



ILLUMINATION FOUNDATION

DISRUPTING THE CYCLE OF HOMELESSNESS

PRESENTED BY

Pooja Bhalla, DNP, RN
Co-CEO, Illumination Foundation

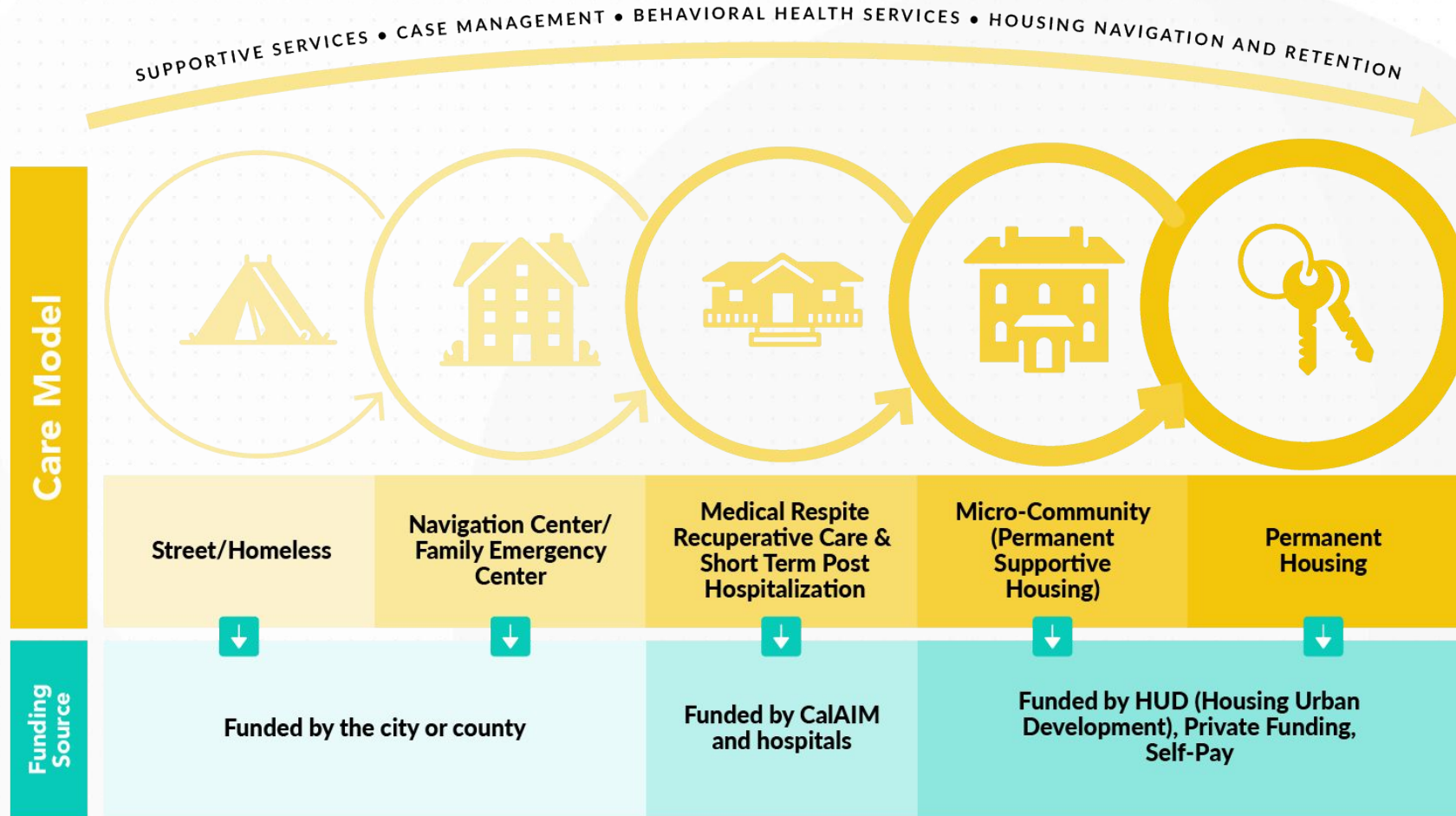
Geeta Grover, MD
Developmental and Behavioral Pediatrician
The Center for Autism and Neurodevelopmental Disorders,
Santa Ana, CA and CHOC Children's, Orange, CA
Clinical Professor of Pediatrics,
University of California, Irvine

Social Justice and Healthcare in Illumination Foundation's Children and Families Program

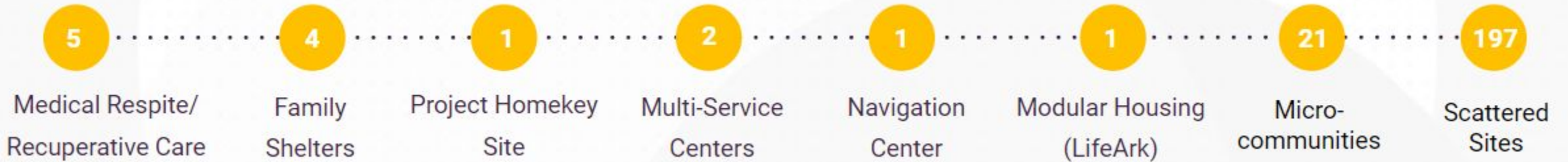
- Social justice and healthcare are inextricably linked
- Social justice includes fair access to healthcare
- Healthcare is not equitable if it is not accessible
- There are still immense gaps in terms of coverage and access for underserved populations, particularly for individuals experiencing homelessness

- Our innovative Children and Families Program healthcare model provides primary care and behavioral health services and wraparound case management to approximately 200 vulnerable children and families experiencing homelessness.

Street 2 Home System of Care



Illumination Foundation Sites



Fullerton Recuperative Care

The nation's first state-of-the-art facility of its kind providing end-to-end services for the most vulnerable segments of those experiencing homelessness, including:

- Recuperative Care/Medical Respite
- Short-Term Post-Hospitalization
- Primary Care
- Mental Health
- Substance Use Counseling
- Community Supports Services
- Couples can stay together
- Pets are welcome



Housing Services

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- Intensive Case Management
- Behavioral Health and Substance Use Services
- Housing Navigation
- Housing Retention
- Micro-communities
- LifeArk modular housing



Family Emergency Shelters

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Plumeria House

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Children and Families Program



Children and Families Program since 2018



Total number of families: 227 Total number of children: 359

Referrals to CHOC (August 2022-present): 52

**Referrals to Center for Autism and Neurodevelopmental Disorders
(Feb 2022-present): 8**

Improved ASQ Scores: 23

Children and Families Program

Comprehensive, client-centered, trauma-informed supportive services on site for families experiencing homelessness.

- Developmental and behavioral health screenings
- Behavioral health counseling
- Medical and behavioral health connections
- Parenting education
- Educational support services
- Enrichment programs



Partnerships

- Partnership with CHOC Children's Hospital for prioritized pediatric healthcare visits for children in emergency shelters
- Mentorship & Skill Building: Pediatricians Dr. Geeta Grover and Dr. Greg Kennedy volunteer their time to provide weekly literacy classes and monthly Mini Medical School Sessions
- Monthly case conferences for staff with Drs Grover & Kennedy to review health & learning needs of our highest risk children in the emergency shelters & to guide referrals for medical care and school-based services



Partnerships

- University of California, Irvine Eye Mobile
- Healthy Smiles Mobile dental mobile clinic
- Parenting classes are provided by The Priority Center and Olive Crest.
- Team Kids provides a mentoring program for the children in our family shelters

- Girl Scouts
- School on Wheels (tutoring)
- American Consumer Credit (financial literacy classes)
- Dreams for Schools (STEM programming)
- Mad Science (STEM programming)
- UCI Medical School and CSULB Nursing School (health promotion/prevention programs)
- The Joyful Child Foundation (safety workshops for families)
- American Academy of Pediatrics, Orange County (AAP-OC)



Client Story: Cheyenne

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What We Know

- Healthy development requires stable and responsive relationship with at least one primary caregiver (serve and return interaction—child learns “I matter.”)
- Early childhood experiences
 - Shape the neural wiring for learning, memory and behavior
 - Influence the evolution of the body’s neuroendocrine, autonomic, metabolic, and inflammatory systems
- In the first few years, new neural connections formed every second and brain reaches 80% of adult size by age 3
- Another critical period of brain growth occurs in adolescence
- Learning occurs when certain neural connections are strengthened due to use and others are pruned back due to lack of stimulation (“blooming and pruning”)

Forkey H. AAP Trauma and Resilience ECHO, 2019.

Shonkoff, JP. Center on the Developing Child at Harvard

What We Know: Poor Education Predicts Poor Health

Number of studies confirm a dose-response association between education and health—the more education, the better the health

U.S. spends more on health care than any other country, yet...

- We have the highest infant mortality and lowest life expectancy among 11 high-income countries (2016)
- American children ages 1 to 19 are 57% more likely to die before adulthood than do children in 19 other wealthy countries

Why... high poverty rates, racial inequities, gun violence, poor educational outcomes and relatively weak social safety net

Thakrar AP et al. Child Mortality In The US And 19 OECD Comparator Nations: A 50-Year Time-Trend Analysis. *Health Affairs* 2018; 37(1): 140-147

Children Are the Poorest Demographic in America



Children represent 23% of the US population but comprise 32% of all people in poverty

Nearly 73% of children living in poverty are children of color:

- nearly 1 in 3 Black, 1 in 4 Hispanic and 1 in 11 white

Majority lived with at least one working family member and a third lived with a family member working full-time, year round

<https://www.childrensdefense.org/wp-content/uploads/2020/02/The-State-Of-Americas-Children-2020.pdf>

Koball H and Jiang Y. National Center for Children in Poverty. January 2018 http://www.nccp.org/publications/pdf/text_1194.pdf

1 in 7 Children Live in Poverty in U.S.

71 percent are children of color

More than 2 in 3 lived in working families



Children's Defense Fund, State of America's Children, 2021 (2019 census data)

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™



**For the first time, the American Academy of Pediatrics
is recommending that pediatricians routinely
screen all children for poverty.**

aap.org/poverty

[#FACEpoverty](https://twitter.com/facepoverty)

Inherited Disadvantage

Black and White children fare very differently in America even when they grow up in homes of comparable income, education, and wealth.

One of every two Black children have had a CPS investigation by 18.

Avoiding conversations about race is a privilege

Inequity Begins at Birth



The ZIP code a child is born in may be more important than their genetic code and contribute to inequities in access to food, housing, and knowledge.

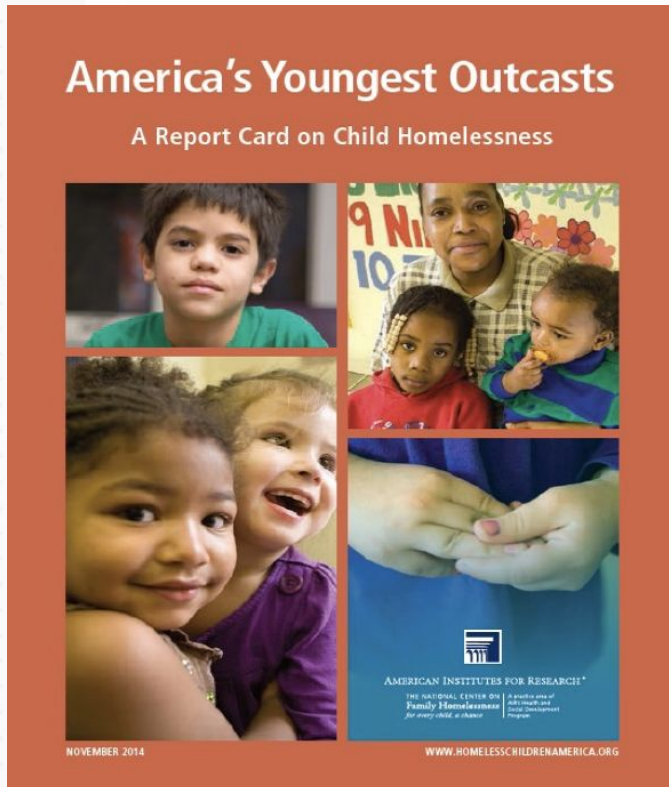
Race is a Social Construct Rooted in History, and NOT a Biological Entity

Racism structures opportunity and assigns value based on how a person looks resulting in conditions that unfairly advantage some while disadvantaging others...

...Leading to a waste of human resources by preventing some the opportunity to attain the highest levels of health, well-being, and achievement



Inequity Begins at Birth: Housing—America's Youngest Outcasts

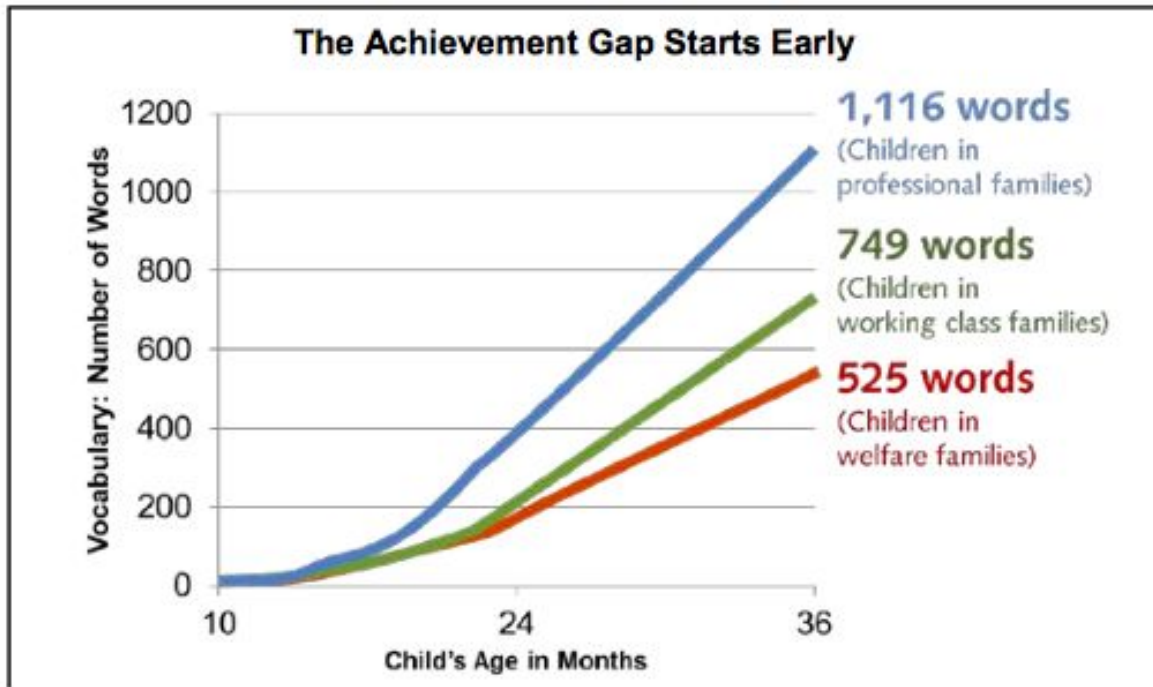


- 2.5 million children in America are homeless each year
- This represents one in every 30 children in the United States
- These children are among the most invisible in society

1 in 5 people experiencing homelessness is a child

Based on a calculation using the most recent U.S. Department of Education's count of homeless children in U.S. public schools and on 2013 U.S. Census data; (American Institutes for Research)

Inequity Begins at Birth: Words Matter—The 30 Million Word Gap



Lower income children hear fewer words and fewer different words than those growing up in higher-income homes

By 4 years of age, differences in word exposure between children in higher SES homes vs those in lower SES homes up to 30 million words

4 million words in a recent replication using a digital recording device

Meaningful Differences in the Everyday Experience of Young Children' Hart and Risley, 1995

Inequity Begins at Birth: Educational Inequity

Educational attainment is the single greatest protective factor against a lifetime in poverty.

Children from low-income homes:

- Hear fewer words in early childhood
- Know fewer words by age 3
- Have fewer literacy resources within the home
- Are less likely to be read to regularly
- Are more likely to experience childhood adversity and toxic stress

Than children from more advantaged families

All resulting in a significant learning disadvantage even before they have access to early preschool interventions.

AAP Policy statement—Literacy promotion: an essential component of primary care pediatric practice. *Pediatrics*, 2014.
1091 N Batavia St., Orange, CA 92867 • (949) 273-0555

Inequity Begins at Birth: **Educational Inequity—the process of “dropping out” begins long before high school**

Brains are built over time . . . interaction between genes and experiences literally shape the architecture of the developing brain.

BUT . . .1/3 of young children and 1/2 of children living in poverty in the U.S. start Kindergarten without the skills they need for success in school.

Annie E. Casey Foundation, 2012. *Double Jeopardy: How Poverty and Third-Grade Reading Skills Influence High School Graduation*

Inequity Begins at Birth: Why Early Literacy Matters

Expressive language vocabulary **at age 3** predicts reading and writing achievement up to the 3rd grade.

BUT... 2/3rds of children each year in the US and 80% of those living below the poverty threshold fail to develop reading proficiency by the end of 3rd grade

Children not reading at grade level by 3rd grade **are 4 times less likely** to graduate high school by 19 than proficient readers

Annie E. Casey Foundation, 2012. *Double Jeopardy: How Poverty and Third-Grade Reading Skills Influence High School Graduation*

Repeating Cycles of Underachievement, Poverty and Homelessness

Strong connection between low literacy skills and our country's exploding incarceration rates

85% of juveniles who interface with the juvenile court system are functionally illiterate or low literate

High school dropouts are 3.5 times more likely than high school graduates to be arrested in their lifetime and 63% more likely to be incarcerated than their peers with four-year college degrees

National Adult Literacy Survey. Prison Literacy. 2003

Race, Poverty, Health, and Achievement Connection

It is critical to recognize and address the institutional, personally mediated and internalized levels of racism that occur in the educational setting because . . .

Education is a critical social determinant of health for children

Educational attainment is the single, greatest protective factor against a lifetime in poverty and impacts long-term health

- Poverty rate of 26% if head of household didn't graduate high school vs. 4% if has Bachelor's degree or higher
- Adults with a college degree live longer and have lower rates of chronic disease than those without a college degree

Race, Poverty, and Education

Black and Latinx American students are significantly more likely to attend schools where:

- Majority of kids are also Black and/or Latinx (**school hypersegregation**)
- Majority qualify for free school lunch (**concentrated poverty**)
- School funding is lower than in suburban communities (**result of historical practice of redlining and financial disinvestment**)
- Majority of teachers are white (**teacher diversity gap**)



Black teachers improve outcomes for Black students—one Black teacher before 3rd grade increase the chances a Black child will enroll in college by 13%;

With 2 Black teachers this increases to 32%

Public schools are majority minority but 80% of teachers are still white—creating racial dissonance and possibly triggering teachers' implicit racial biases

Close the achievement gap—best way to increase teacher diversity is to get more kids of color into college

<https://hub.jhu.edu/2018/11/12/black-students-black-teachers-college-gap/>

Adverse Childhood Experiences (ACES)

- Child trauma and adversity come in many forms, and no term covers all of them; ACES is one of the better-known terms
- ACES are stressful or traumatic events, including abuse, neglect, and household dysfunction that are experienced before the age of 18
- ACES are strongly related to the development of a wide range of health problems throughout a person's lifespan
- ACE score (0-10) gives us a way to measure adversity and talk about it
- The toxic stress caused by ACES can have a profound impact on children's development by potentially altering both their developing brains and bodies

AAP. Adverse Childhood Experiences and the Lifelong Consequences of Trauma, 2014

ACES in Children and Adolescents

- In U.S., 34 million children, 46%, have experienced at least one ACE and 22% have 2 or more (2016 NSCH data)
- Children living in poverty, including those experiencing homelessness, are more likely to carry high ACES
 - Children living below the Federal Poverty Line are 5 times more likely to experience ≥ 4 ACES than those who live in financially stable households.
- Associated Adverse Health Outcomes Include:
 - Infancy: developmental/cognitive delay, FTT, sleep issues
 - Child: learning and behavioral concerns, asthma
 - Adolescent: obesity, diabetes, smoking, teen pregnancy

Bethell CD *Health Affairs* 2014; 33(12): 2106-2115.

Kalmakis KA et al. *J Am Assoc Nurse Pract* 2015; 27(8); 457-465.

Halfon N. *Academic Pediatrics* 2016; 17(75): S70-78.

ACES Scores of Illumination Foundation Children

- Children at the Emergency Shelter have an average ACE score of 4.5
- The average age of children at ER Shelters is 4.3 years
- The all-time average ACE score for children under 18 across Illumination Foundation housing and children's programs is 7.2
- ≥ 4 ACES significantly increases risk for leading causes of death

- Of the 10 ACES:
 - 80% of children have a family member diagnosed with a mental illness
 - 87% of children have been separated from a caregiver
 - 71% of children have witnessed some type of domestic violence
 - 72% of children have had a parent arrested or in jail/prison



ACES and Homelessness—Intergenerational Impact

- Experience of housing-insecurity significantly increases risk of ACE exposure in children
- Homeless children often have parents with high ACEs, increasing risk of adverse outcomes in children:
 - Environmental: impact on parenting
 - Physiologic: epigenetic changes—early experiences affect how genes are expressed
- Resulting in:
 - Higher rates of chronic illness, like asthma
 - Lower literacy rates compared with low-income children in secure homes; each school change can result in a loss of 4 months of academic skill
 - More than twice as likely to repeat a grade; behavioral issues; drop out of school, expulsion or suspension

Dwomoh I and Dinolfo EA. *Pediatr in Rev.* 2018. Szilagyi MA et al. *Pediatrics.* 2015.

Lê-Scherban F et al. *Pediatrics* 2018. Schickedanz A. *Pediatrics* 2018.

Pair of ACES: ACES and Social Determinants of Health (SDOH)

- Relationship between community adversity and adversity within the family can be conceptualized as “pair of ACES”
- ACES: Adversity within the family
 - Impact child’s relationship with primary caregiver
- SDOH: Adversity within the community
 - Environmental conditions (eg, poverty, food insecurity, community violence) in which children are born, grow, live, work and age
 - Can potentially impact ACES

Ellis W, Dietz W. A new framework for addressing adverse childhood and community experiences: the building community resilience model; Acad Pediatr 2017; 17:S86-S93.

Physiologic Response to Trauma and Stress

Three Levels of Stress Response



Biological systems in the body interact with each other and the environment—adapting to the conditions in which children are developing

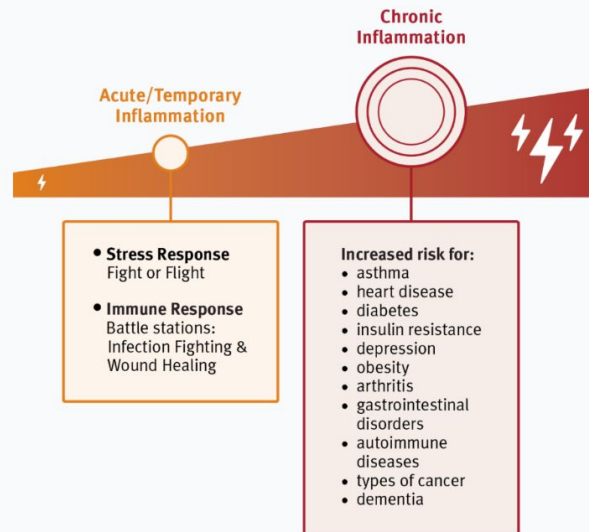
Excessive and persistent adversity can overload biological systems leading to long-term consequences

Duration, severity, and timing of an experience (stressor) as well as **availability of supportive relationships** determine whether response is ultimately growth-promoting or harmful

Toxic stress: exposure to stress without benefit of a supportive relationship

Center on the Developing Child at Harvard. Connecting the brain to the rest of the body: early childhood development and lifelong health are deeply intertwined. Working Paper 15, June 2020.

Acute to Chronic Inflammation



Adversity Isn't Destiny

Capabilities that underlie RESILIENCE can be strengthened at any age!

Solutions:

Decrease Adversity and Increase Buffering

Build Parent and Child Capability and Capacity

- Decrease Adversity: reduce sources of stress in lives of families
 - Basic needs are met—housing, food, childcare
 - “Upstream” efforts: address structural inequities in education, health, housing, employment; reduce community violence

All of which make it easier for adults to provide essential protective relationships for children—capable adults with the capacity to parent

- Increase Buffering: stress busters
 - Promotion of secure parent-child attachment—child learns “I matter”
 - Build competency and restore routines: strengthen parent and child core life skills—setting goals, managing emotions and behavior, creating daily family routines—family meals, daily reading together
 - ACES Aware Self-Care Tool:
<https://www.acesaware.org/wp-content/uploads/2019/12/Self-Care-Tool-for-Pediatrics.pdf>

Client Story: Mike

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Choices Given vs. Choices Made



Opportunities Gap Leads to Achievement Gap

Aspirational Equity . . . What Could the World Look Like if We Could All Achieve our Potential



Julie Linton, MD, Executive Committee Chair, AAP Council on Immigrant Child and Family Health

AAP Immigrant Child Health Toolkit:

<https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Immigrant-Child-Health-Toolkit/Pages/Immigrant-Child-Health-Toolkit.aspx>

Future Plans

- Medical respite program for children
- Educating and partnering with CPS and Child Abuse Services in local communities to discuss unique referral needs for children in shelters
- Growing and developing partnerships within the educational sector



Future Plans: Intergenerational Campus



- 8 families with permanent supportive housing
- 6 seniors with permanent supportive housing
- Supportive services tailored to meet specific needs
- On-site preschool operated by Head Start

Children's Programming at Illumination Foundation

Mentorship

- Provide continuous, stable relationships
- Develop trust in educators and providers



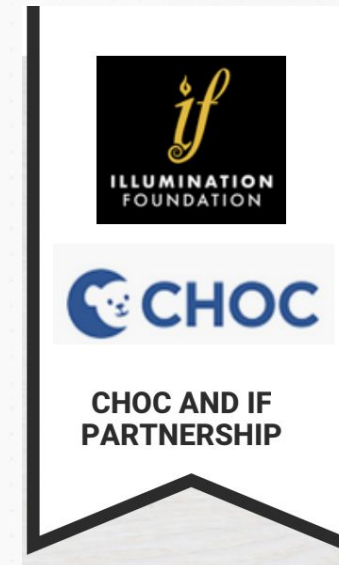
Higher Education

- Encourage education as a method to disrupt the cycle of homelessness
- Support STEM-based learning



Medical Home

- Establish trust in medical providers
- Utilize health liaisons to advocate for care



Social Justice and Healthcare in Illumination Foundation's Children and Families Program Key Points

1. Integrating housing and healthcare for people experiencing homelessness directly addresses social justice in healthcare by reducing barriers and increasing fair access
2. Partnering with hospitals, health plans, and medical groups can improve ACES outcomes in children experiencing homelessness
3. A successful comprehensive model to address health equities and social determinants of health can be replicated in other communities

Resources

- ACES Connection: <https://www.acesconnection.com/>
- American Academy of Pediatrics :
 - The Resilience Project
 - PATTeR: Pediatric Approach to Trauma, Treatment and Resilience: Trauma and Resilience ECHO
 - Trauma guide for primary care: www.aap.org/traumaguide
- Center on the Developing Child at Harvard: <https://developingchild.harvard.edu/>
- Center for Youth Wellness: <https://centerforyouthwellness.org/>
- CDC: www.cdc.gov/violenceprevention/childabuseandneglect/cestudy
- Childhood Adversity Narratives: <http://www.canarratives.org/>
- National Child Traumatic Stress Network: <https://www.nctsn.org/>
- Substance Abuse and Mental Health Administration:
<https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>

- Books:
 - Burke Harris N. The Deepest Well: healing the long-term effects of childhood adversity. 2018
 - Masten AS. Ordinary Magic: resilience in development. 2015
- TED Talk—Nadine Burke Harris: <https://www.tedmed.com/talks/show?id=293066>
- Film: Resilience: the biology of stress and the science of hope. <https://kpirfilms.co/films/>
- Orange County Department of Education:
<http://www.ocde.us/Search/results.aspx?k=aces%20and%20trauma>
- Patient education:
 - ACES Too High: <https://acestoohigh.com/>
 - [Sesamestreetincommunities.org](https://sesamestreetincommunities.org)
 - <https://sesamestreetincommunities.org/topics/family-homelessness/>
 - <https://sesamestreetincommunities.org/topics/traumatic-experiences/>

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Thank You!