

Neonatal Abstinence Syndrome Education Project SCOPE: Supporting Children of the Opioid Epidemic

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Background

- The United States opioid epidemic has led to an increase in opioid use during pregnancy.
- Neonatal Abstinence Syndrome (NAS) can occur when infants are born to women who used opioids during pregnancy.
- Currently, research on developmental outcomes and interventions for children with NAS and related symptoms are available; yet, resources focus primarily on the neonatal period.
- Emerging literature suggests developmental concerns may present throughout childhood in the areas of intellectual and academic functioning, speech and language, fine and gross motor skills, socialization, and behavior.
- However, caregiver resources for managing these concerns are limited among preschoolers (children ages 3 to 5).

Objectives

- The purpose of this project is to develop and implement an educational resource for caregivers of children experiencing the developmental impact of in-utero exposure to:
 1. Improve child developmental outcomes
 2. Decrease caregiver stress.

Acknowledgement

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Method

Qualitative Interviews

- Qualitative interviews were conducted with a representative (i.e., foster care, kinship care, CCHMC neonatologist) from our community partners were asked to meet with the SCOPE team individually to discuss their experience caring for children with NAS or in-utero exposure, or their experience working with caregivers of these children.

Direct Observations

- We conducted direct observations of two NICU Follow-Up Clinic visits, in which children, along with their foster caregiver, were seen.

Development of Caregiver Check In Scale:

- Based on feedback from community partner interviews and observation of NICU Follow-Up Clinic, a Caregiver Check In scale was developed to help determine caregiver's areas of concern regarding the child.
- The scale was developed through visme.co. and revised according to feedback received from community providers.
- The research team developed areas of developmental concern based on findings in the literature, community partner interviews and professional, clinical experience.
- The scale was distributed via e-mail to several community partners who work in the area of NAS to receive feedback on the following areas:
 - Readability
 - Clear instructions
 - Appropriate areas of development
 - Use of examples

Development of Resource Map:

- To address the lack of resources for caregivers of children with NAS or in-utero exposure, an interactive resource map was created using ZeeMap programming. Local and state resources have been added to the map and include but are not limited to:
 - Early Intervention
 - Early Education programs
 - Board of Developmental Disabilities
 - Young Child Institute

Results

Literature Review

- Overall trend of negative long-term developmental outcomes for children with NAS.
- Long-term outcomes and specific interventions for preschool and school-aged youth was limited and inconsistent.

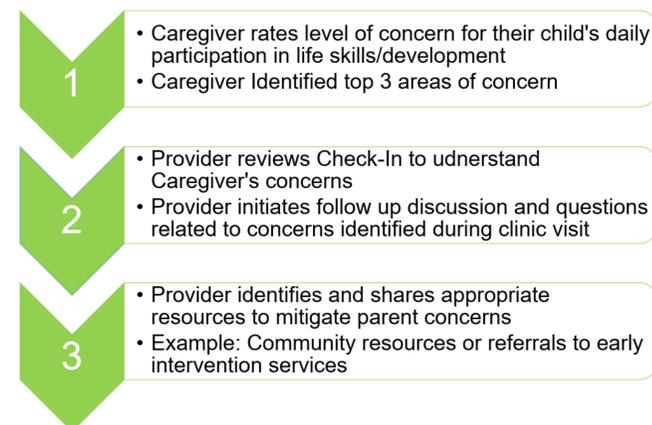
Community Partner Interviews

- Needs identified included:
 - Education on NAS symptom management, and trauma-informed care specific to preschool-aged children.
 - Experiences and self-reported supports/needs varied by caregiver type (i.e., biological, foster, kinship).
 - How to find community and peer supports.

Caregiver Check In:

- To be used at early childhood care provider and medical appointments.
- Allows provider to better identify caregiver's needs.
- Used to guide provider recommendations to community resources, referrals for intervention, or caregiver education.

Caregiver Check In: How to Use



Caregiver Check In: Final Version

CAREGIVER CHECK IN

We want to know what matters to YOU and your child. This will help us learn what is important to talk about during your visit today.

Please put a check mark to show your level of concern related to your child in the areas below over the past 30 days.

Area of Child's Daily Life	Tell Us About Your Concerns					Rank Please rank top three areas of concern, with #1 being the highest
	NO CONCERN	A LITTLE CONCERN	SOME CONCERN	A LOT OF CONCERN	EXTREME CONCERN	
Sleep <small>Some examples: Difficulty falling or staying asleep, waking early, short sleep cycles</small>						
Feeding <small>Some examples: Picky eating, eating non-food items, over-eating, refusal to eat, gagging or vomiting</small>						
Bonding with Caregivers <small>Some examples: Does not seek caregiver for comfort or difficult to calm</small>						
Sensory Avoiding <small>Some examples: Dislikes loud noises, some clothes or food, bright lights, open areas</small>						
Sensory Seeking <small>Some examples: Enjoys tight hugs/squeezes, loud noises, messy hands, crashing body</small>						
Problem Behavior <small>Some examples: Tantrums, hitting, kicking, biting, screaming, self-injury, scratching, destroying things</small>						
Communication <small>Some examples: Problems with listening, speaking, using gestures, or following directions</small>						
Motor Skills <small>Some examples: Problems with running, jumping, climbing, feeding self, is accident-prone/clumsy</small>						
Child's Mood <small>Some examples: Often looks sad, fearful/worried, angry</small>						
Play Skills <small>Some examples: Does not pretend, play with other children, or use toys correctly</small>						
Inattention & Impulsivity <small>Some examples: Constantly moving, wandering, no concern for safety</small>						
Learning <small>Some examples: Problems with remembering things or not learning from mistakes</small>						

Is there anything else you would like to talk about today?



Discussion

Project evolved over the course of the LEND year due to the following reasons:

- Long-term outcome and intervention research limited for preschool and school aged children
- Due to the wide impact NAS can have on children, it was difficult to understand what areas to focus on when creating educational materials.
- Qualitative interviews showed a variety of needs (varying by caregiver type and level of education)

Caregiver Check In will be used to assess developmental areas of high priority contributing to caregiver concern

- This information will be used to support creation of an educational material to meet caregivers' needs.

Limitations

- Caregiver Check In has not yet been tested in clinic setting due to delays related to the COVID-19 pandemic and restriction of in-person clinic visits.

Next Steps

Caregiver Check In

- Plan to administer and collect data on areas identified as top priority to parents to further inform educational materials created.
- Disseminate use of the Caregiver Check In at institutional and local clinic visits for patients with Neonatal Abstinence Syndrome.

Creation of Caregiver Supports

- Educational Product
- Continual update of Zee Map

Example of Zee Map:

