

*Use of the Family Check-Up in  
pediatrics: The Smart Beginnings and  
SafeKeeping Youth Studies*

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# Overview

- Provide context for using pediatrics as a platform for utilizing Family Check-Up and other preventive interventions in primary care
- Describe SafeKeeping Youth (SKY) Study, an ongoing project to prevent substance use among at-risk early adolescents (10-13)
- Describe Smart Beginnings Study, a second ongoing study aimed at promoting school readiness among families with newborn infants
- Lessons learned, achievements, and challenges

## Why use the FCU in Pediatrics

- One of few venues for identifying at-risk children, especially those in poverty
- Parents tend to trust their pediatricians more so than other societal agents in service settings, adding credibility to the FCU (see our engagement data later)
- Pediatricians identify children with problem behavior but have insufficient time, expertise, and resources to address
- Even the name “Family Check-Up” fits into culture of “well check-up” visits in USA, as parents expect to come to primary care on a regular basis to ensure their child’s health.
- Efficiency and brevity of FCU consistent with “take action now” strategy of pediatric practices

SafeKeeping  
Youth (SKY)  
Study:  
Adapting FCU  
for  
Primary  
Care to  
Prevent  
Adolescent  
Substance Use

- Delivering FCU in pediatric offices using parenting-oriented FCU
  - Safeguarding low-income children from risky peers and behavior
  - Building parent-child relationship quality in the process
  - Getting parents to be more active participants in their children's lives, particularly in high-risk neighborhoods



## SafeKeeping Youth (SKY) Study: Development of ALEXSA

- Barriers to substance use prevention in pediatrics:
  - Insufficient time, unfamiliarity with a screen,
  - lack of resources/training to manage positive screen
  - lack of effective intervention.
- Youth Risk Index (YRI), short version of ALEXSA, takes 7 min for youth and parents to complete
- Measures risk of dangerous behavior based on longitudinal research
- Youth version is cartoon- and audio-based, and found to be enjoyable for youth
- Does not disrupt patient flow
- YRI uses best ~20 items from 350 in full ALEXSA predicting substance use one year later

# Sample Items from ALEXSA

## Anger Coping

When you have a problem at school or at home, do you get mad at people?



Never Sometimes Usually Always

Replay


Pause

Don't Know

Refuse

## Distractibility

How often are you easily distracted from your schoolwork?



Never Every few days 1 a day 2+ a day

Replay

Pause

Don't Know

Refuse

## Suscept. to Peer Pressure

If your best friend invited you to watch a movie and you had to study for a test, would you go watch the movie anyway?



Never Sometimes Most times Every time

Replay


Pause

Don't Know

Refuse

## Conduct Disorder

How many of your friends have ever started a fight?



0 1 2

3 4 5+

Replay

Pause

Don't Know

Refuse

# FCU Implementation in SKY

## Service Setting Adaptation

- ALEXSA screen in exam rooms at PCC to parent and 9.75-13 year old child -- <10 minutes on Ipad (parent) or pc (child)
- Only those interested in full study will complete Screen
- Families randomly assigned to FCU or wait-list control group, receiving FCU 1 year later

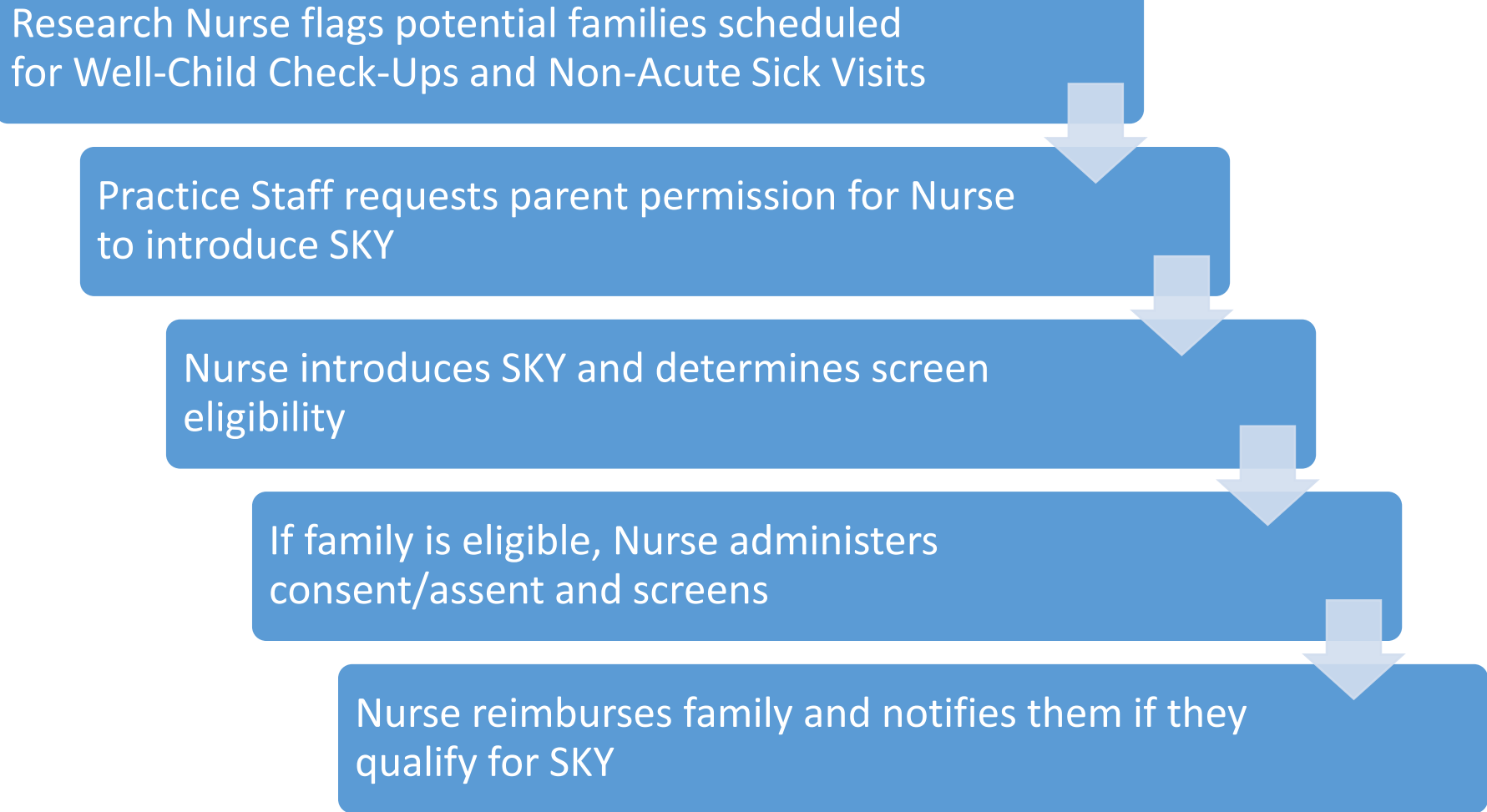
## Real World Implementation

Pediatric  
FCU family  
home

Follow-Up  
treatment  
at family  
home

# Flow of Successful Recruitment

Research Nurse flags potential families scheduled for Well-Child Check-Ups and Non-Acute Sick Visits



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graph TD; A[Research Nurse flags potential families scheduled for Well-Child Check-Ups and Non-Acute Sick Visits] --> B[Practice Staff requests parent permission for Nurse to introduce SKY]; B --> C[Nurse introduces SKY and determines screen eligibility]; C --> D[If family is eligible, Nurse administers consent/assent and screens]; D --> E[Nurse reimburses family and notifies them if they qualify for SKY];
```

Practice Staff requests parent permission for Nurse to introduce SKY

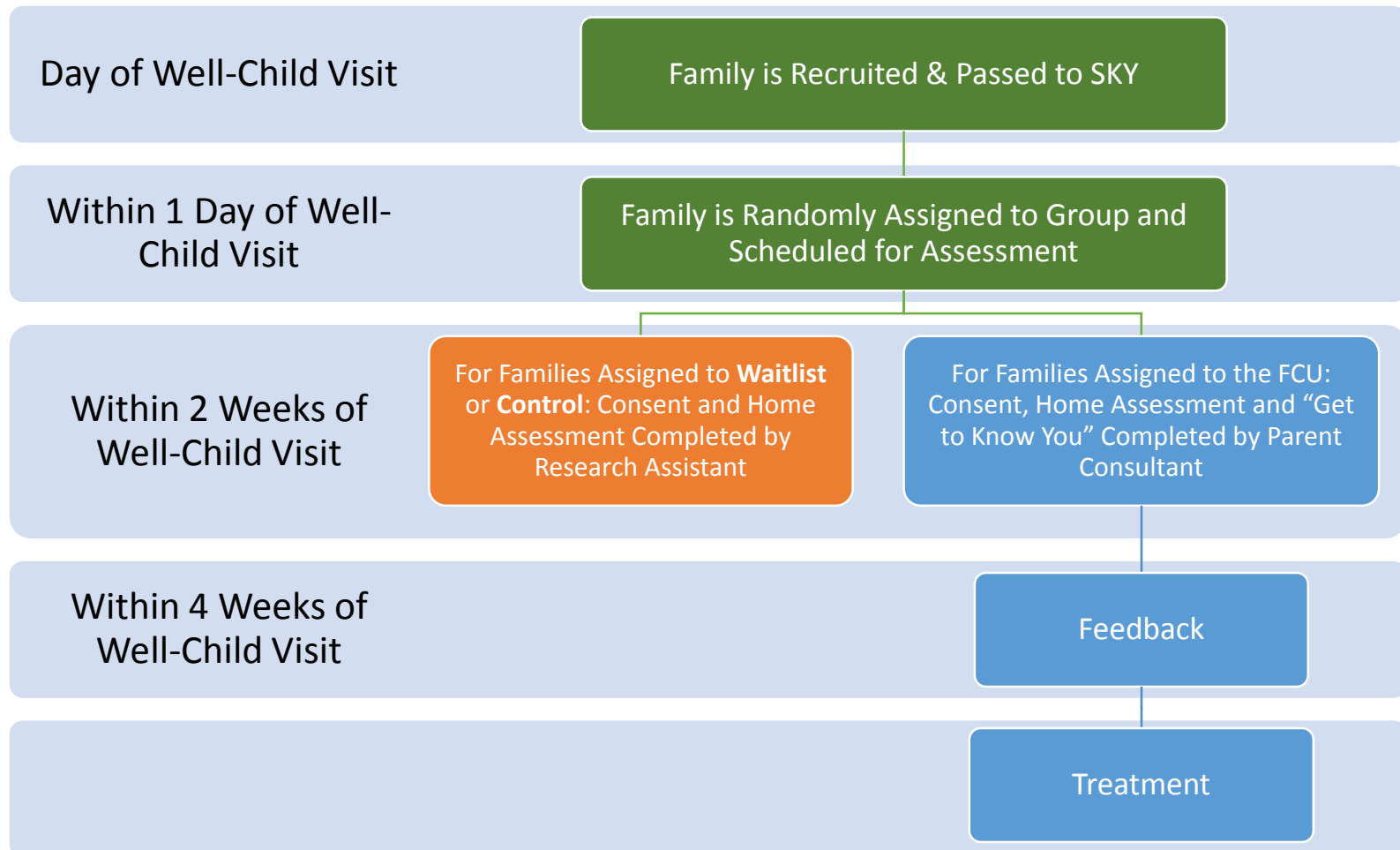
Nurse introduces SKY and determines screen eligibility

If family is eligible, Nurse administers consent/assent and screens

Nurse reimburses family and notifies them if they qualify for SKY

# Flow of Study Participants For SKY Study

What happens after recruitment?



## Lessons Learned from SKY: Achievements and challenges

- **Lessons learned**
  - Need a champion on unit to create *and* maintain enthusiasm
  - Buy in of front-line staff essential
  - Compared to early childhood, youth/families in really brutal shape – takes dedicated intervention staff
- **Achievements**
  - 93% engagement rate in FCU
  - Preliminary findings suggest effects on monitoring and substance use
- **Challenges**
  - Incorporating intervention staff into practice
  - Billing for insurance post Affordable Care Act that provides reimbursement for substance use risk
  - Maintaining enthusiasm of pediatric staff -- need “booster sessions”

# Motivation for *Smart Beginnings* Project

- Large socioeconomic (SES) disparities in school readiness; *observed early in development of brain architecture during the first year of life.*
- Modest success reducing SES gaps through early education and home visiting programs (partly because <4% of eligible low income children enrolled); and such programs are costly
- Income matters. But, parent-child interactions appear to explain 50% of SES gaps

## **Elements for a new strategy:**

- A platform that will reach a high percentage of families as early as birth of child
- Use of proven interventions that target parent-child interactions
- Flexibility to address the needs of high and lower risk poor families
- Implementation at low cost

# Barriers to scalability and population-level engagement addressed by our model

## Barriers:

**Engagement  
Cost**



## Addressed by:

**Identify families and engage in  
1° prevention in medical home**

**Heterogeneity  
in Risk**



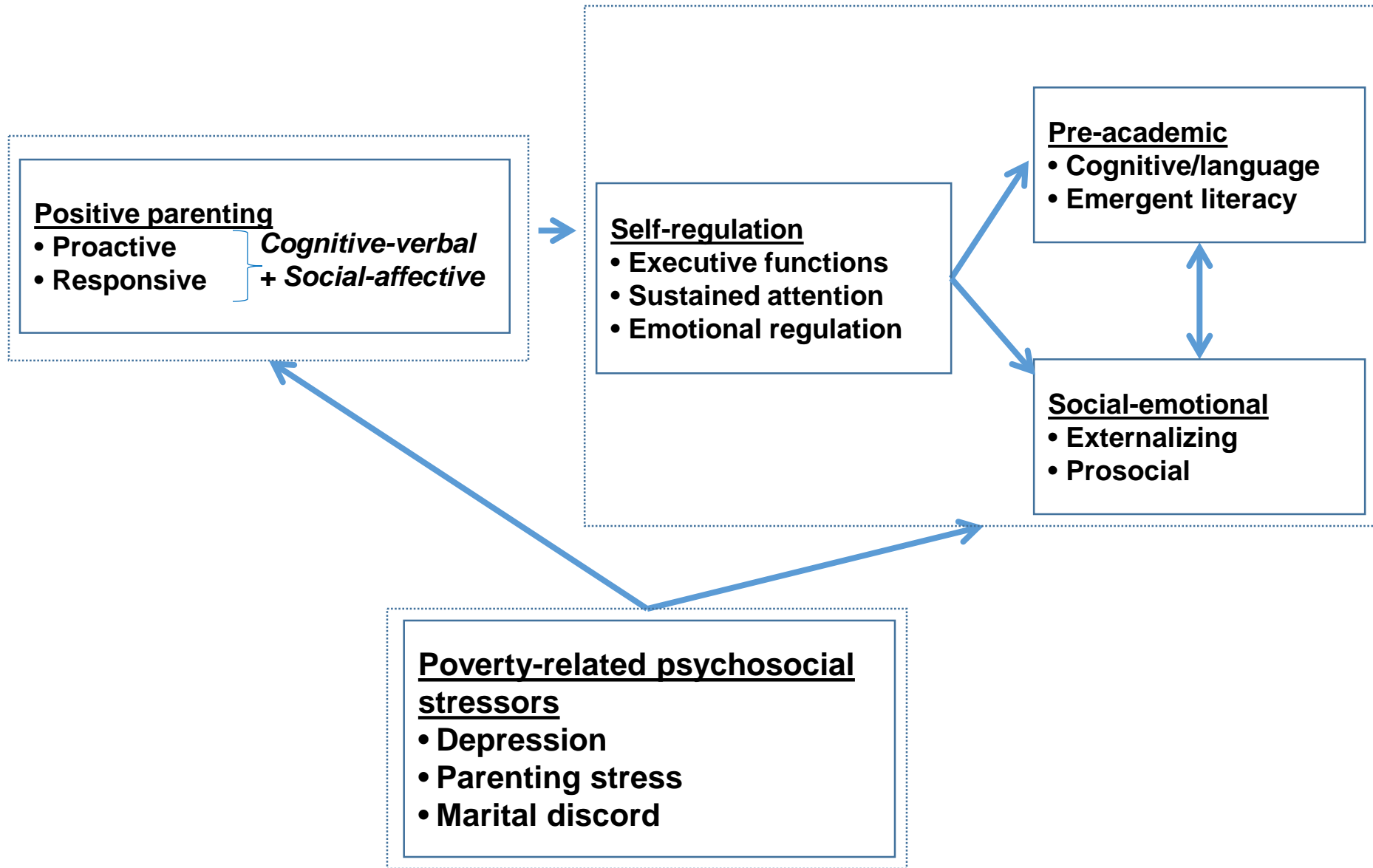
**Integrated 1°+2° prevention:**

- **Tailored to risk, building on goals**
- **Potential for additive and synergistic impacts**

## **A new (tailored public health) strategy**

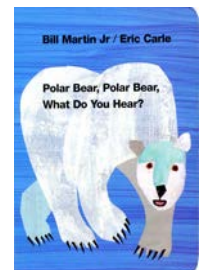
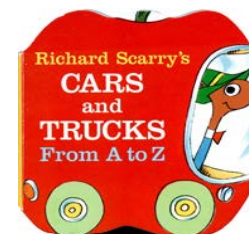
- **Utilize pediatric primary care settings as a platform that reaches families at time of child's birth**
- **Integrate two proven prevention (parent-child interaction based) intervention models:**
  - **Video Interaction Project (VIP;** Mendelsohn et al., 2005) for all parents of infants during visits to pediatricians
  - **Family Check up (FCU;** Dishion, Shaw et al., 2008) for more intensive and tailored services for families with additional family-based risks

# Theory of Change: Use of VIP *and* FCU



## Pediatric Primary Care as a Platform in Early Childhood

- Population-level accessibility: 91% of children < age 2 had at least one well child visit in 2011
- Early and frequent contact: Begins at infancy with preventive care based (immunization and screening) schedules for 13 to 15+ contacts through age 5
- Low marginal cost; building on existing health care infrastructure and 'medical home' models
- Opportunity to leverage Reach Out and Read (Klass, 1999)
  - Striking evidence of population level accessibility
  - Current reach of nearly 3.9 million children at nearly 5,000 sites
  - ~ 25-30% of all low income families in the U.S.



# Video Interaction Project: Part 1

## **Video Interaction Project (VIP; Mendelsohn et al., 2005)**

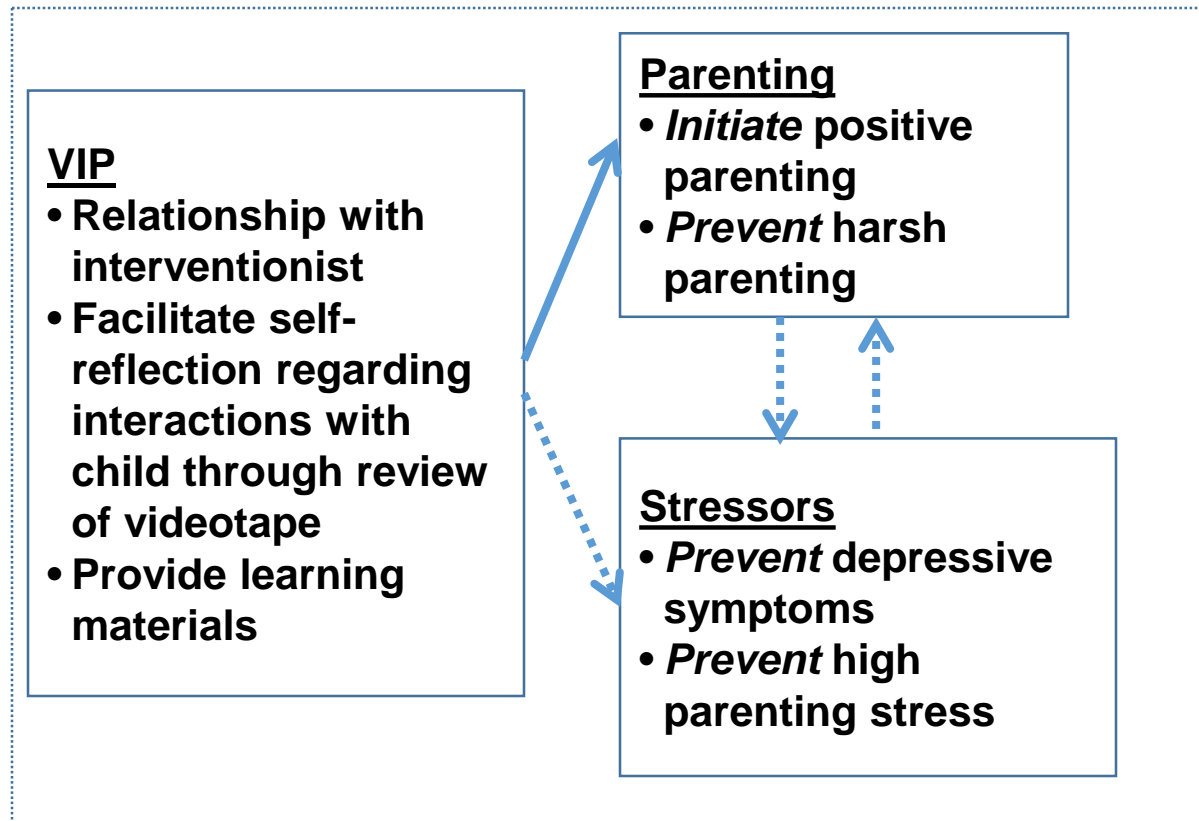
- Developed within Bellevue Project for Early Language, Literacy and Education Success
- Expands on Reach Out and Read
- Supports parenting in shared reading, pretend play & daily routines
- Implemented by interventionist who builds ongoing relationship with family
- Sessions are 30 minutes in tandem with well-child visits
- Average estimated (variable) cost \$150 per child per year

**Primary strategy: Use videotapes of parent and child to identify and reinforce interactional strengths and encourage self reflection**

**Additional components: provision of learning materials (toys, books); parenting pamphlets**



# VIP model for 1° prevention in medical home *prior to onset of family/child problems*

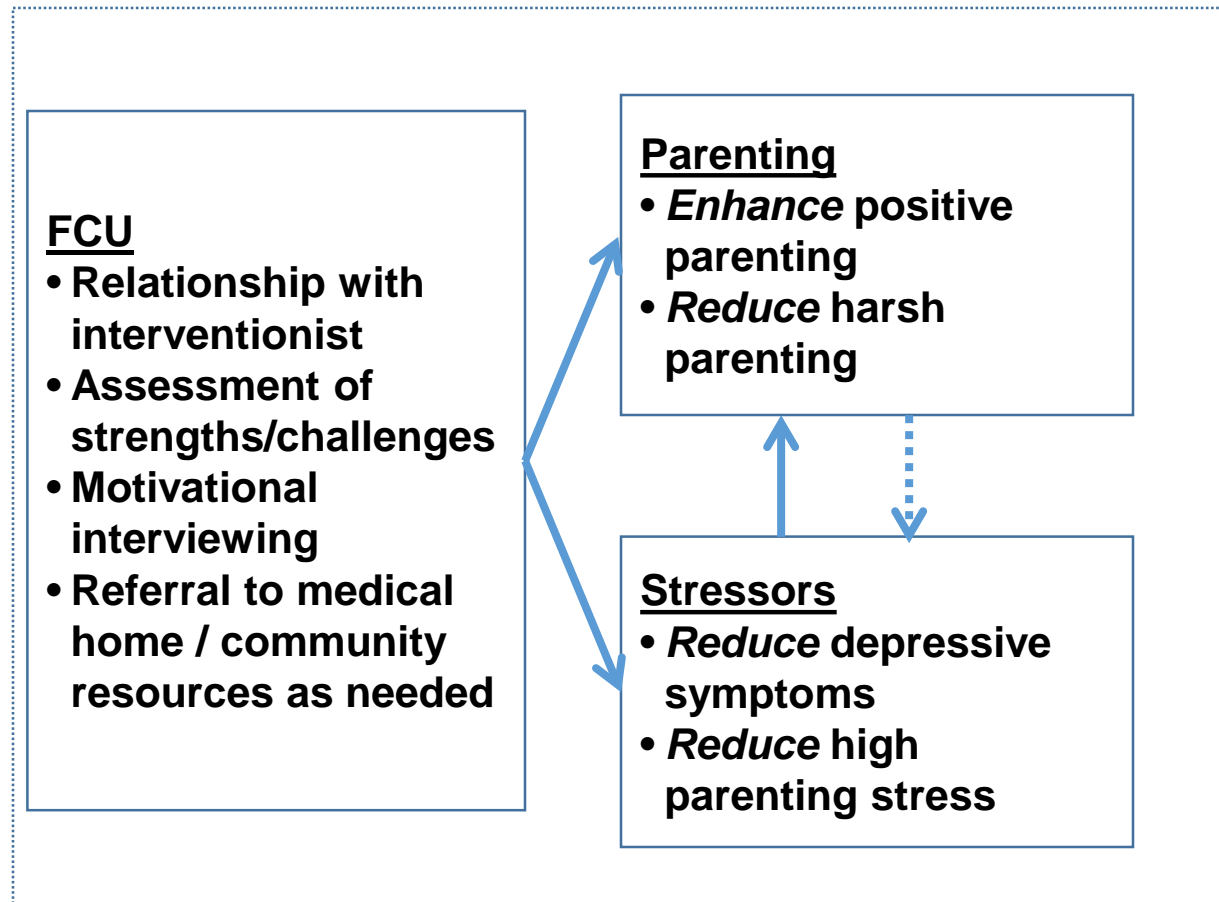


# Integrated intervention model: Part 2: FCU

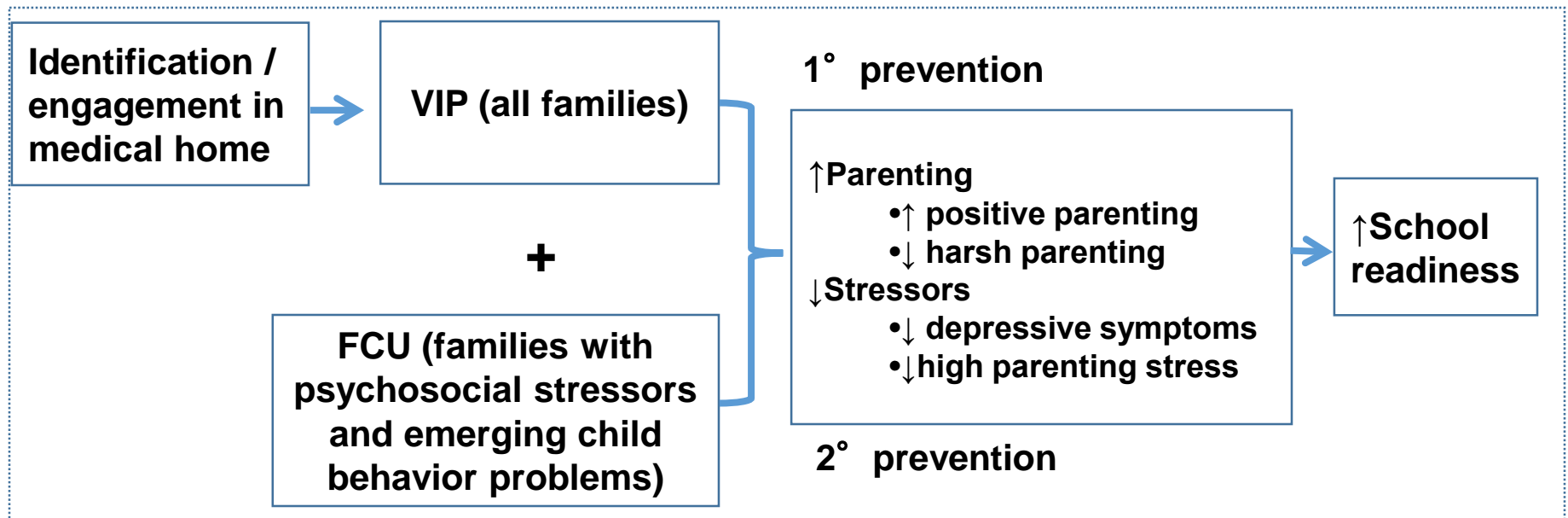
## **Family Check-Up, an ecological approach to family intervention** (FCU; Dishion & Stormshak, 2007; Shaw et al., 2006)

- Intensive proactive services for families with children at risk of behavioral problems, and families with psychosocial stressors
  - Assessment-based that attends to parents' motivation
  - Delivered by parent consultants with clinical experience
  - Contact at developmental milestones (vs. at times of clinical need)
  - Three initial sessions (assessment, get-to-know-you, feedback) with follow-up treatment focusing on parent management strategies
  - Average variable cost ~\$600 per child per year
- *The notion is that FCU may be needed to address heterogeneity of risk within a low-income population*

# FCU model for 2° prevention of *emergent* family/child problems

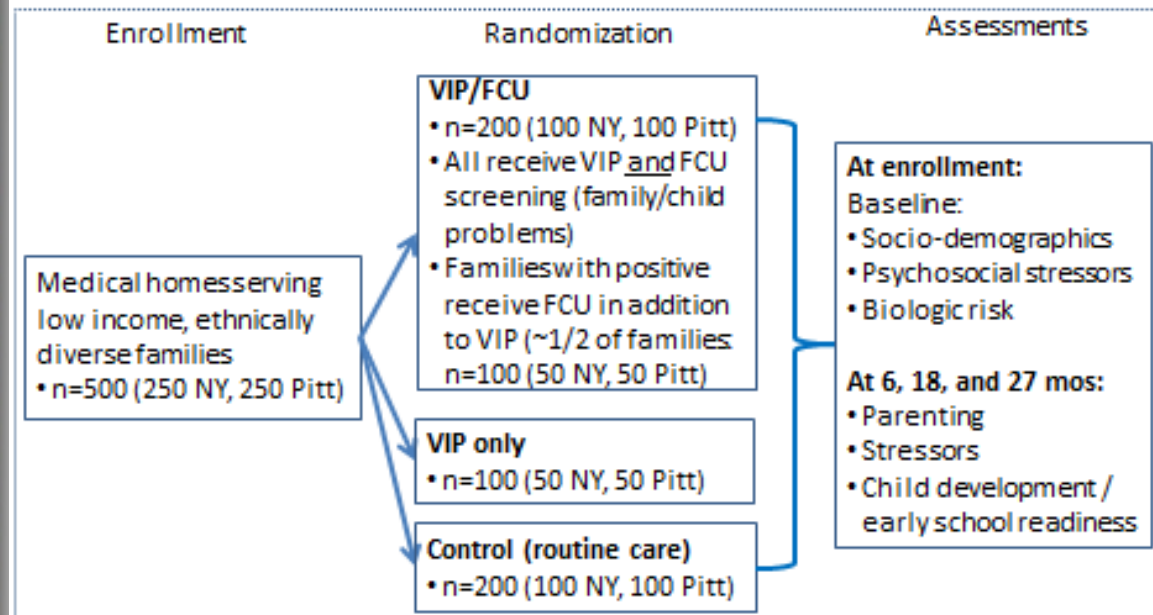


# Integrated VIP/FCU Intervention Model



# Research Design of Smart Beginnings

Figure 6. Overall study design



## Lessons Learned for Smart Beginnings: Achievements and challenges

- **Lessons learned**
  - Learning to take advantage of hand-off between VIP and FCU staff
  - VIP staff surprised at number of families they didn't know were in need because of VIP's narrow focus on parenting
- **Achievements**
  - High sense of optimism among families and intervention staff
  - Engagement rate >94% for VIP
    - 65/69 families in Pittsburgh  $\geq 1$  VIP session & 27% sessions with fathers
    - ~85% for FCU with 57% including fathers (>challenging families)
  - No intervention findings yet, but seeing effects on higher attendance of well-child visits due to relationship with VIP/FCU staff
- **Challenges**
  - Supporting VIP staff in Pittsburgh and FCU staff in NYC remotely
  - Conducting home visits in NYC, including materials for assessments

## **Challenges Outside of US in using FCU in pediatrics**

- Burden on day-to-day practice
- Receptivity of physicians
- Prevention vs. treatment of mental health disorders
  - Proactive vs. reactive
- Accessible platform for identifying recent immigrants
- Specific child issues that might be “hot topics” in Sweden and elsewhere
  - Obesity (FCU trial in US)
  - Opioid addiction in parents of newborns in US
  - Preventing substance use
  - Promoting school readiness
  - Diverse immigrant populations with and without parents