

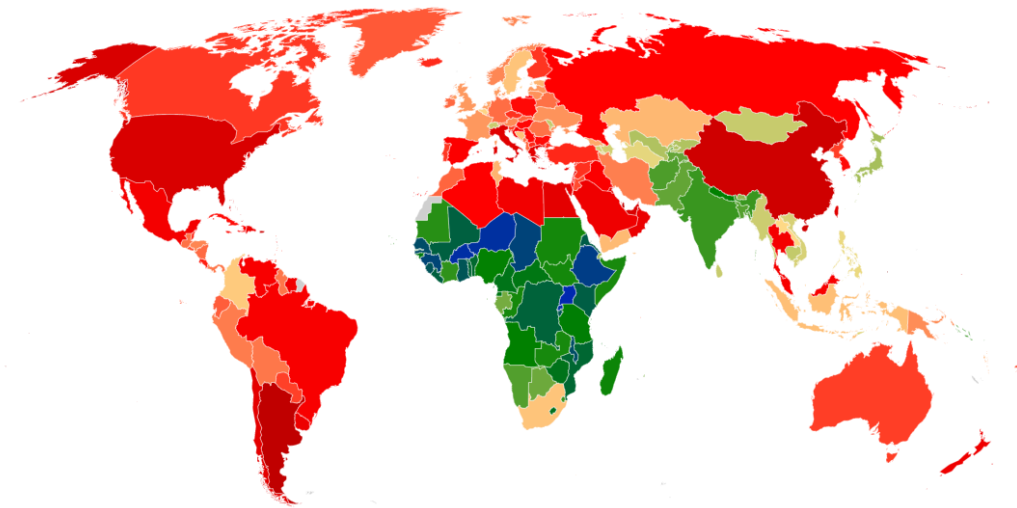
Prioritizing Electronic Health Record Measures for Interventions to Reduce Childhood Obesity in Health Disparity Populations



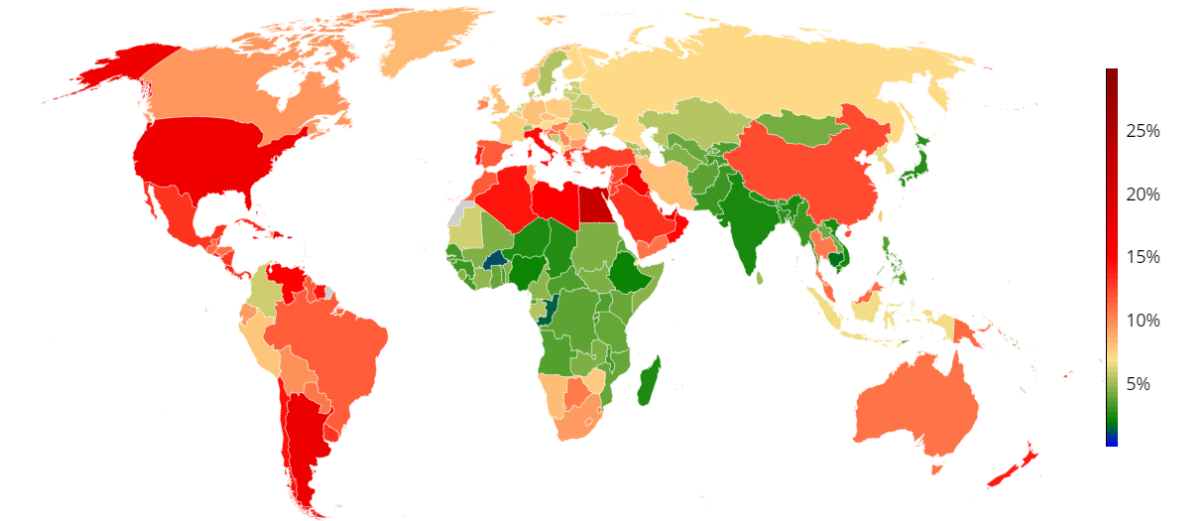
Jennifer Woo Baidal, MD, MPH
Inaugural Director, Pediatric Obesity Initiative
Vagelos College of Physicians and Surgeons

Unprecedented high obesity prevalence responsible for 4 million deaths globally

Males



Females



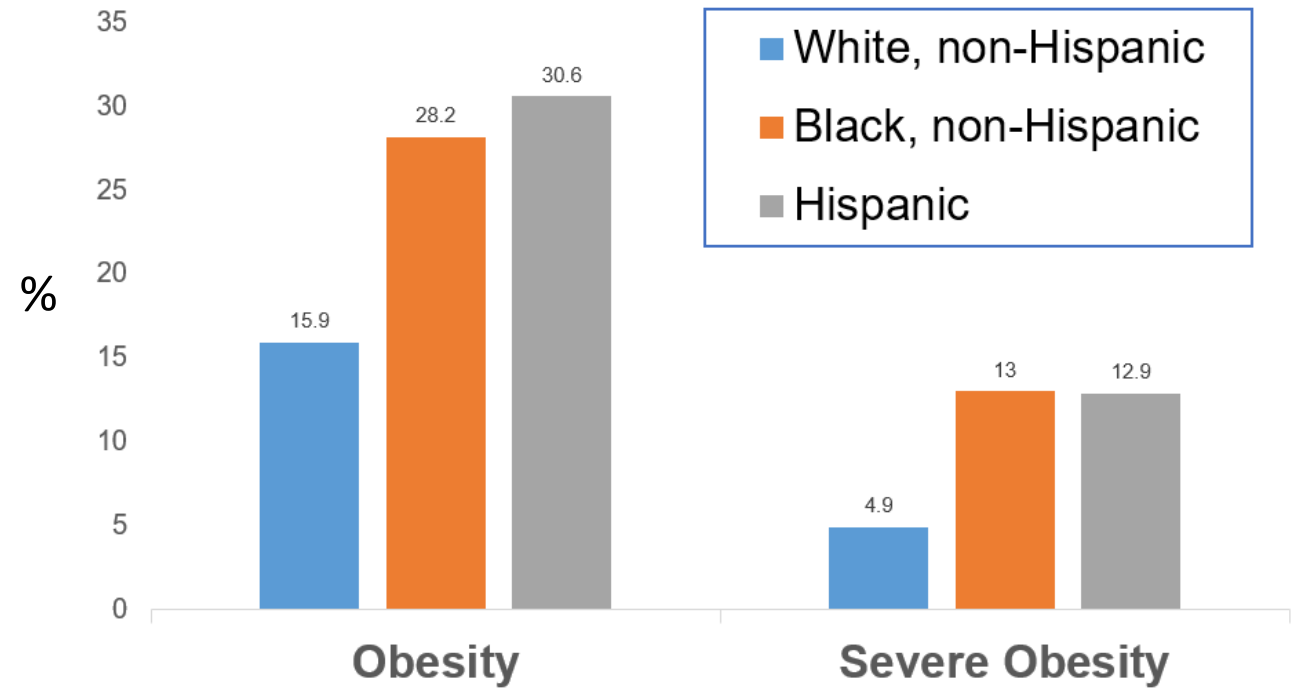
Children Age 6 years Obesity Prevalence 2016

<http://ncdrisc.org/obesity-prevalence-map-ado.html>

The GBD 2015 Obesity Collaborators, NEJM. 2017; NCD Risk Factors Collaboration, The Lancet. 2017; Ogden, JAMA. 2018

Racial, ethnic,
and socioeconomic
disparities in obesity
start in childhood

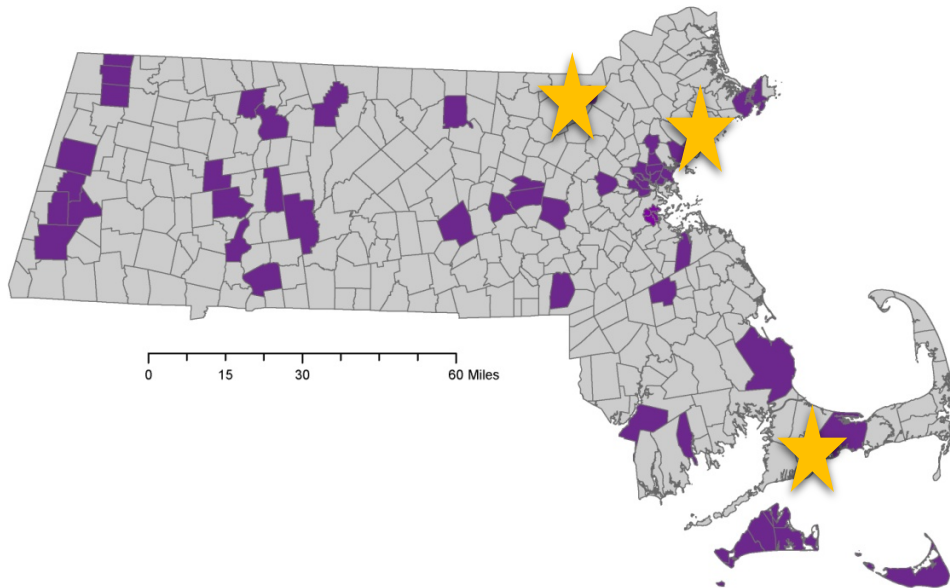
Children age 12-19 years, NHANES 2015-2019



Ogden CL, et al. JAMA. 2020

Childhood Obesity Research Demonstration Study (CORD)

Mass in Motion Communities



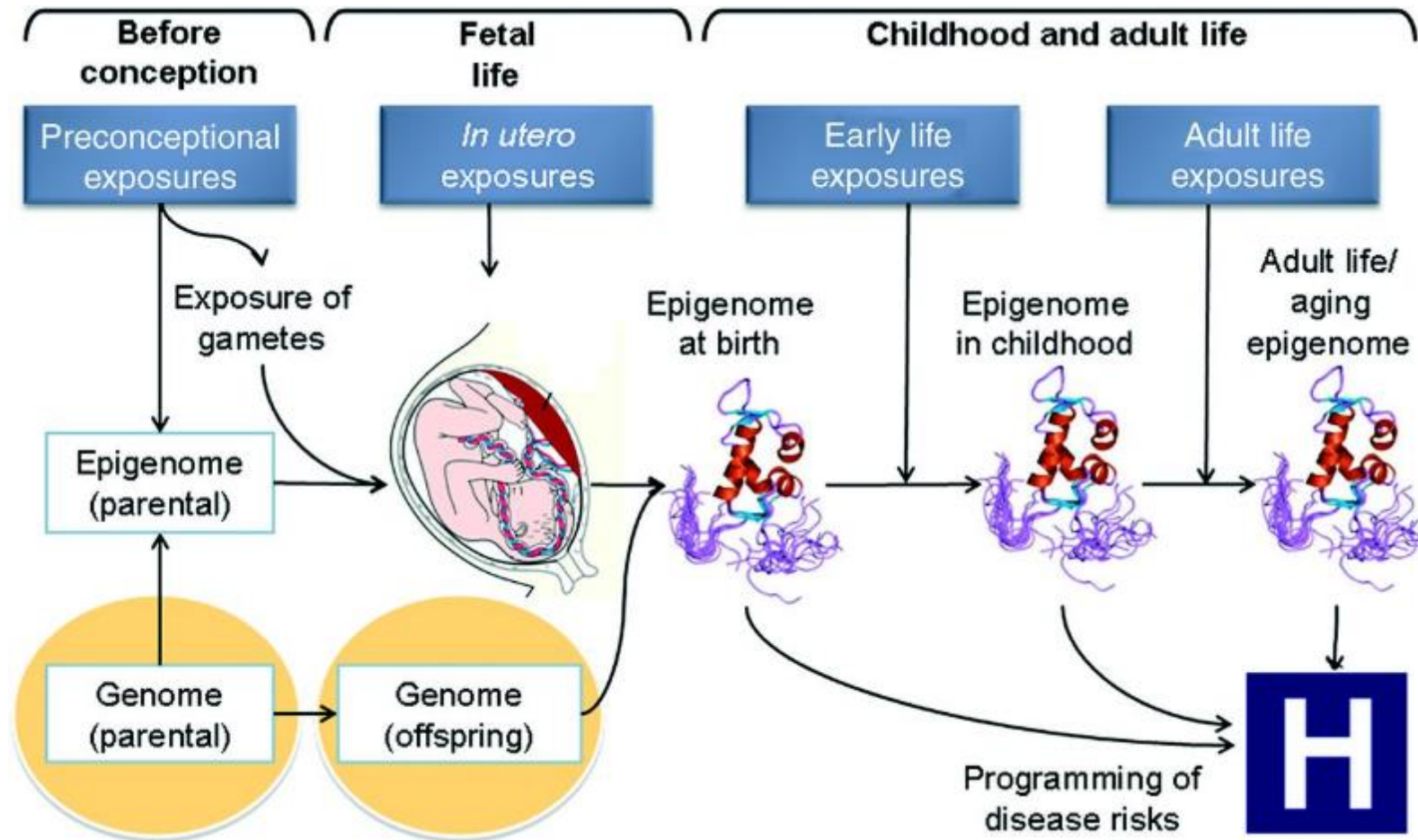
Multi-sector, Multi-level Approach in Low-Income Communities

- Community
- Primary Care
- Women, Infants, and Children (WIC)
- School & After School
- Early Child Education and Care

Multi-sector, multi-level approach

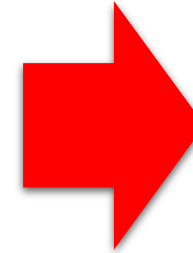
- **Improved BMI outcomes in MA-CORD site #2**
 - Primary care (age 2 -12 years): -0.16 BMI z-score units/year
- **Potential to reduce racial/ethnic disparities**
 - Most effective among African-American WIC children ($p < 0.01$)
- **Improvements in prevalence of risk-reducing behaviors**
 - Avoidance of sugar-sweetened beverage intake
 - Sleep sufficiency

Critical Periods of Health Inequities



Neighborhood Disparities in Obesity

- **Washington Heights/Inwood**
 - 47% children: overweight or obesity
- **New York City – Small decline**
 - 38% overweight or obese



Data2Go: Washington Heights, Inwood & Marble Hill.” *data2go.Nyc*, Measure of America of the Social Science Research Council and Helmsley Charitable Trust

NewYork-Presbyterian Hospital Campuses

NYP Allen Hospital
NYP/Columbia University Irving Medical Center
NYP Lawrence Hospital
NYP Lower Manhattan Hospital
NYP Morgan Stanley Children's Hospital
NYP/Weill Cornell Medical Center
NYP Westchester Division

NewYork-Presbyterian Regional Hospital Network

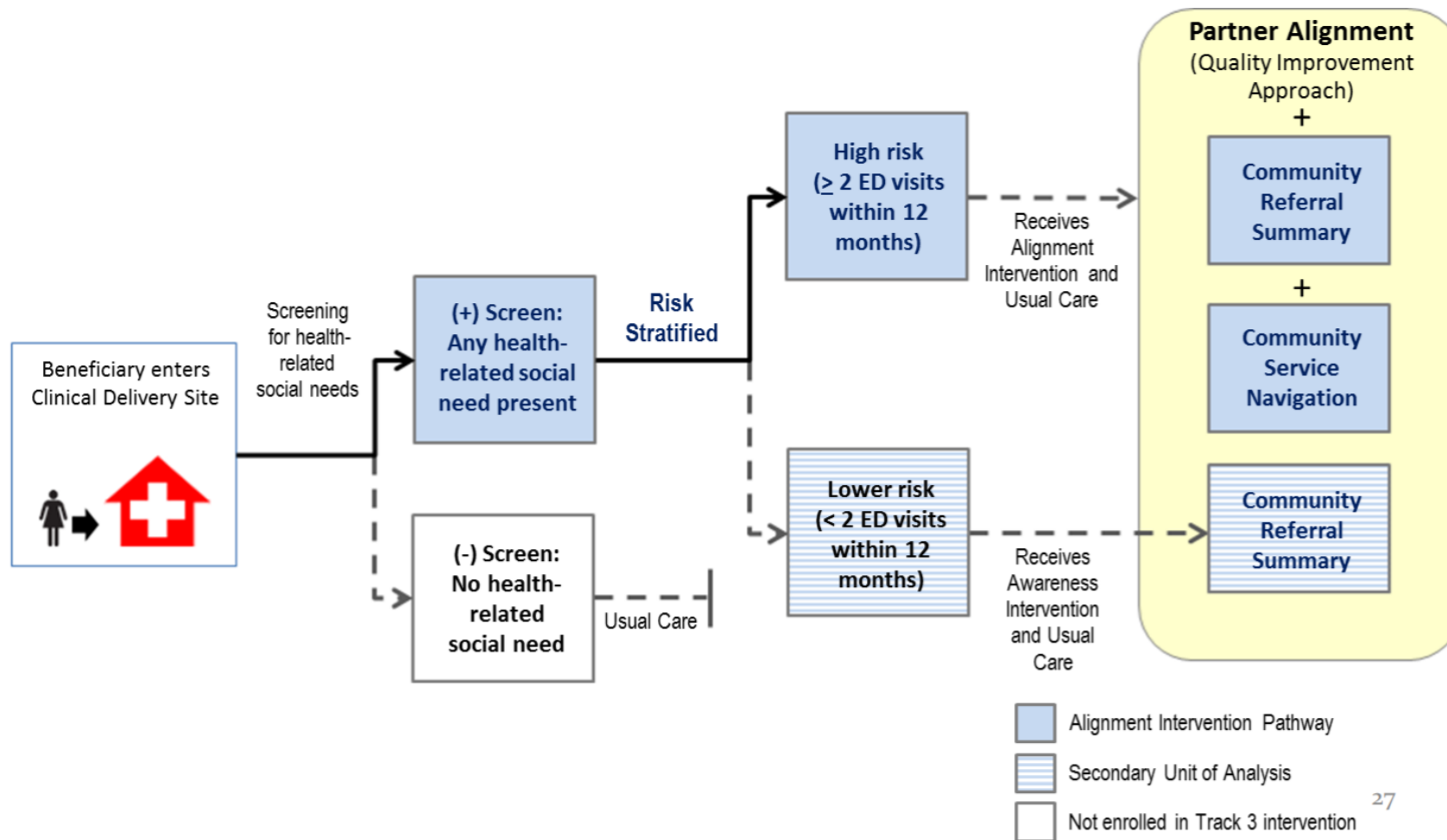
NYP Brooklyn Methodist Hospital
NYP Hudson Valley Hospital
NYP Queens



NewYork-Presbyterian

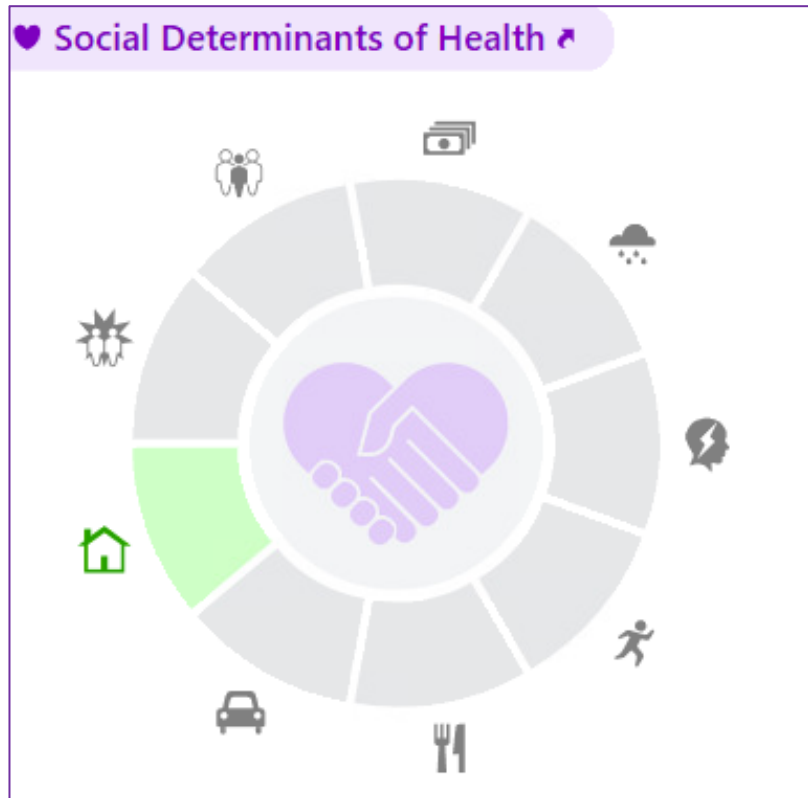
- Academic healthcare system in NYC and Westchester
- 10 campuses
- 2 Medical Schools
 - Columbia
 - Weill Cornell

ANCHOR: NYP's Center for Medicare and Medicaid Innovations Accountable Health Communities (CMMI AHC)



LINC: Leveraging IT for Neighborhoods in Childhood

Electronic Health Record



Multi-level Effects on Infant Weight Trajectories

- Individual: Universal screening for SDoH
- Residential neighborhood characteristics: Geospatial methods

Mitigating effects of social service utilization

Parental and provider perceptions and unintended consequences

Columbia / NYP Food Insecurity Response to COVID

(March 16, 2020 – February 19, 2021)



6,452 Families
25,939 individuals

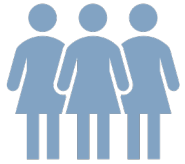


1,000,000
Pounds of food



Evaluation
Food security, diet, health
In-depth interviews

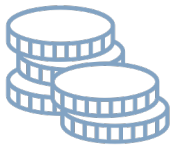
Opportunities and Challenges: SDoH Data to Address Disparities in Childhood Obesity



Systematically collect patient-level data on race, ethnicity, and health-related social needs



Apply a life course lens and consider the household unit of measure



Cost, cost-effectiveness – who benefits? Who pays?



Cultivate community relationships and strategies for timely interventions

Acknowledgements

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THANK YOU

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[@woobaidal](https://twitter.com/woobaidal)

Charity-donations

