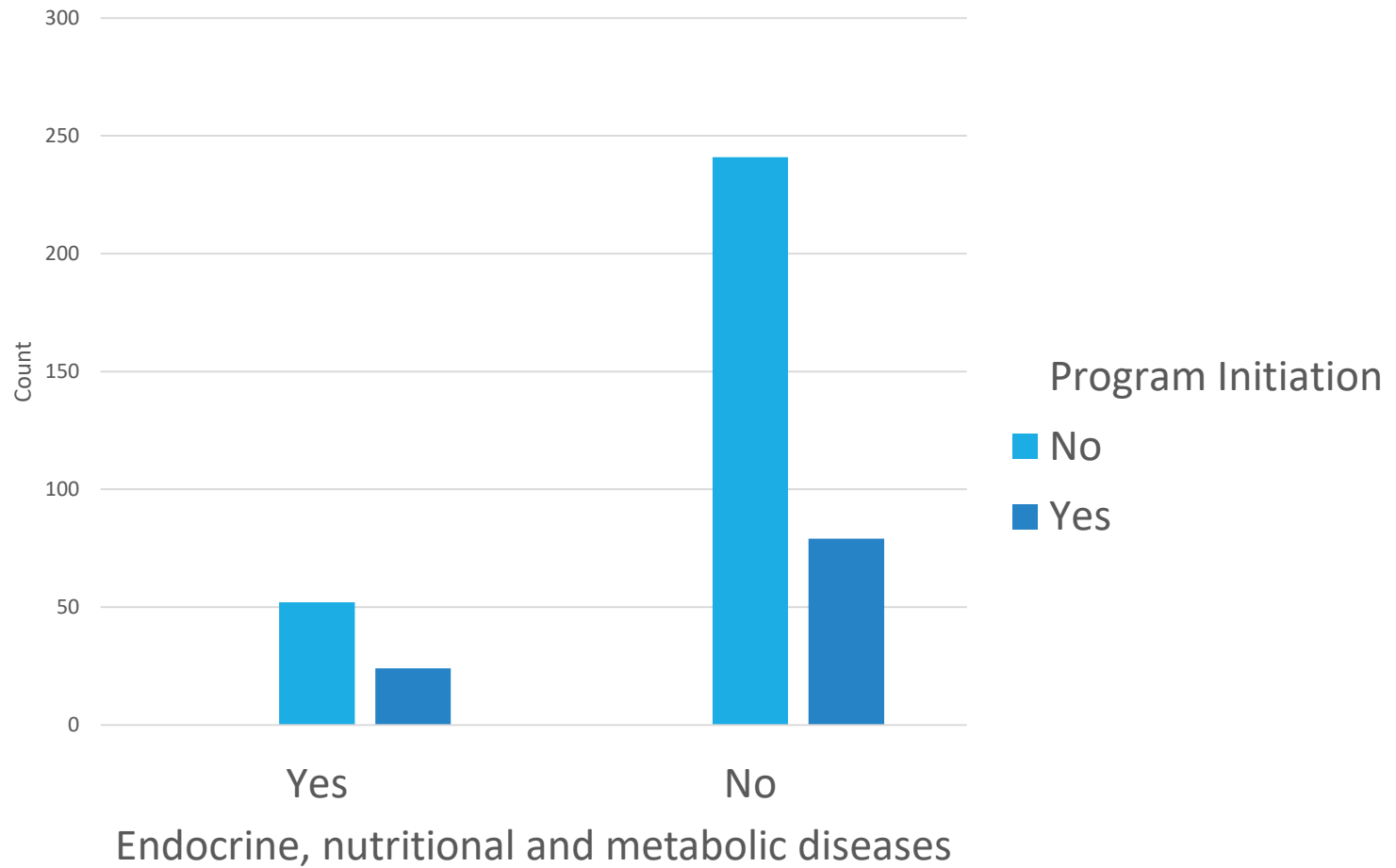
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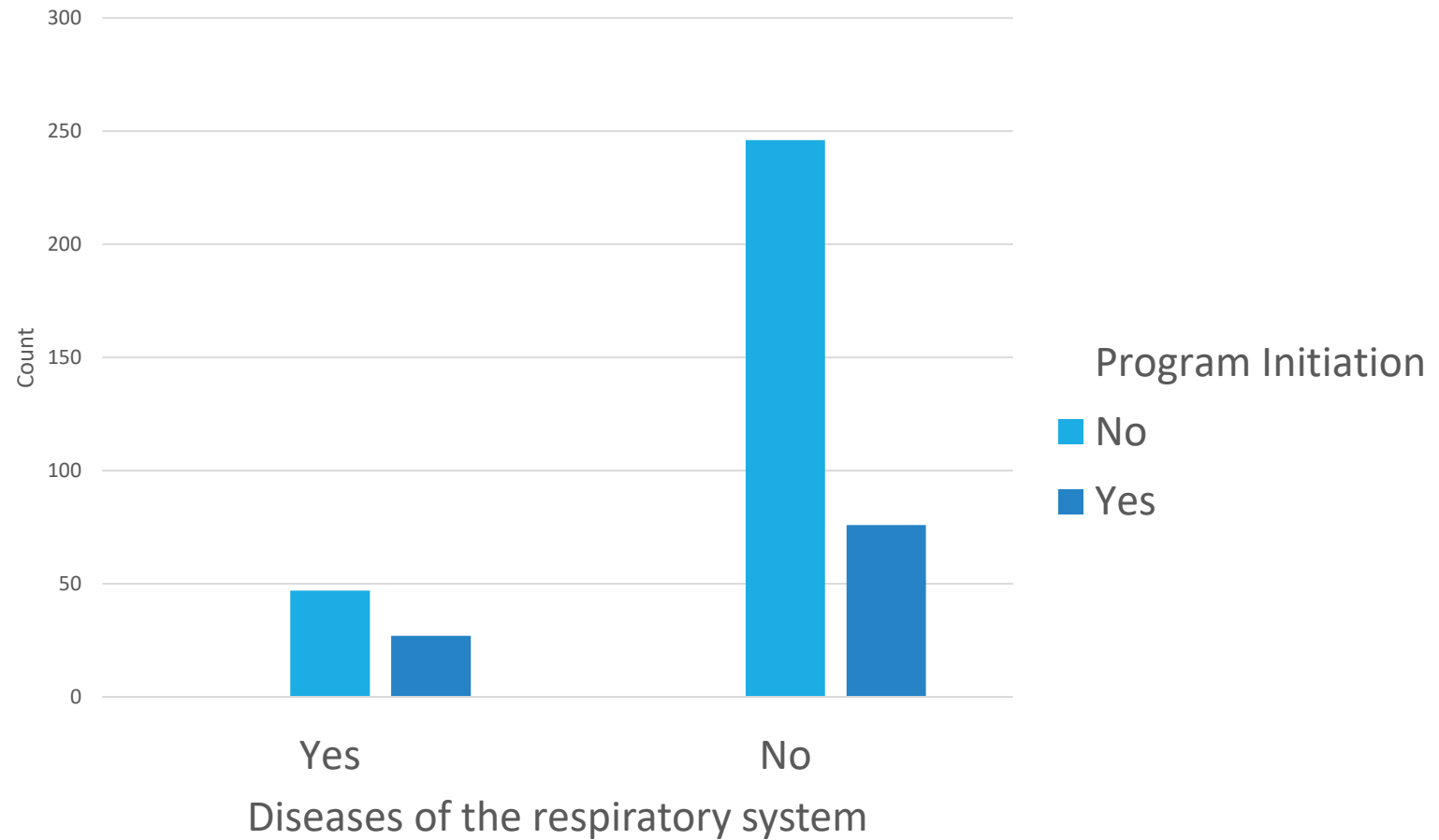
Visit type



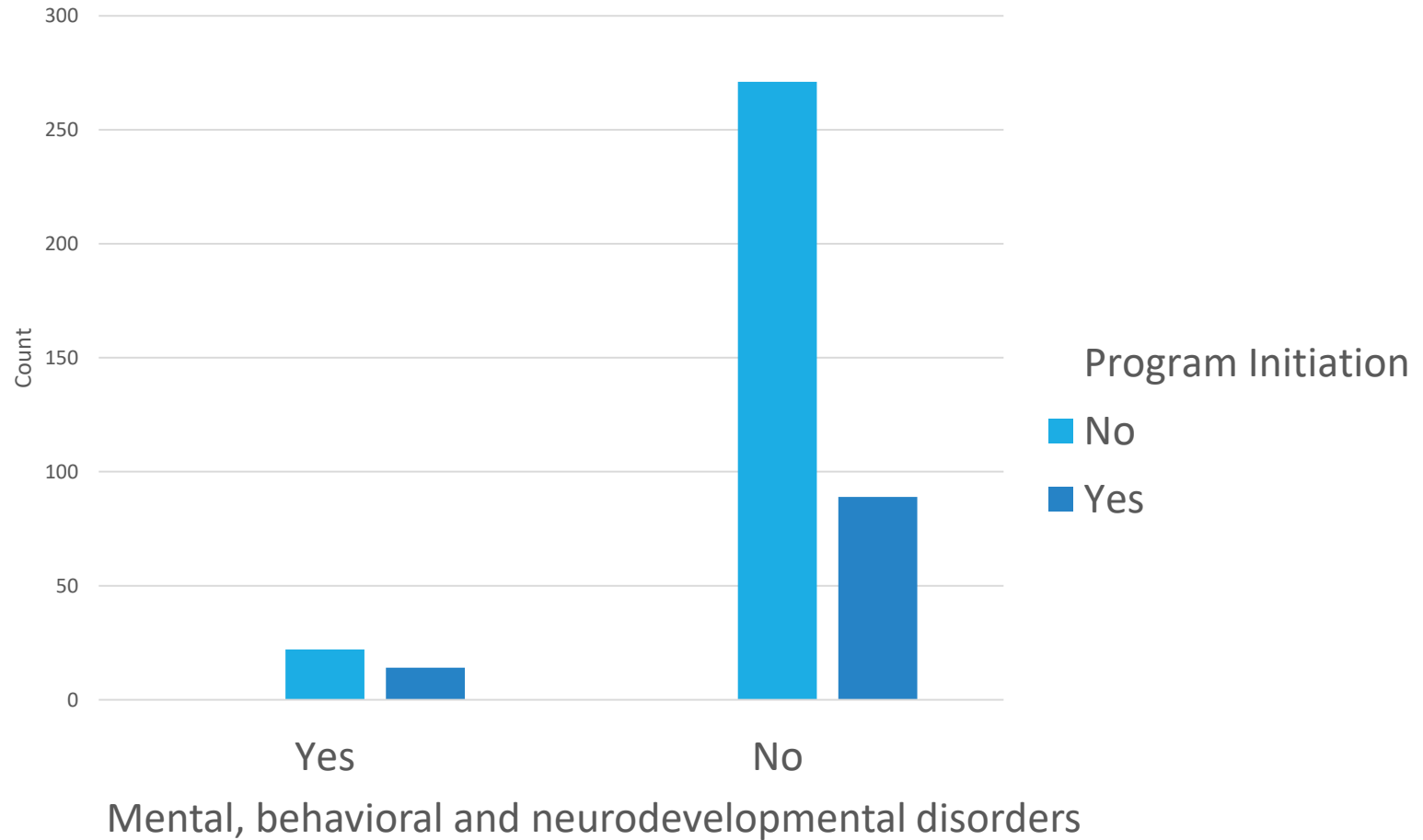
Metabolic Dx



Respiratory Dx




Behavioral Health Dx



Feedback & Motivation Sessions

80% of intervention families engaged in at ≥ 1 Feedback Session


Family: _____ Child's Age: _____ Date: _____



FCU4Health Child and Family Feedback Form

Family Health Routines


Family Health Routines	
Parent Health Behaviors	
Familiarity with Health Practices	
Other:	



Strength Needs Attention

Child Health Behaviors


Child Physical Activity Habits	
Child Eating Behaviors	
Child Food and Beverage Choices	
Other:	



Strength Needs Attention

Family Well-Being and Support


Family Stress	
Parent Well-Being	
Parent Substance Use	
Other:	



Strength Needs Attention

Child Adjustment


Behavior	
Emotional Adjustment	
Coping & Self-Management	
Other:	



Strength Needs Attention

Family Management and Relationships

Relationship Quality	
Positive Behavior Support	
Monitoring & Limit Setting	
Other:	

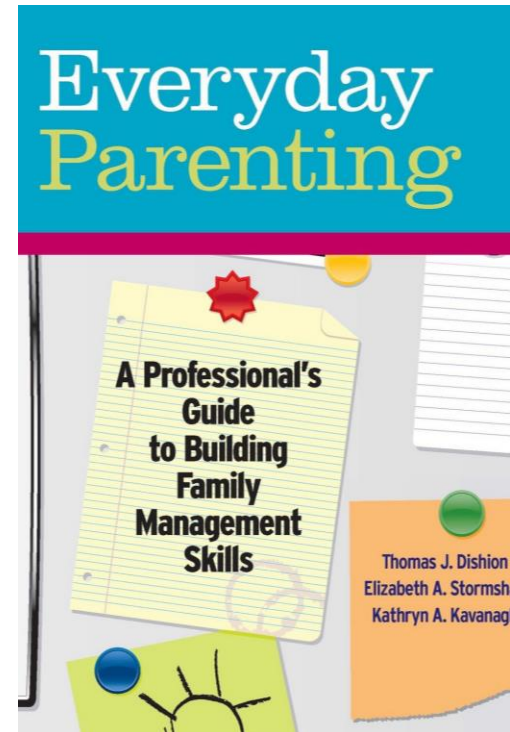


Strength Needs Attention

Parenting Modules

Of those...

- 67% engaged in ≥ 1 parenting module
- Mean number of modules: 2 (range = 0-12)
- Mean time for modules: 2.87 (range = 0-10.75) hours





Referrals to Community Resources

Referrals: 92% of families received referrals to community resources

Outcome: 100% of those families' needs were met

Participation in Community Programs/ Services by Category

	Mean	SD	Min.	Max.
Sports/organized physical activities	21	51	0	360
Informal physical activities	34	51	0	210
Community gardening	0	1	0	9
Nutrition classes	3	11	0	87
Total	58			

What is the role of MI in this setting?

Motivational interviewing (MI) is a core component of the FCU and FCU4Health used to engage families

MI is a clinical skill that often requires training and ongoing supervision to maintain

Research Questions

- How do MI skills compare to ratings from a previous efficacy trial?
- Are MI skills associated with indicators of participant responsiveness?
- Is the influence of MI skills moderated by Spanish language?

Methods

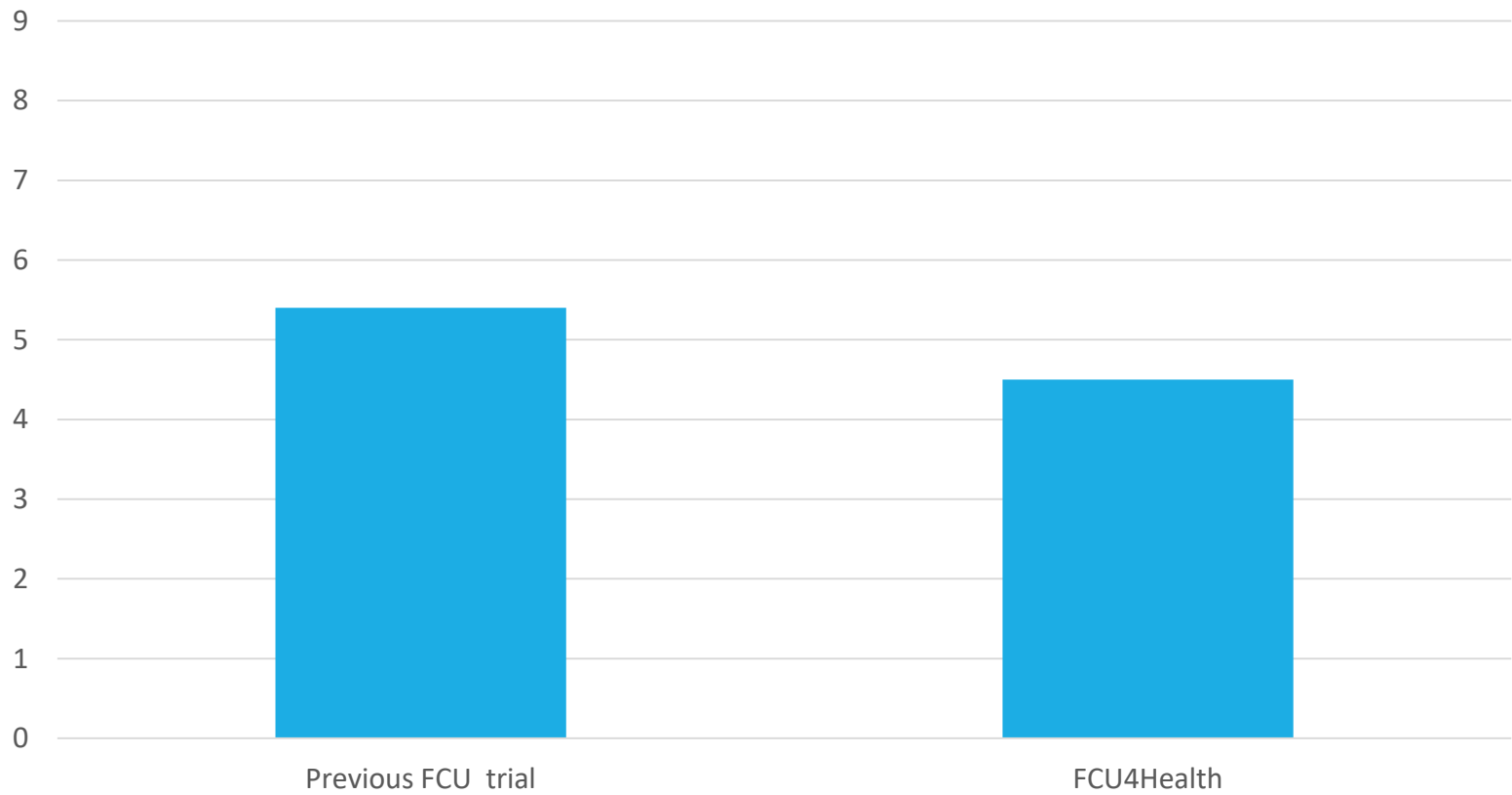
Measures

- Provider delivery and participant in-session engagement
 - Rated the first feedback session using the COACH rating system
 - Coders: 4 trained FCU4Health coordinators
 - 9-pt. scale:
 - Delivery: 1 (needs work) – 9 (good work)
 - Engagement: 1 (low) – 9 (high)
 - IRR: .74 for delivery; .73 for engagement
- Follow-up parenting sessions
 - Count using administrative data
- Motivation to achieve goals
 - Parent report at baseline and immediate post-test
 - 5-pt. scale: 1 (no change needed) - 5 (working hard to change)
 - Cronbach's α : .89 at baseline; .91 at post-test

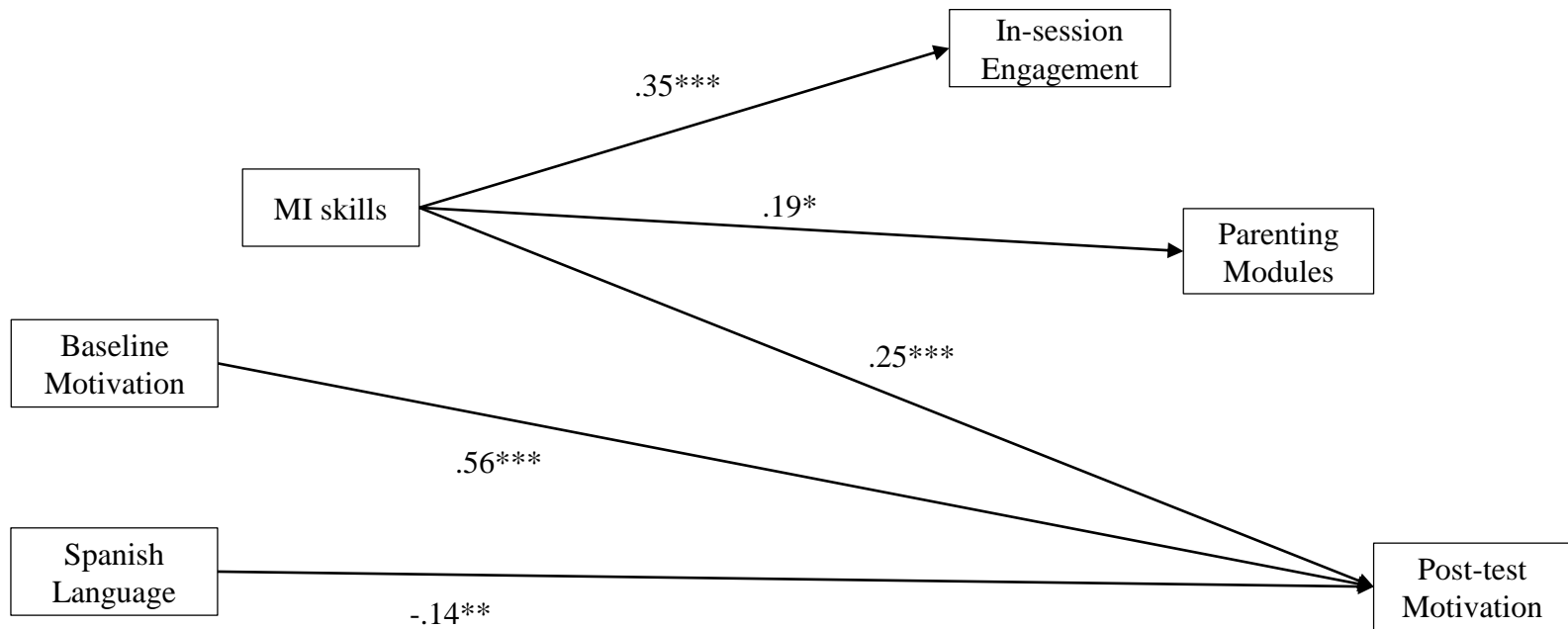
Analysis

- Included 141 participants assigned to the intervention condition
- SEM analyses conducted in Mplus

MI scores



Results



$$\chi^2(4) = 2.64, p = .62$$

Summary

Programs with both physical and behavioral health outcomes appropriate for integrated primary care settings

Implementation should be tailored to fit the workflow

Families are more likely to initiate services if referred by pediatricians at well-checks, and if they had a respiratory or behavioral diagnosis

Motivational Interviewing skills were important for engagement, and were only slightly lower than efficacy trial

Thank you!

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