



EMORY



Children's<sup>SM</sup>  
Healthcare of Atlanta

# Stronger Together: Enhancing Postnatal Outcomes Through Collaborative Care and Support

---

**Salathiel Kendrick-Allwood, MD, FAAP**



# Disclosures

---

I have no disclosures



# Objectives

---

- **Understand and review the evidence on mental health challenges for parents of children at risk for developmental disorders in the post-NICU period**
- Compare types of social drivers of health and their impact on pre- and post-natal development in high-risk infants and their families
- Discuss the role of multidisciplinary providers and programs in providing screening and facilitating access to medical, legal, psychological health, and social supports for families in the first three years



# Parental Behavioral Mental Health Conditions Post-NICU

---

- Post-traumatic stress is increased in mothers of infants admitted to the NICU
- Parental psychological distress may persist after a critical medical crisis passes & infants are discharged
- Rates of depression & anxiety are **2–5 times higher in mothers of infants born very preterm** throughout childhood
- 34% of mothers of very preterm infants have clinically elevated post-traumatic stress symptoms at 18–24 months



# Parental Behavioral Mental Health Conditions Post-NICU

---

- Parental mental health problems can influence children's development, with one mechanism being through their influence on the parent-infant relationship
- Supporting parents of infants born preterm is important at a public health level
- Costs associated with mental health problems are estimated as one of the largest single sources of non-communicable health-related global economic burden





# Case 1

---



# Objectives

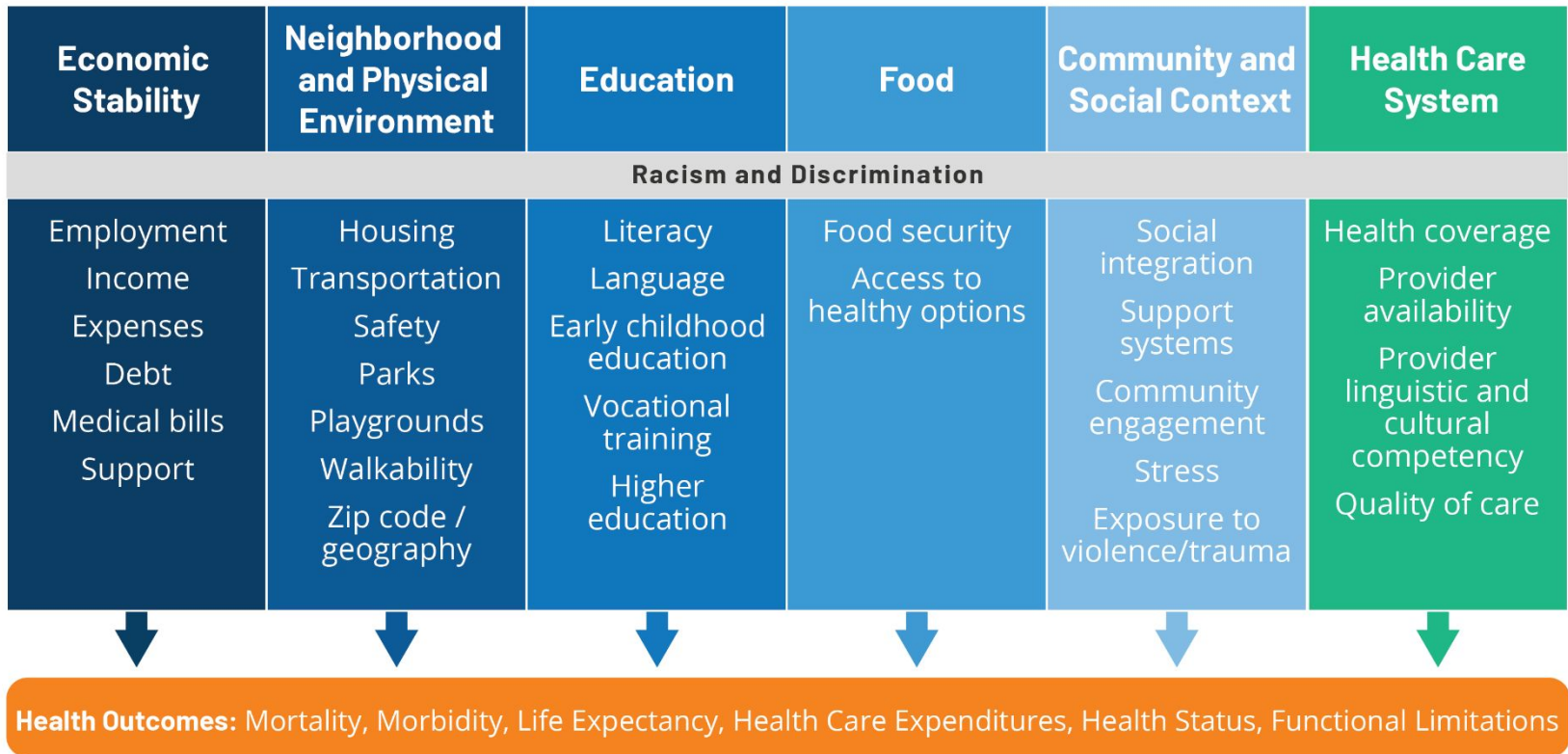
---

- Understand and review the evidence on mental health challenges and social drivers of health for families of children at risk for developmental disorders in the post-NICU period
- **Compare types of social drivers of health and their impact on pre- and post-natal development in high-risk infants and their families**
- Discuss the role of multidisciplinary providers and programs in providing screening and facilitating access to medical, legal, psychological health, and social supports for families in the first three years



# Social Drivers of Health

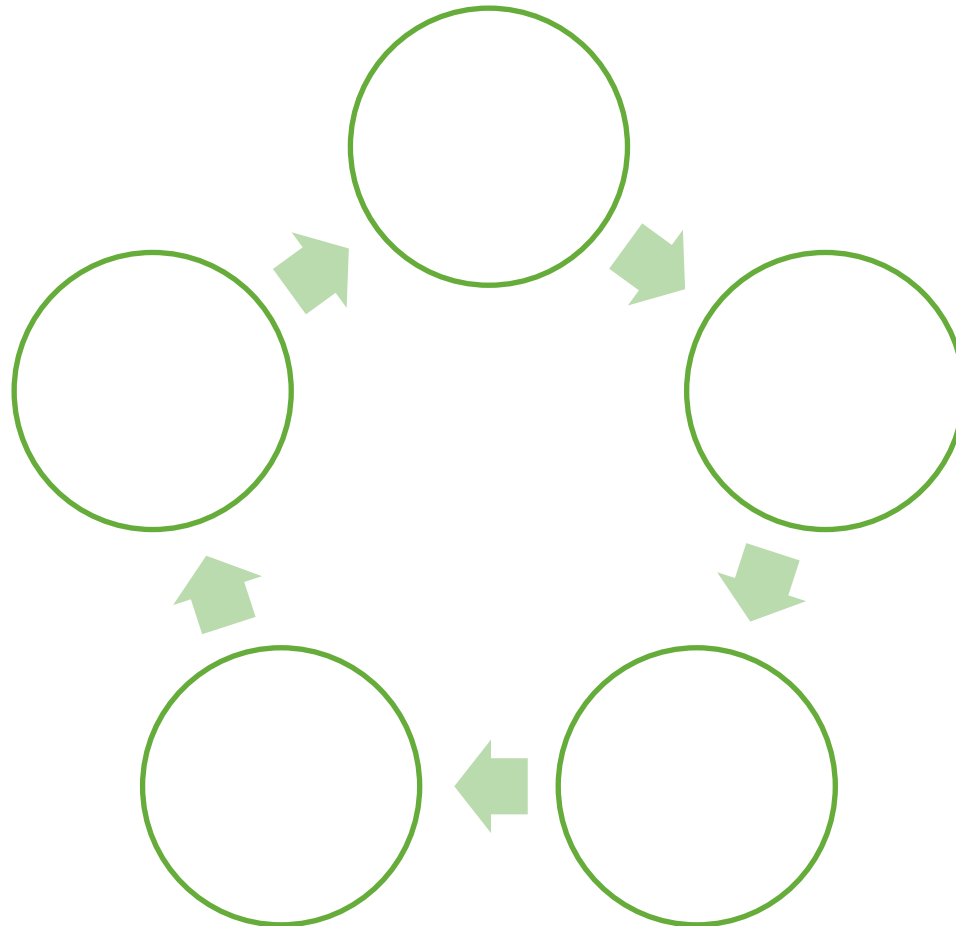
## Social and Economic Factors Drive Health Outcomes



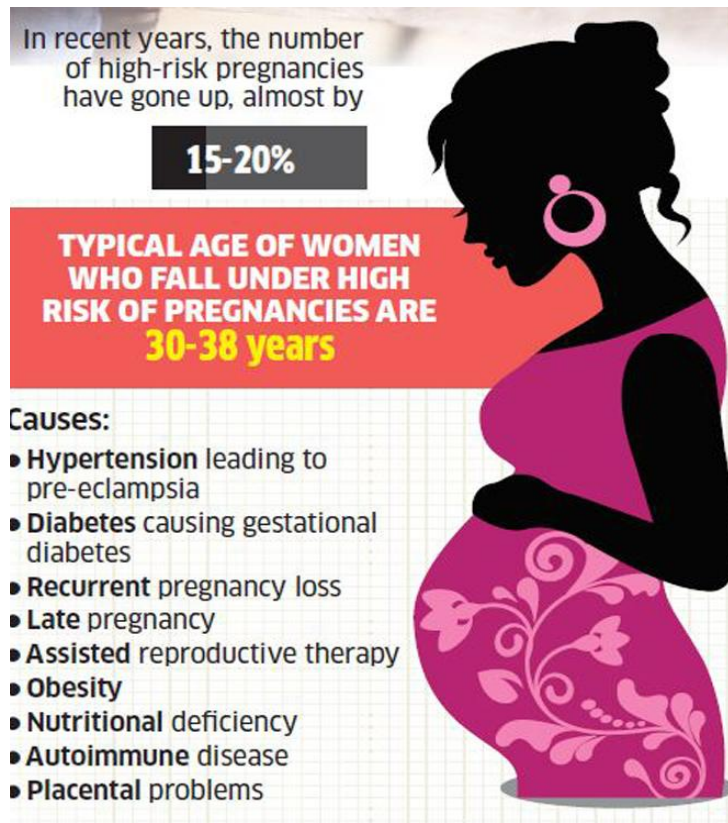


# Impact of SDH

---



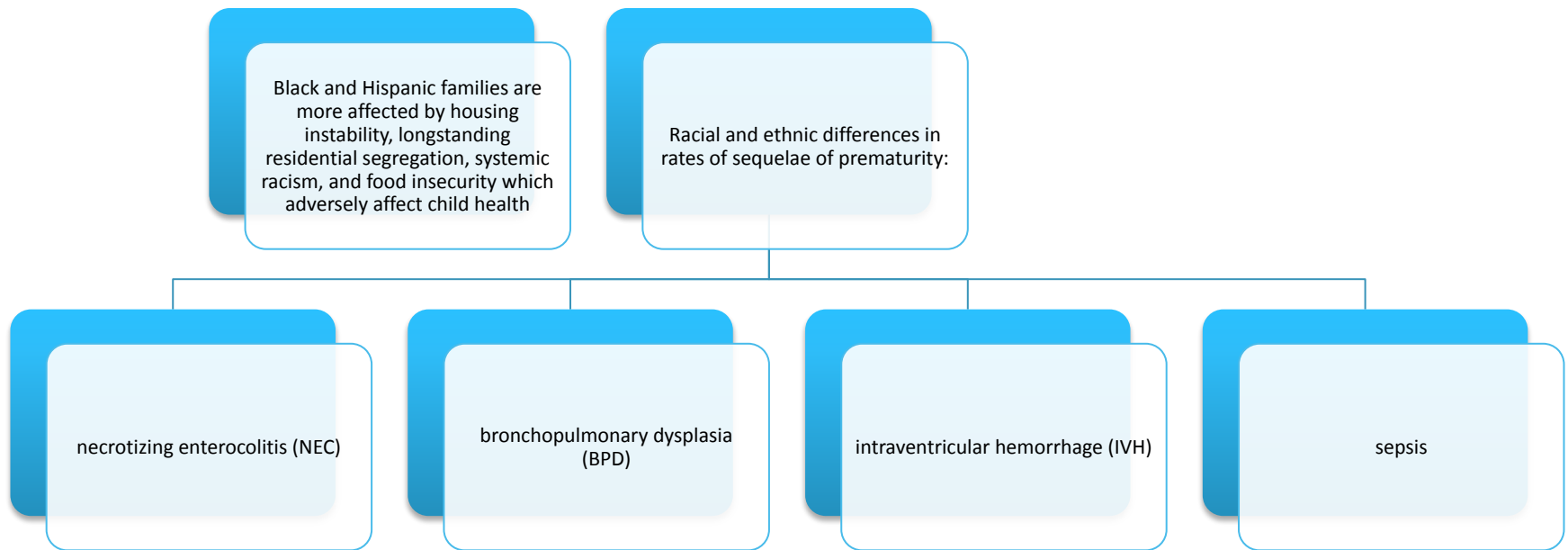
# Impact of SDH: Preconception & Pregnancy Risks



- The majority of women (52%) have at least one preconception risk factor
- Nearly 20% have > 2 risk factors
- American Indian and Alaskan Native women had the highest rates of preconception risk factors (4-5)
  - drinking, smoking, diabetes, and mental distress
- Black women had the highest rates of obesity
- Hispanic women had the second-highest rate of diabetes

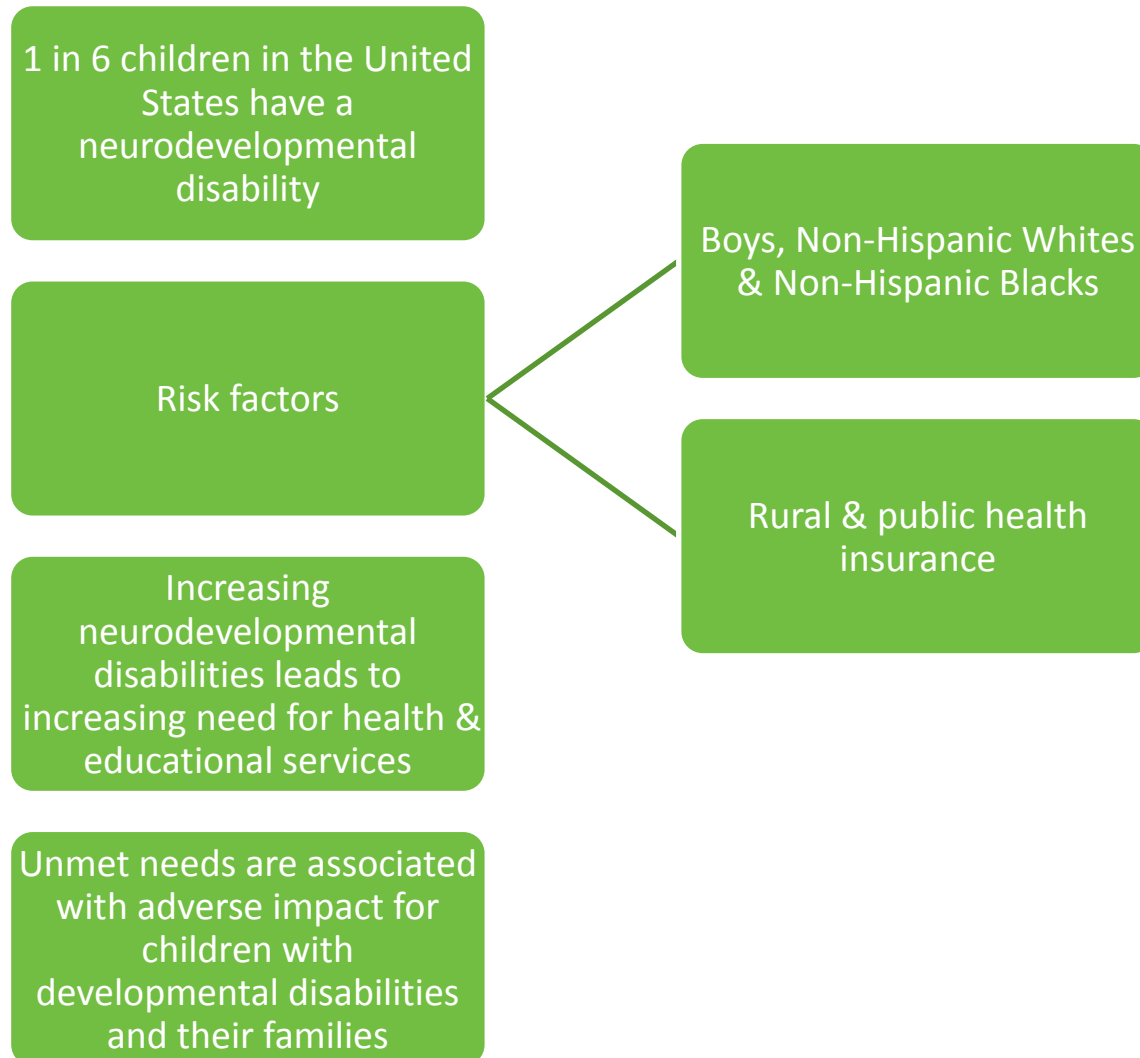
# Impact of SDH and Inequities Post-conception

---



# Infants at High-Risk for developmental disabilities

---



# Which Infants are “High-Risk”?

---

- Preterm infant\*
- Infant with special healthcare needs
- Dependence on technology
- Infant at risk because of family issues
- Infant with anticipated early death
- Congenital heart disease (CHD)
- Need for Extracorporeal Membrane Oxygenation (ECMO)
- Hypoxic Ischemic Encephalopathy (HIE)

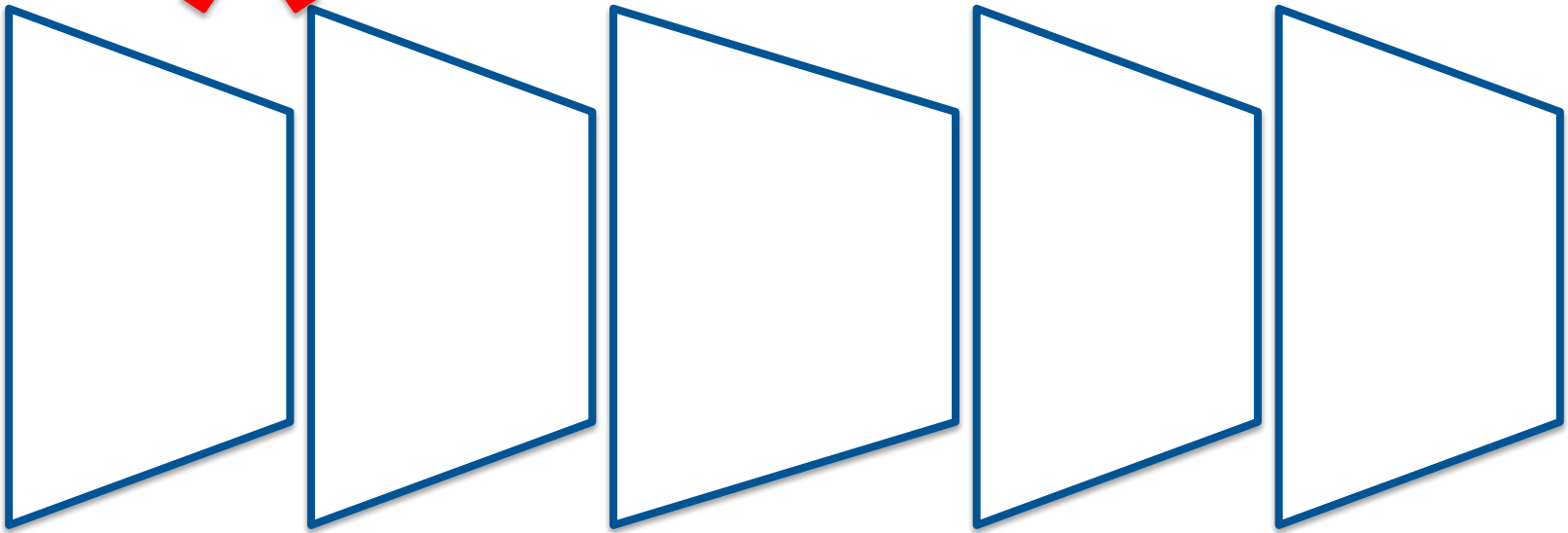




# High-Risk Infant Follow-Up Mission – Updated

---

~~Prediction~~ → surveillance, support, interventions



## Case 2

---



# Social Drivers of Health

---



# Objectives

---

- Understand and review the evidence on mental health challenges and social drivers of health for families of children at risk for developmental disorders in the post-NICU period
- Compare types of social drivers of health and their impact on pre- and post-natal development in high-risk infants and their families
- **Discuss the role of multidisciplinary providers and programs in providing screening and facilitating access to medical, legal, psychological health, and social supports for families in the first three years**



# How do we work together to help?

---

Families with a high-risk infant have additional stressors

Prevention means breaking the cycle

Change the thought process from an individual approach to a Team/Community approach



# Multidisciplinary Approach to Care Inpatient

---

## Components of Comprehensive Family Support in the NICU



- Hall, S., Hynan, M., Phillips, R. *et al.* The neonatal intensive parenting unit: an introduction. *J Perinatol* **37**, 1259–1264 (2017). <https://doi.org/10.1038/jp.2017.108>

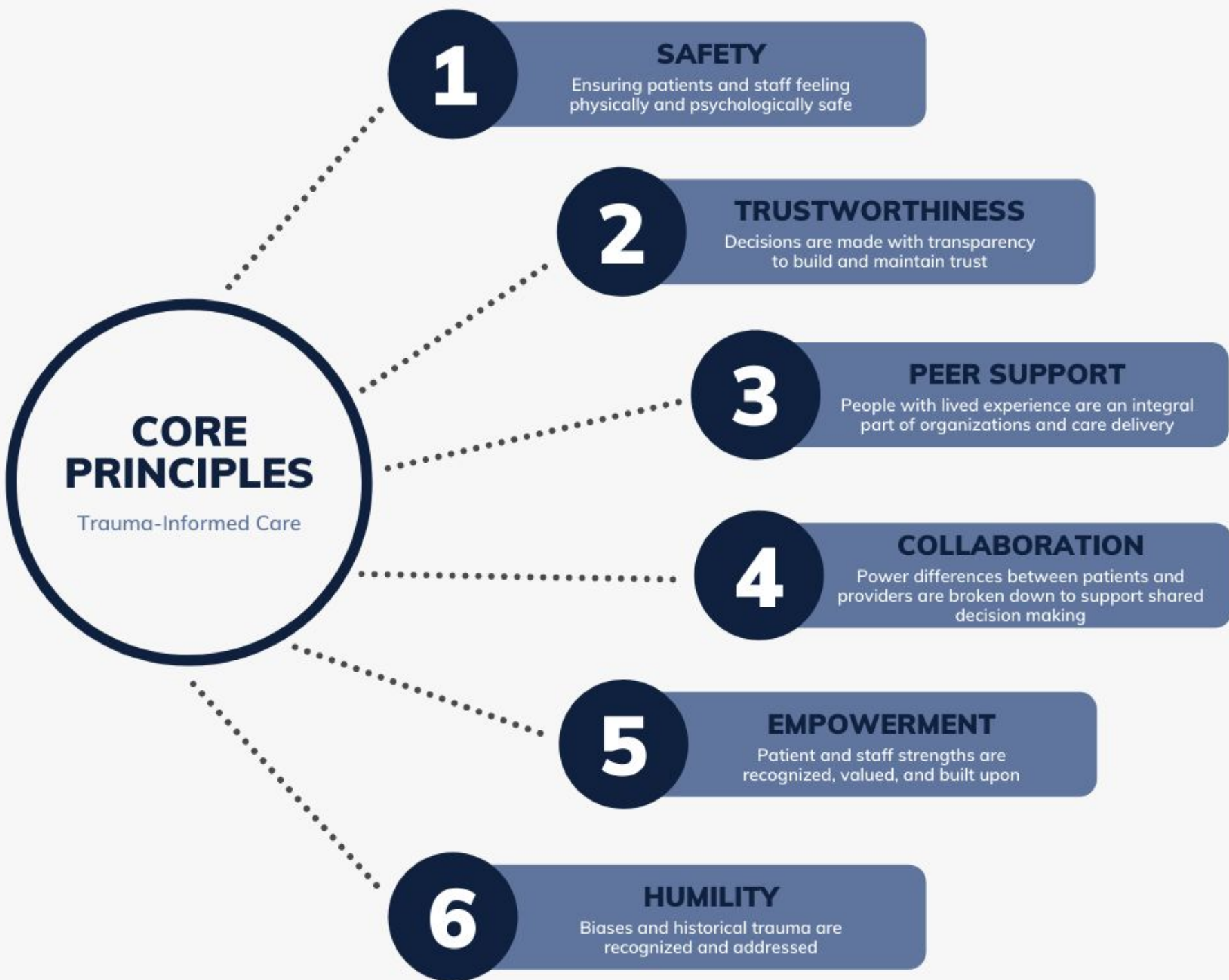
# Trauma and Trauma-Informed Care (TIC)



- Results from events or series of events that are physically and/or emotionally harmful or life-threatening and have long-lasting adverse effects
- TIC- approach within healthcare to integrate understanding of trauma into practice, policies, and environments
- Understand biological evidence of trauma without suggesting childhood adversity is destiny
  - Cortisol
  - Long-term effects
- Core Principles of TIC

- Heather Forkey, Moira Szilagyi, Erin T. Kelly, James Duffee, THE COUNCIL ON FOSTER CARE, ADOPTION, AND KINSHIP CARE, COUNCIL ON COMMUNITY PEDIATRICS, COUNCIL ON CHILD ABUSE AND NEGLECT, COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH; Trauma-Informed Care. *Pediatrics* August 2021; 148 (2): e2021052580. 10.1542/peds.2021-052580
- James Duffee, Moira Szilagyi, Heather Forkey, Erin T. Kelly; COUNCIL ON COMMUNITY PEDIATRICS, COUNCIL ON FOSTER CARE, ADOPTION, AND KINSHIP CARE, COUNCIL ON CHILD ABUSE AND NEGLECT, COMMITTEE ON PSYCHOSOCIAL ASPECTS OF CHILD AND FAMILY HEALTH, Trauma-Informed Care in Child Health Systems. *Pediatrics* August 2021; 148 (2): e2021052579. 10.1542/peds.2021-052579





# How does trauma show up in NICU follow-up?

---

- PARENTS/CAREGIVERS
  - Primary and Secondary traumatic stress
  - Parenthood- hopes, dreams, and expectations
  - Sleep disturbances
  - Mental Health
  - Outside trauma sources
- INFANT/CHILD
  - Parental separation
  - Disrupted environment
  - Painful and stressful experiences
  - Immobilized
  - Future risks



# Developmental Progress Clinic Screening

---

Edinburgh  
Post-Partum  
Depression Scale

PHQ-2 depression  
questionnaire

SDH  
questionnaire/Family  
Resource Survey

PTSD 5

ACEs Philadelphia  
version\*





# Adverse Childhood Experiences (ACEs)

## ACE Version

Kaiser &  
Philadelphia

Philadelphia only

## ACE Type

Lack of food, clothing, home, protection

Sexual Abuse

Jail

Mental Abuse

Physical Abuse

Violent Harm

Drugs

Mental Illness

Feelings of being unprotected

Divorce

Witness violence

Experience in Foster Care

Discrimination

# Social Determinants of Health in Cerebral Palsy

---

---

No group differences in frequency unmet social or mental health needs

---

In the entire caregiver cohort (n = 194), 21% met the initial screening criteria for depressive symptoms.

---

The initial screening for PTSD symptoms was positive for 20% of caregivers

---

$\geq 4$  ACEs were reported by 13% of parents

---

50% of caregivers reported experiencing discrimination

---

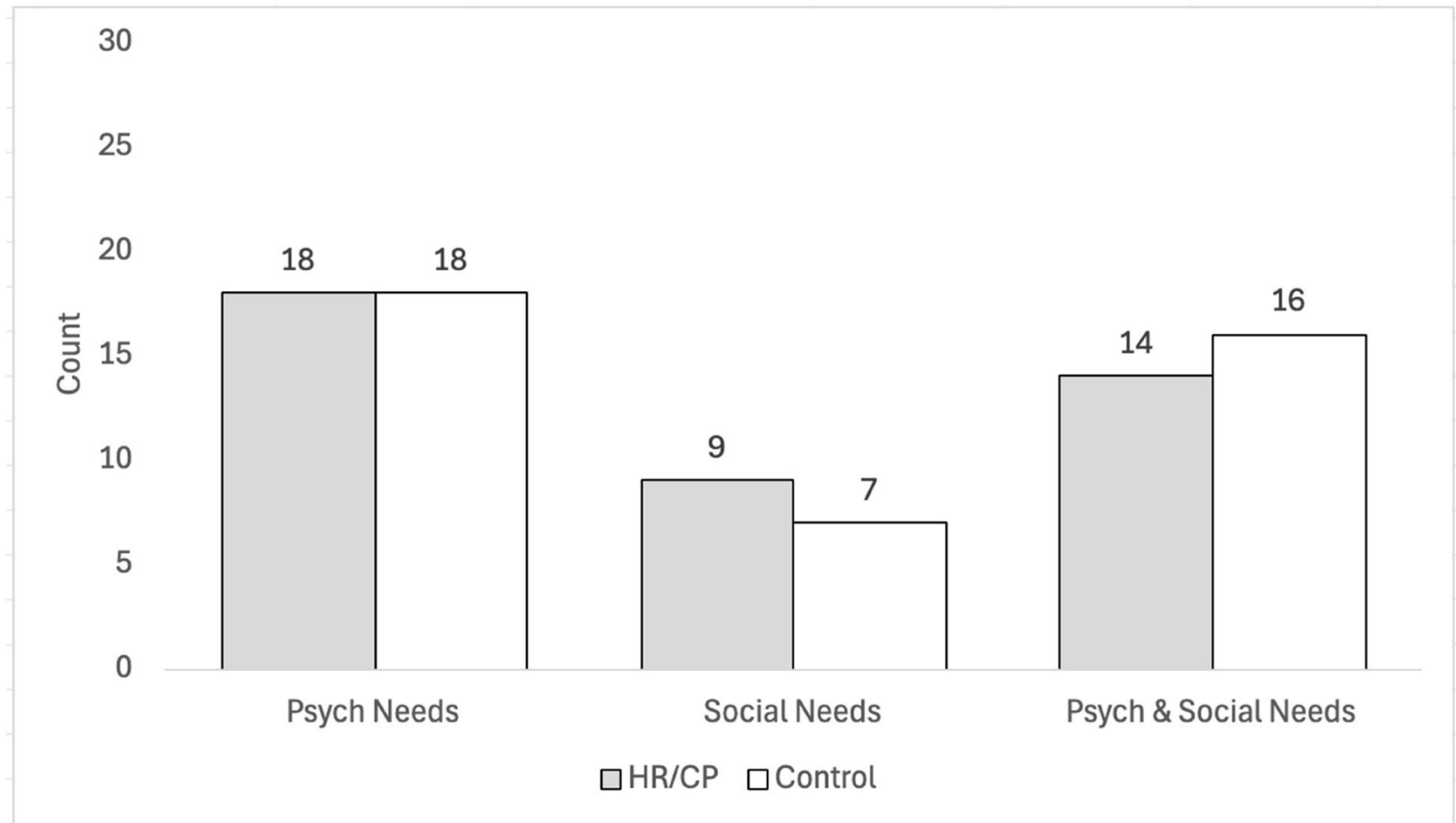
68.4% had felt unprotected (feeling unsupported, unloved, and/or unprotected)

---

75% had lived with a family member experiencing mental illness

---

# Frequency of Co-occurring Psychological Factors with Social Needs by Group



# Interventions for Families

---

- Establish an emotionally safe environment
- Active listening
- Screen for maternal/paternal health and provide resources
- Support groups
- Facilitation of infant/family bond
- Staff Training



# Interventions for Patients

---



- Gentle handling
- Soft lighting/high-pitched sounds
- Listen to the baby's cues
- Reducing pain
- Involve the family
- Be flexible
- Sing/rhythmic sounds

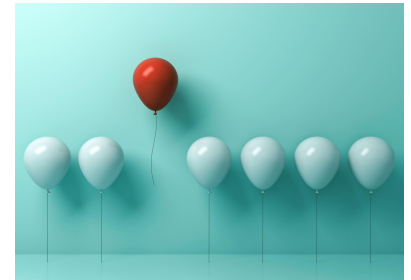
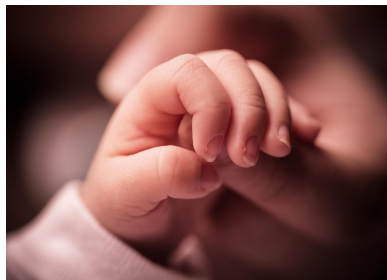
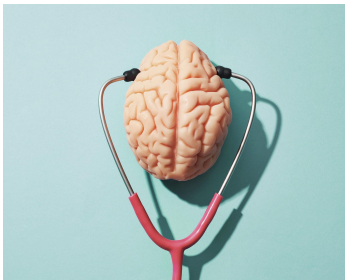


# Interventions for Providers

---

- Resilience promotion
- Investigate one's own story and trauma
- Provide screening, support, and resources for families
- Advocate for families

Policies, protocols, and practices don't transform experiences; people do



# Resources provided

- Social Security Income (SSI):
  - 1250 gms or Less
  - 31+ days hospital
  - Chronic Health Issues (Trach, Cerebral Palsy, Autism, etc.)
  - Stipend and SSI Medicaid (Federal)
  - Parents' Income will be assessed
- Katie Beckett Waiver:
  - Patient meets medical eligibility
  - Parents are over Income for SSI
  - Application Process (Psychological Test required)
  - No financial benefit
- Advocacy:
  - Health Law Partnership (HeLP)\*
  - Healthy Grandparents
  - Cerebral Palsy Foundation
- Parent Group

## Find Help GA:

- Resource portal (Zip Code needed)
- Free/low-cost community resources (Food, Housing, Health Care and Job Training)
- Open to All

## Community Resource List 1:

- Utilities, Food, Housing, Childcare, Education, and Job Training
- Sheltering Arms/Easter Seals (Childcare)

## Community Resource List 2:

- Mental Health: Counseling/Therapy

## Community Resource List 3:

- Housing (Silverton Foundation, Section 8)



# Collaborations and Community Affiliates

---

- Marcus Autism Center
- Emory School of Medicine  
Psychology & Psychiatry -  
Neuropsychology
- Georgia State University
- Cerebral Palsy Foundation
- Children's Rehabilitation  
Services
- HeLP\*
- GA Pines
- BEGIN
- Lekotek
- FOCUS
- Miss Gussies Place
- SPRITE clinic
- Community Pediatricians,  
subspecialists and NICU's
- Parent Group for NICU  
graduates
  - Katie Beckett, Babies  
Can't Wait, School  
Psychologists, etc.
  - Most importantly  
parents/caregivers



# The Health Law Partnership (HeLP)

---

- HeLP, a medical legal partnership
  - Lawyers – Atlanta Legal Aid
  - Law Students – Georgia State Law School
  - Physicians – Peds Institute/Emory and Morehouse Schools of Medicine
  - Medical Students & Residents – Emory and Morehouse Schools of Medicine

# HeLP in children with Neurodevelopmental Disabilities (NDD)

---

651 caregivers/clients, 724 dependents receiving HeLP services

## Caregivers' characteristics:

- 59.1% Black/African American
- 87.5% female
- 42.7% single
- 31.2 % employed
- Mean age 35.8 years ( $\pm 13.2$ )
- Mean household size 4.2 persons ( $\pm 1.8$ )

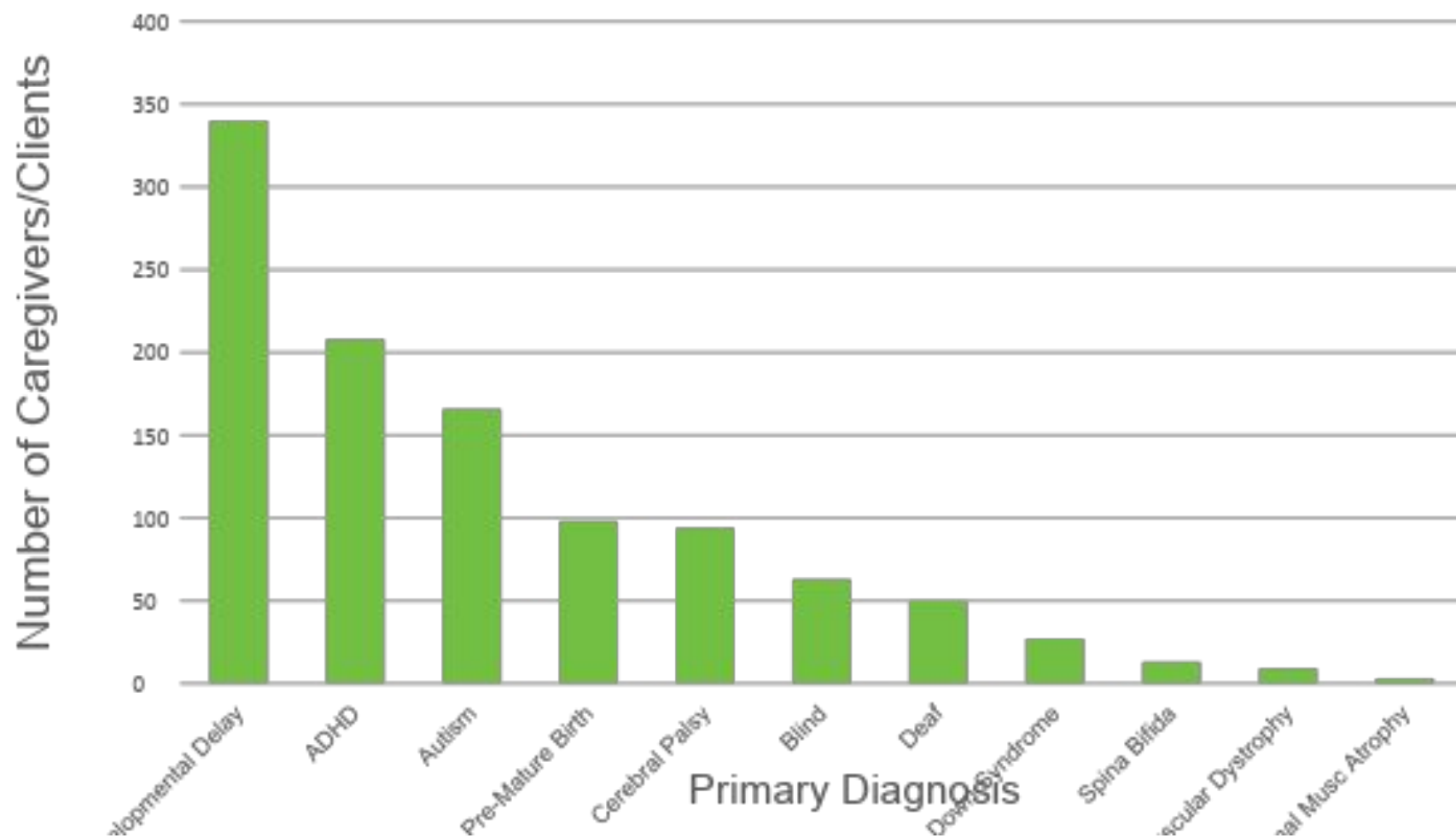
## Children:

- 62.4% males
- 56.7 % had an individual education plan (IEP)
- 7.5 % had a 504 plan

# Diagnoses of children served

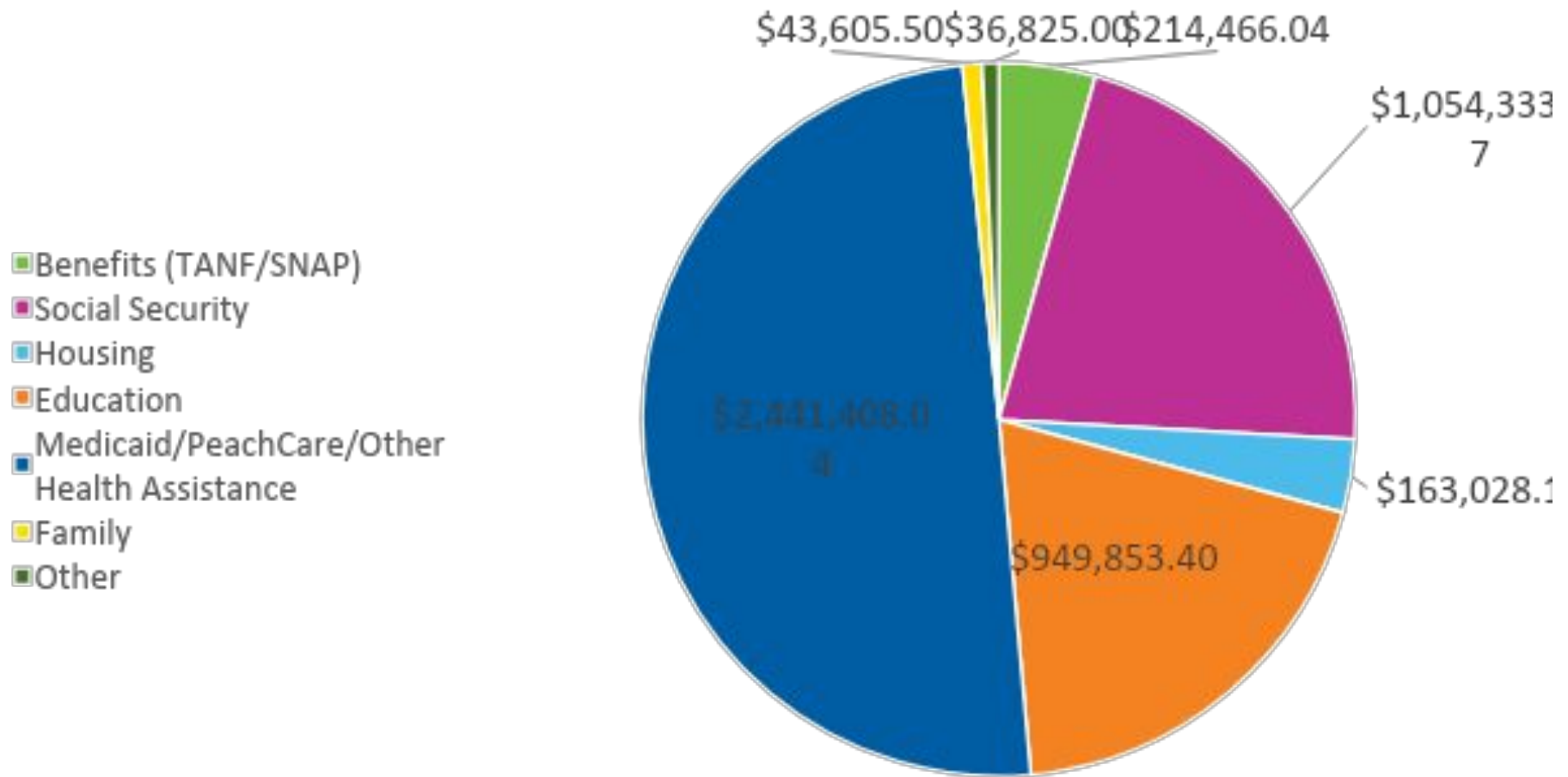
---

N= 1071



# Annual Dollar Amount Gained by Case Types

---





# HeLP in Children with NDD

---

- Improved access to health care and education resources
- Financial cost savings to families
- Cost savings to the health care system by securing entitlement benefits (Medicaid, SCHIP, SSI)
  - For children with neuro-developmental disabilities
  - may otherwise be attributed to indigent or charity care
- Access to entitled benefits and resources results in short- and long-term cost savings to both families and systems

# Summary

---

## What we know?

- SDH, inequities, and disparities negatively impact health outcomes will be more pronounced in children with neurodevelopmental disorders

## Who are those in need?

- Our most vulnerable populations – infants at risk for neurodevelopmental disabilities

## Why we need HRIF?

- Surveillance, support, and interventions (early)

## Why we need community engagement?

- To address social drivers of health, health disparities and inequity - JUSTICE

## How can we help?

- Engage caregivers, primary care providers, & community partners
- Collaborate with interdisciplinary partners
- Advocate with state and federal legislators on behalf of our neurodevelopmentally challenged children and their families



# Questions?

---

