Social Determinants of Health Data

Julia E. Iyasere, MD, MBA

Executive Director, Dalio Center for Health Justice; Senior Vice President, Health Justice and Equity, New York-Presbyterian; and Assistant Professor of Medicine, Columbia University Irving Medical Center

We Ask Because We Care is a component of HANYS *Advancing Healthcare Excellence and Inclusion* learning collaborative, launched with generous support from the Mother Cabrini Health Foundation. The goal is to improve the accuracy and completion of patient demographic data while cultivating community understanding of how hospitals use this data to inform patient care and improve health outcomes.

Agenda

- **Introductions**
  - HANYS AHEI team
  - AHEI faculty
- **Our partners**
- **Session 4:**
  - Social determinants of health data
- **Upcoming series**

HANYS AHEI team

Kathleen Rauch, RN, MSHQS, BSN, CPHQ

Vice President, Quality Advocacy, Research and Innovation and Post-acute and Continuing Care

Morgan Black, MPA

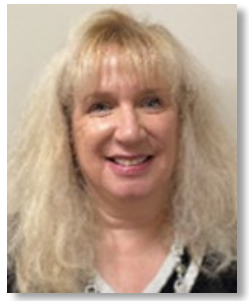
Director,
AHEI

Rachael Brust, MBA

Project Manager,
North Country

Christina Miller-Foster, MPA

Senior Director, Quality Advocacy, Research and Innovation



Maria Baum, MS, RN, CPHQ

Project Manager,
Mohawk Valley

Kira Cramer, MBA

Project Manager,
Downstate

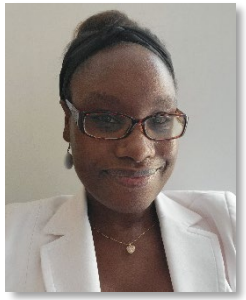
HANYS faculty

Julia E. Iyasere, MD, MBA

Executive Director, Dalio Center for Health Justice; Senior Vice President, Health Justice and Equity, New York-Presbyterian; and Assistant Professor of Medicine, Columbia University Irving Medical Center

Pamela Y. Abner, MPA, CPXP

Vice President and Chief Diversity Operations Officer, Mount Sinai Health System



Shana Dacon-Pereira, MPH, MBA

Assistant Vice President, Corporate Health System Affairs Mount Sinai Office for Diversity and Inclusion

Theresa Green, PhD, MBA

Director, Community Health Policy and Education, URMC Center for Community Health

Barbara Warren, PsyD, CPXP

Senior Director, LGBT Programs and Policies, Mount Sinai Office for Diversity and Inclusion

Our funder and partner

Mother Cabrini HEALTH FOUNDATION

OUR FUNDER

Funding from the Mother Cabrini Health Foundation allows HANYS to expand its capacity to provide education, direct support, tools and data to our members in a strategic way. With this learning collaborative, we strive to effect lasting change in health equity at the local level by engaging providers and community stakeholders to address health disparities.

DataGen® Insights for Healthcare®

OUR PARTNER

Through a partnership with Socially Determined, provider of Social Risk Intelligence™ solutions, DataGen will develop custom analytics for participants to help them understand how and where communities are affected by social risk so they can develop tailored intervention strategies.

Session objectives

After this session, participants will be able to:

1) complete SDoH assessments;
2) communicate how SDoH information is used and why it is important;
3) identify next steps when a patient screens positive; and
4) develop a robust referral process.

Presenter

Julia E. Iyasere, MD, MBA

Executive Director, Dalio Center for Health Justice; Senior Vice President, Health Justice and Equity, New York-Presbyterian; and Assistant Professor of Medicine, Columbia University Irving Medical Center

Bio

STAY AMAZING

NewYork-Presbyterian

WITH WORLD-CLASS DOCTORS FROM

COLUMBIA

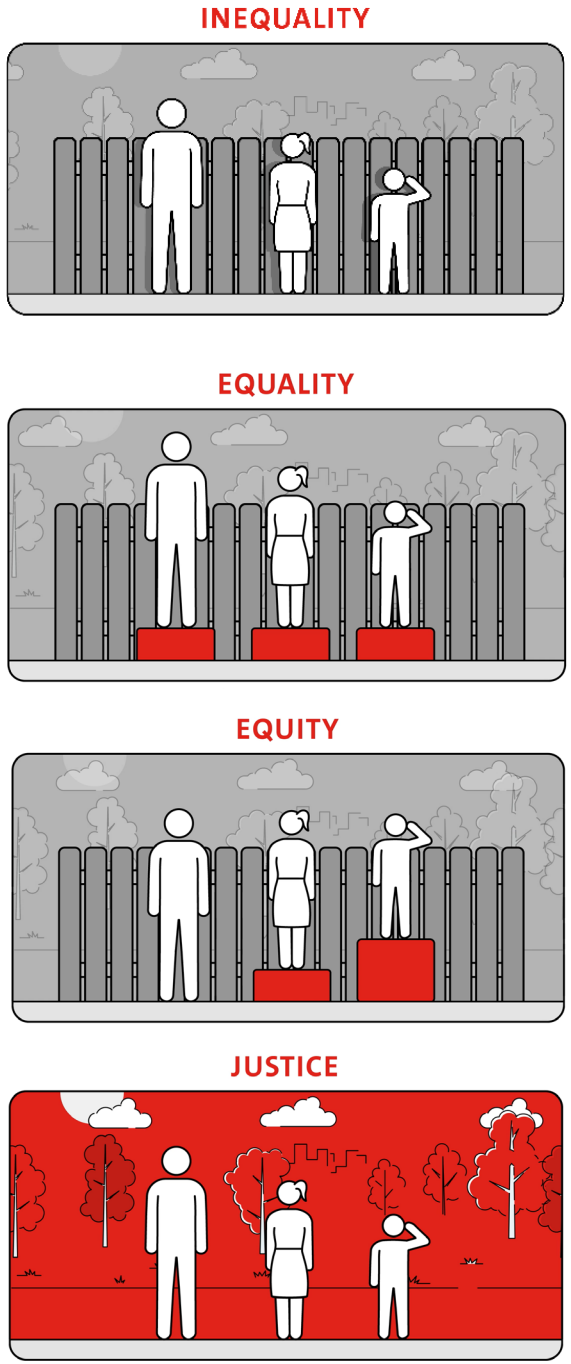
Weill Cornell Medicine

Social Determinants of Health Data Collection and Referral at NewYork-Presbyterian

Julia Iyasere, MD MBA

SVP, Health Justice and Equity at NYP

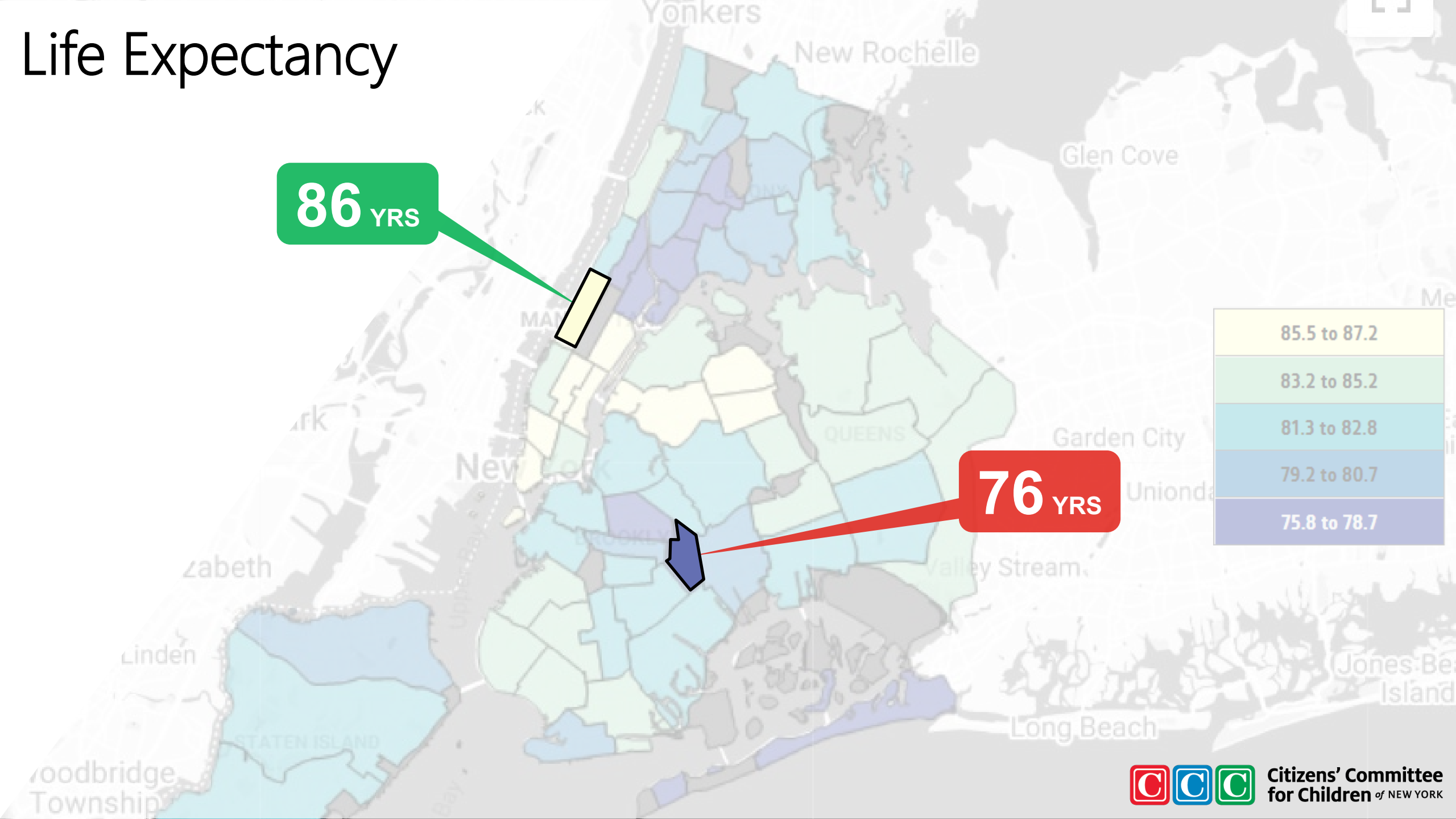
Executive Director, Dalio Center for Health Justice



Our mission is to be a leader in understanding and improving health equity and proactively address the **systemic inequities** and **structural factors** that create conditions for poor health.

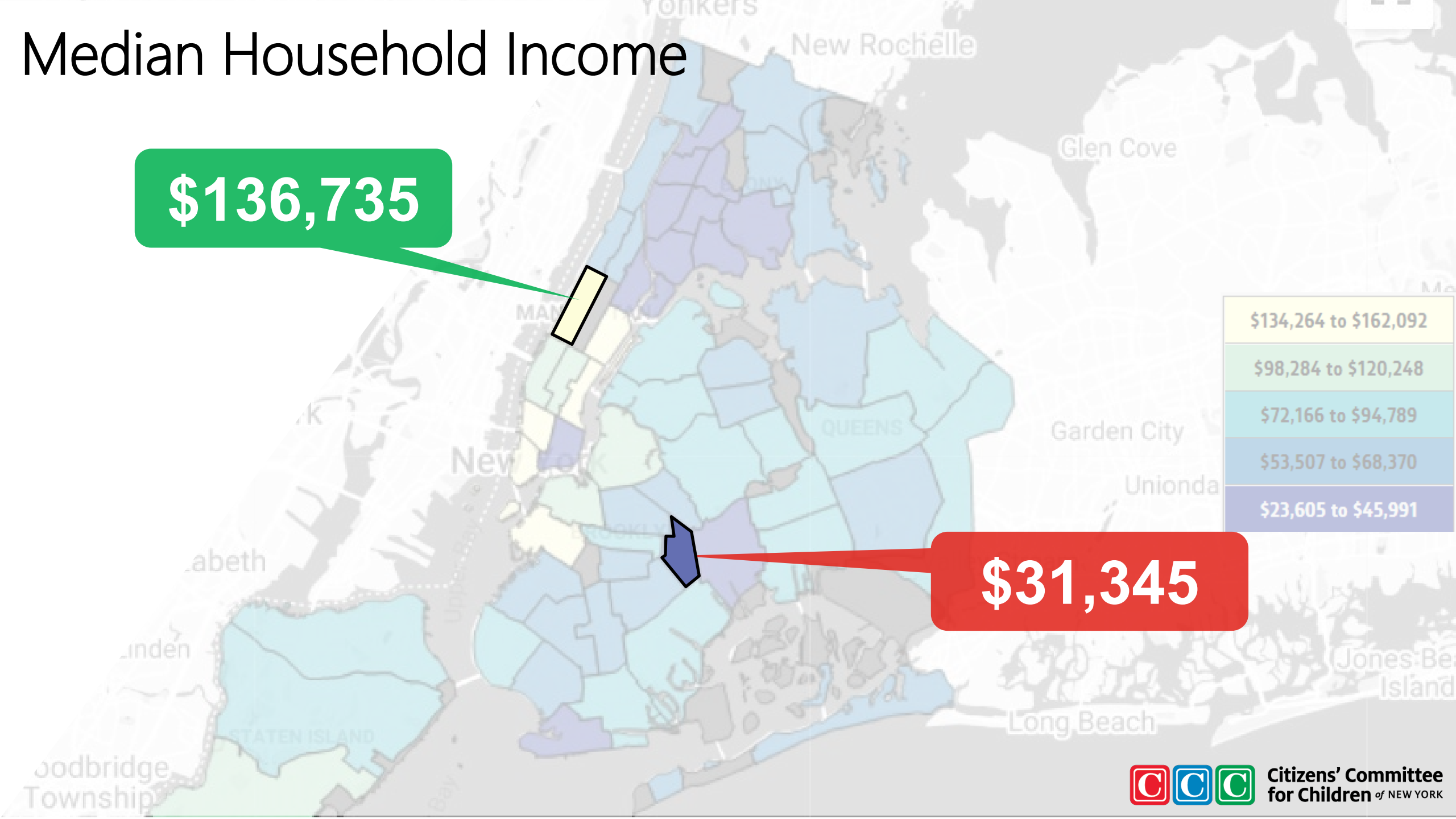
NewYork-Presbyterian
Dalio Center for Health Justice

Life Expectancy



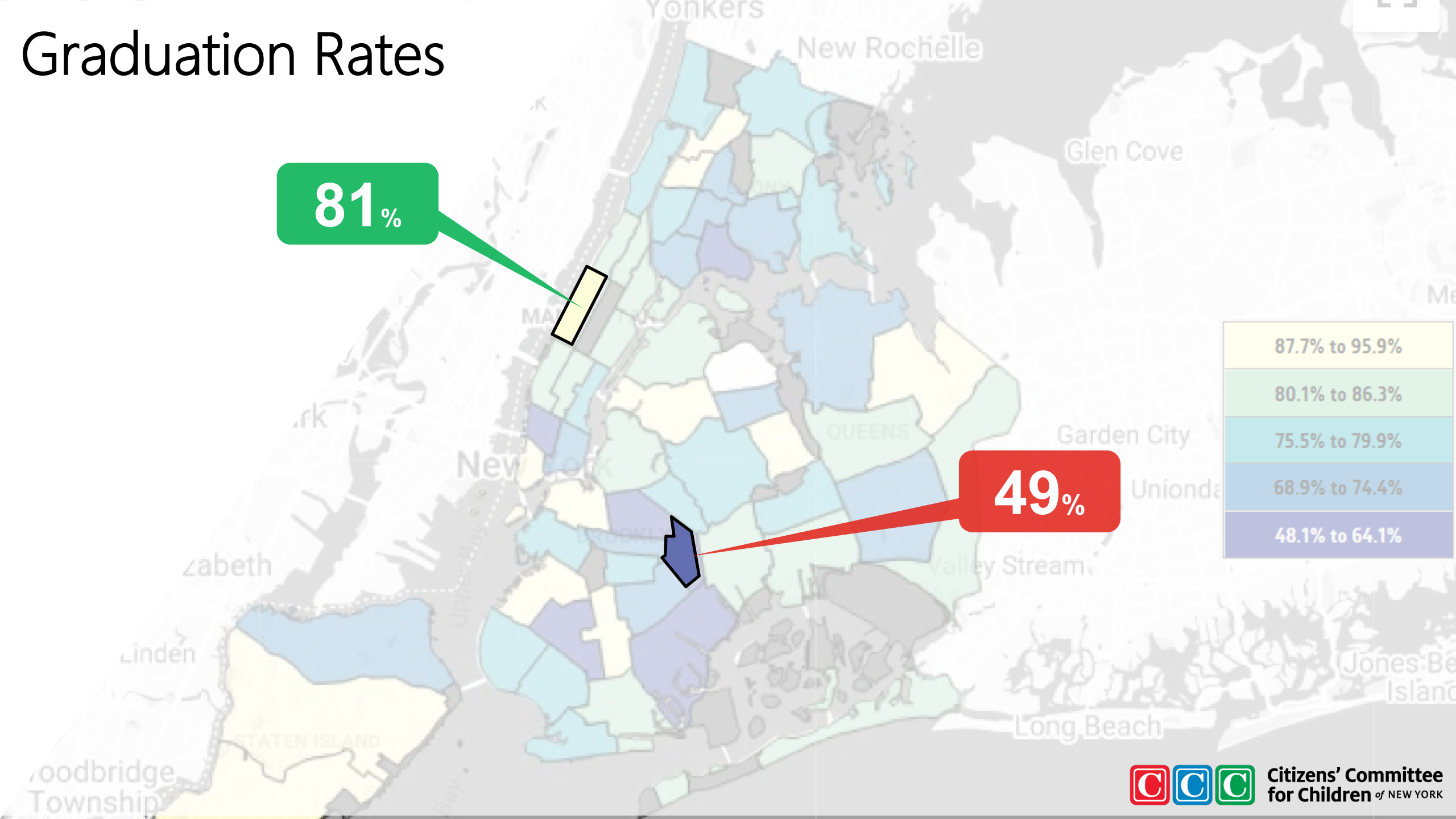
Citizens' Committee for Children of NEW YORK

Median Household Income



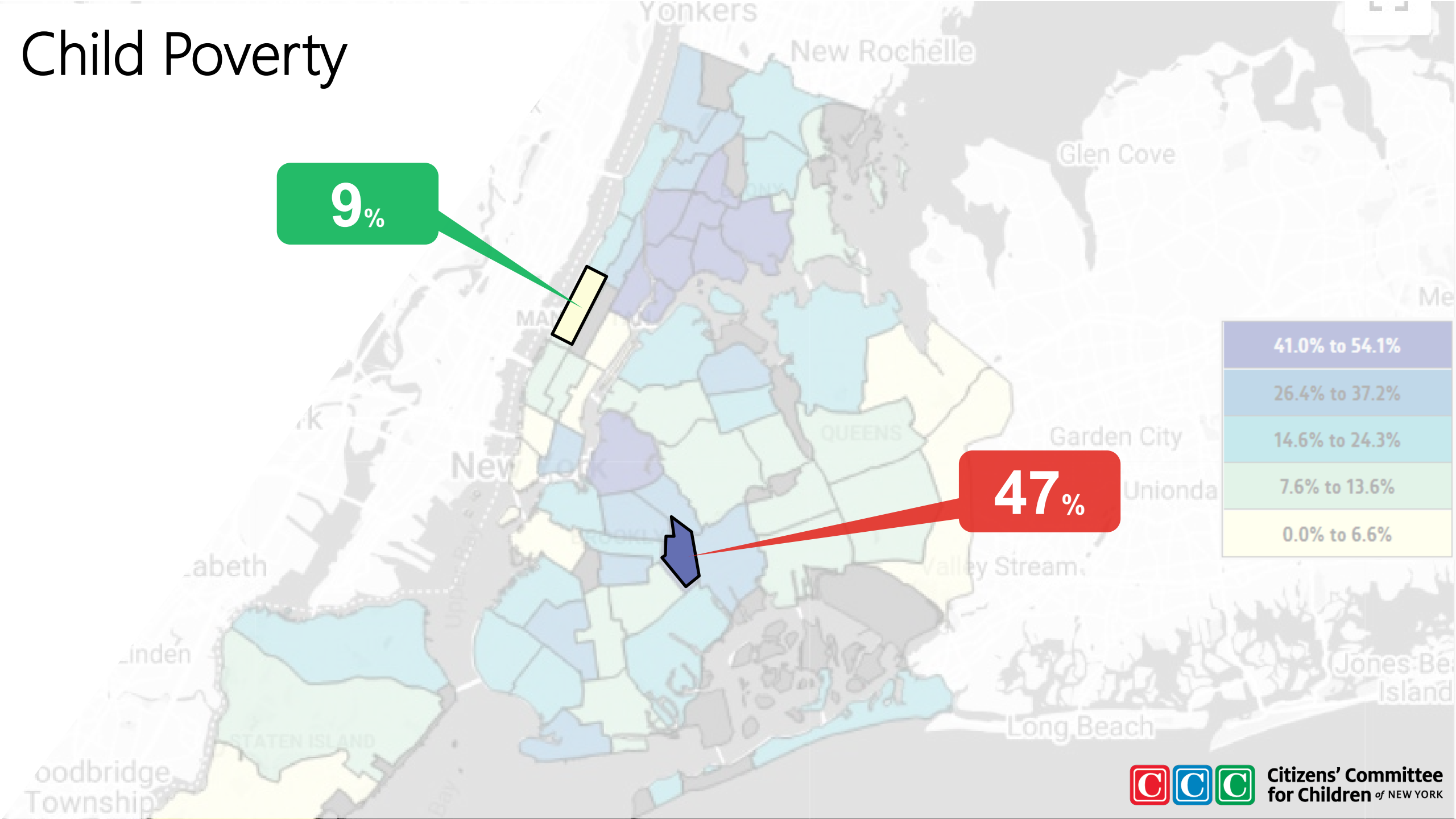
Citizens' Committee for Children of NEW YORK

Graduation Rates



Citizens' Committee for Children of NEW YORK

Child Poverty



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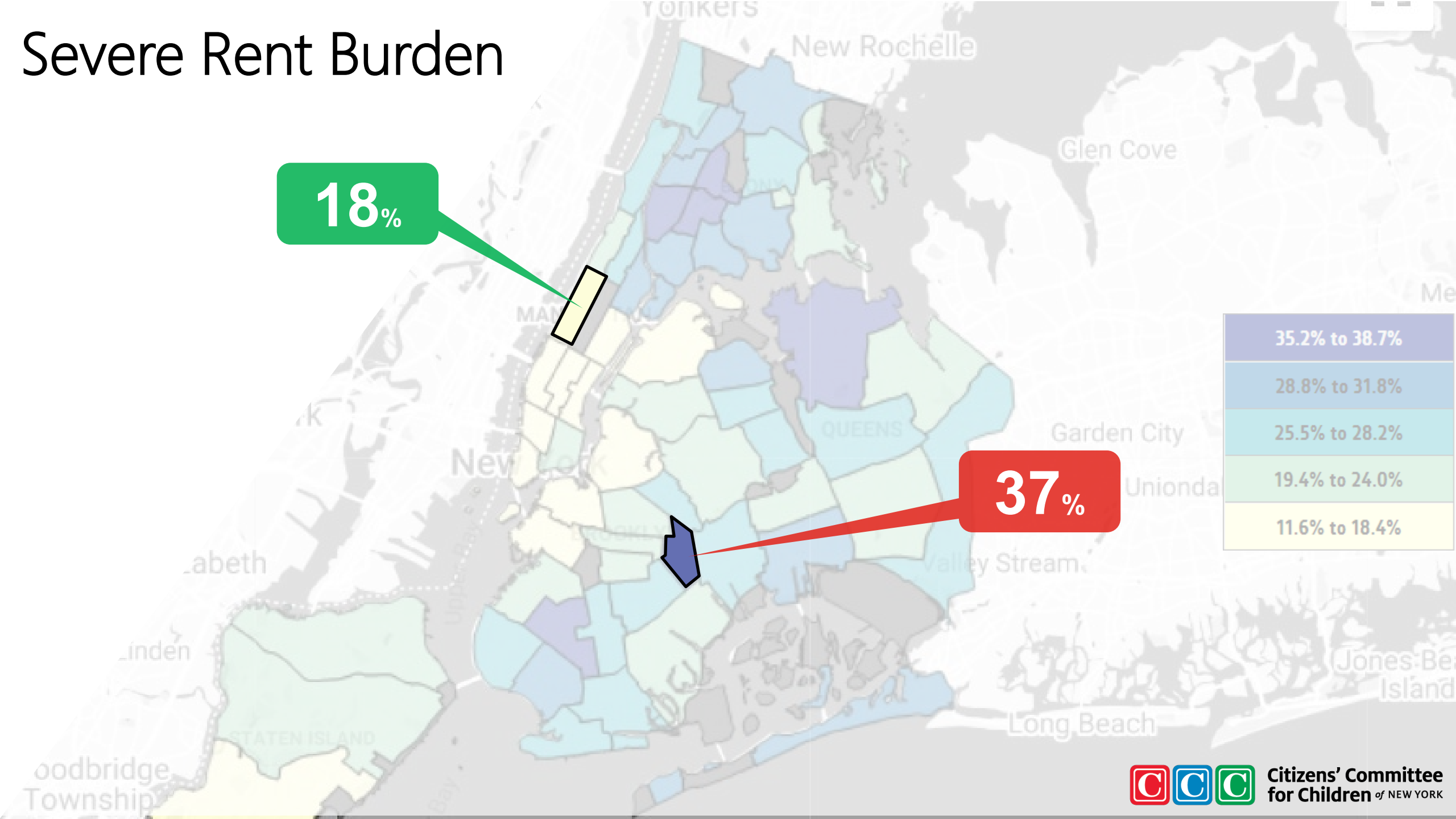
Severe Rent Burden

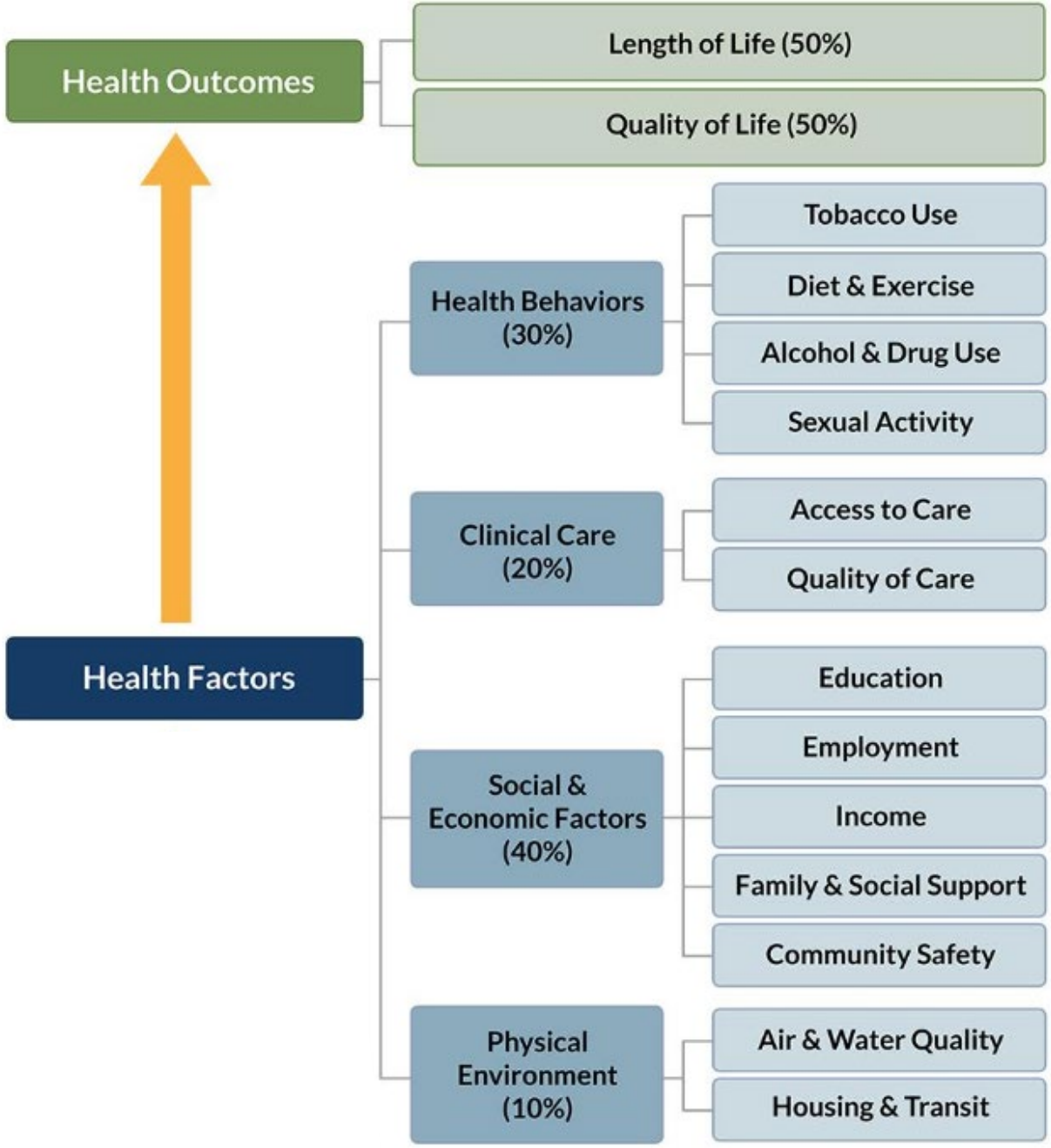


Citizens' Committee for Children of NEW YORK

Social determinants of health are the conditions in which people are born, grow, live, work, and age.

[1]World Health Organization

https://www.cdc.gov/publichealthgateway/sdoh/index.html



Social determinants of health are the conditions in which people are born, grow, live, work, and age. [1]

They include factors like socioeconomic status, education, neighborhood and physical environment, employment, and social support networks, as well as access to health care.

[1]World Health Organization

…three options

Self-reported, Individual-level SDoH Data Elements

Social risk data collected directly from patients and/or caregivers.

e.g. PRAPARE, AHC

Neighborhood-level SDoH Data Elements

Community-level social risk data, typically from public sources

e.g. US Census, CDC, CRDC, HUD

Social-risk Indices

Community-level aggregations of social risk data, summarized in a composite numerical result

e.g. SVI, ADI, CNI

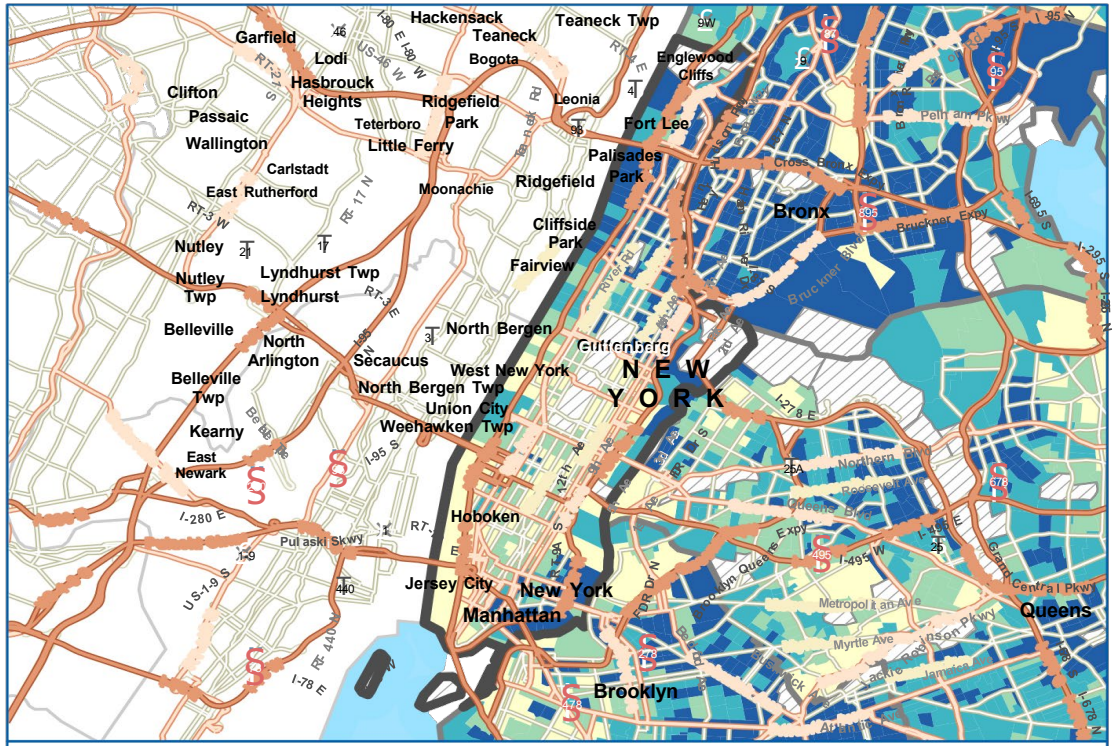
Some Examples

CDC Social Vulnerability Index 2018

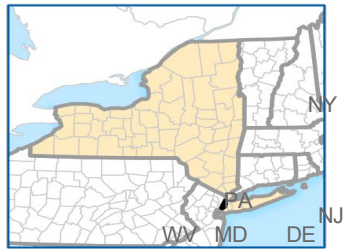
New York County, New York

PART 1

Overall Social Vulnerability[1]



Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)



Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **CDC Social Vulnerability Index (CDC SVI 2018)[4] County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. CDC SVI 2018 groups **fifteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

MAP PRODUCED 3/12/2020

GRASP

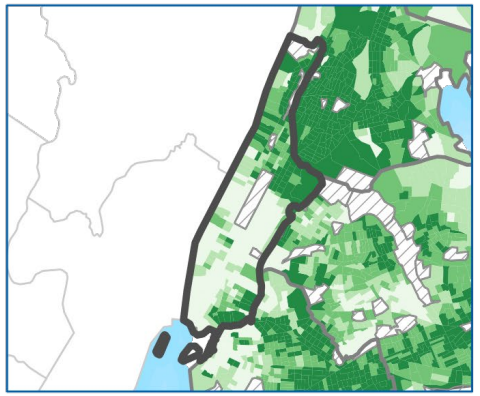
Agency for Toxic Substances and Disease Registry
Division of Toxicology and Human Health Sciences

ATSDR

FINAL - FOR EXTERNAL USE

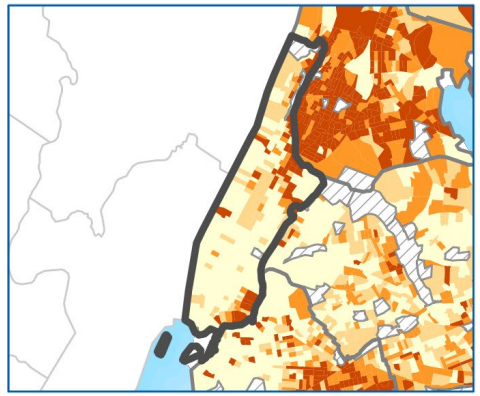
CDC SVI Themes

Socioeconomic Status[5]



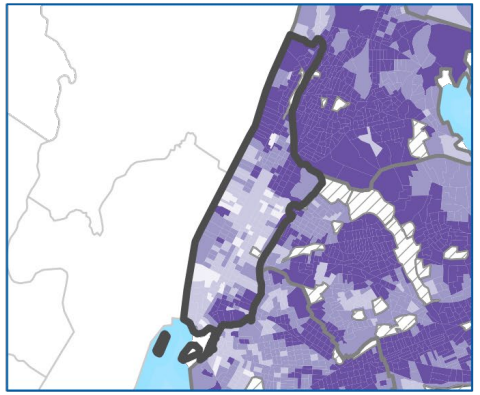
Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Household Composition/Disability[6]



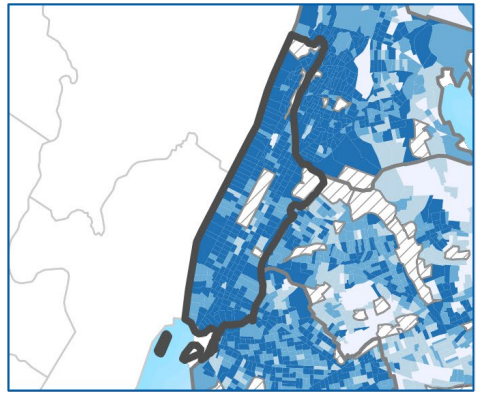
Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Race/Ethnicity/Language[7]



Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Housing Type/Transportation[8]



Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Data Sources: [2]CDC/ATSDR/GRASP, U.S. Census Bureau, Esri® StreetMapTM Premium.
Notes: [1]Overall Social Vulnerability: All 15 variables. [3]Census tracts with 0 population. [4]The CDC SVI combines percentile rankings of US Census American Community Survey (ACS) 2014-2018 variables, for the state, at the census tract level. [5]Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. [6]Household Composition/ Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. [7]Race/Ethnicity/Language: Minority, English Language Ability. [8]Housing Type/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.
Projection: New York NAD 1983 UTM Zone 18N, CM shifted to -76.
References: Flanagan, B.E., et al., A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011. 8(1). CDC SVI web page: http://svi.cdc.gov.

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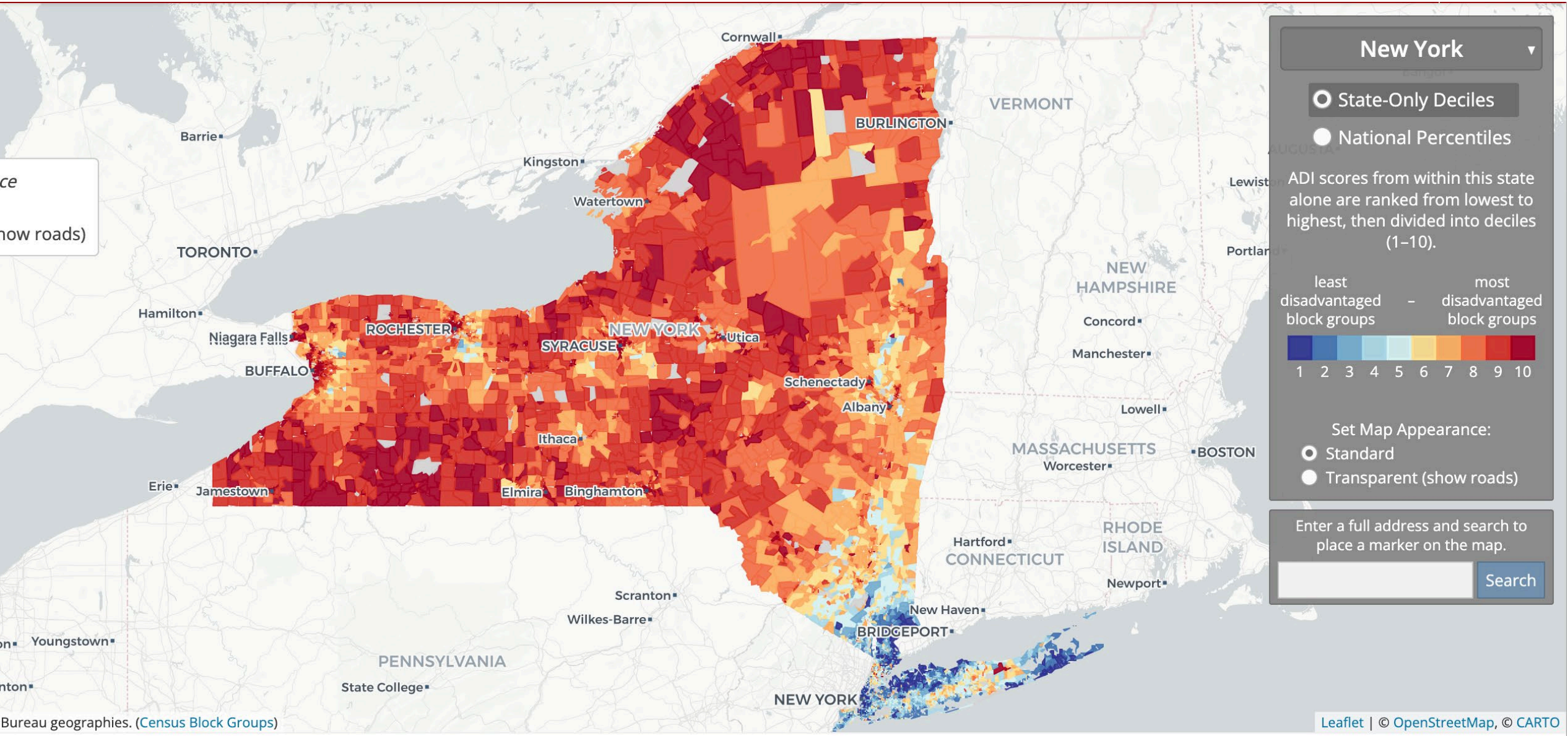
Area Deprivation Index



…three options

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Social-risk Indices

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e.g. SVI, ADI, CNI

Benefits and Limitations

Self-reported, Individual-level SDoH Data Elements

- ✓ Specific to the patient, highly reflective of actual needs
- ✓ Timely and recent

- × Not readily available
- × Requires substantial resources to collect
- × Collection bias?

Neighborhood-level SDoH Data Elements

- ✓ Many data sources exist and are publicly available

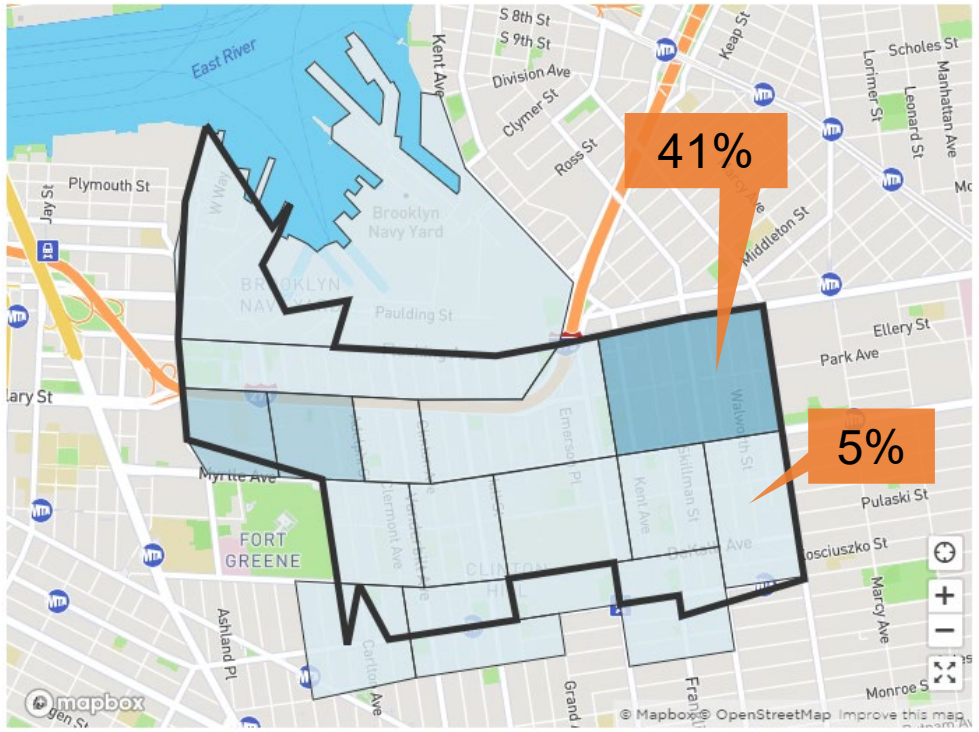
- × Not specific to the patient, assumes the patient shares the characteristics of the neighborhood
- × Many not be timely or recent
- × Not all measures are available at the required geographic specificity
- × Requires moderate resources to collect, aggregate, and maintain data

Social-risk Indices

- ✓ Many index options exist and are publicly available
- ✓ Requires minimal resources to select and maintain index data
- ✓ Aggregates several needs

- × Not specific to the patient, assumes the patient shares the characteristics of the neighborhood
- × Many not be timely or recent
- × Not all indices are available at the required geographic specificity
- × Indices may include variables that are not applicable to every use case

% of Families below Poverty Level, 11205
US Census 2010



ZIP Code 11205

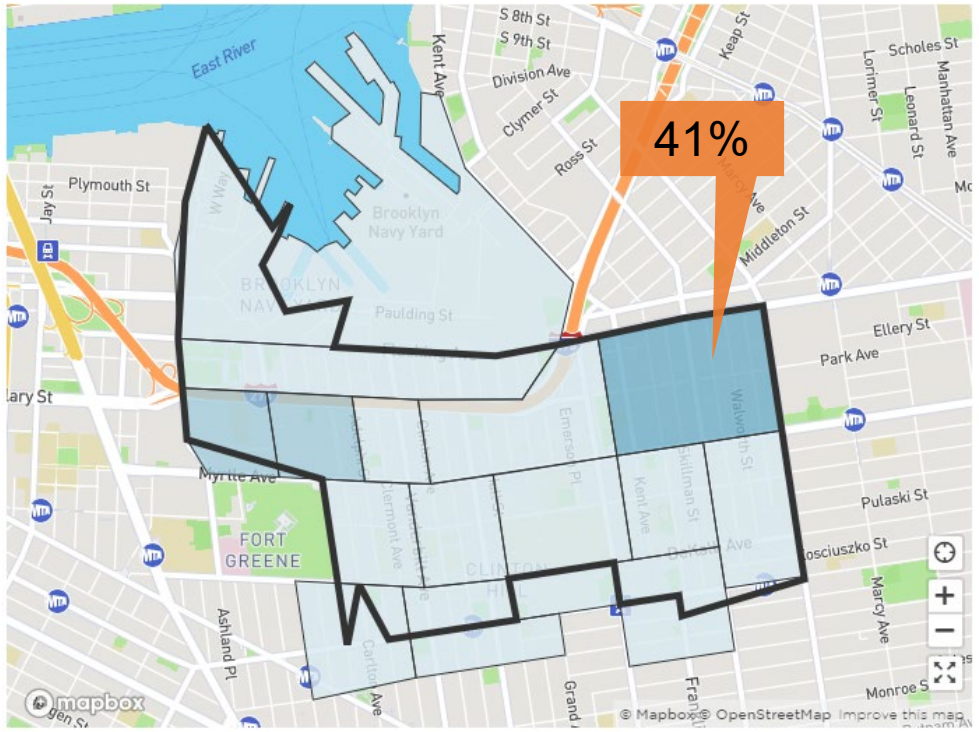
Families Below Poverty Level per household

- 0 - 0.2
- 0.2 - 0.4
- 0.4 - 0.6
- 0.6 - 0.8
- 0.8 - 1

Sources: US Census Bureau 2010

Why is Geographic Specificity Important?

% of Families below Poverty Level, 11205
US Census 2010



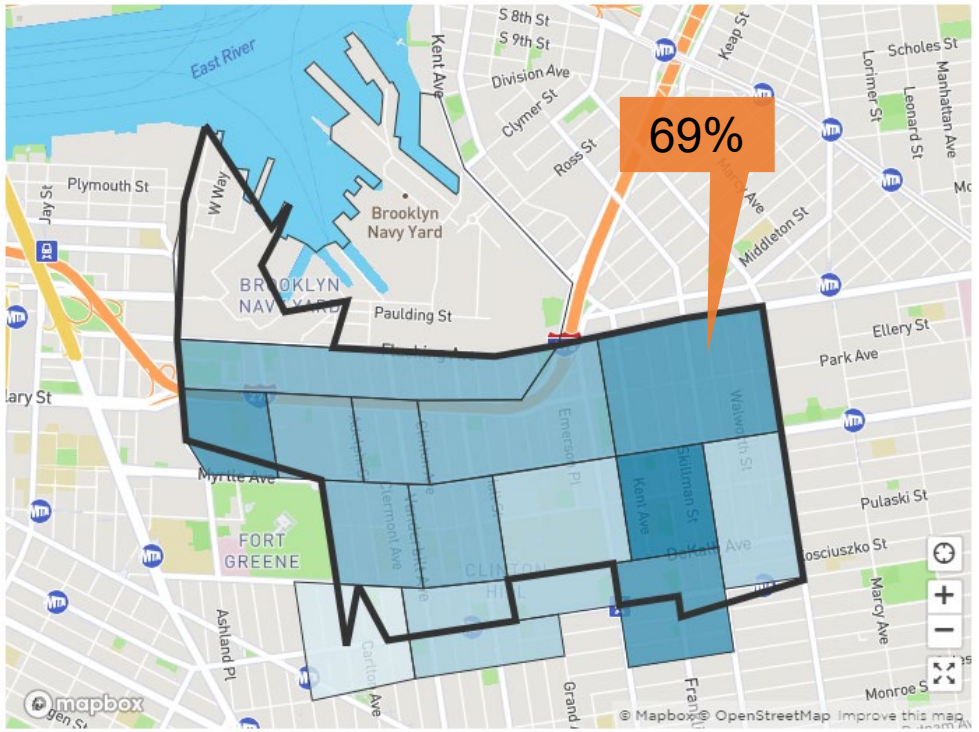
ZIP Code 11205

Families Below Poverty Level per household

- 0 - 0.2
- 0.2 - 0.4
- 0.4 - 0.6
- 0.6 - 0.8
- 0.8 - 1

Sources: US Census Bureau 2010

% of Families below Poverty Level, 11205
US Census 2000



ZIP Code 11205

Families Below Poverty Level normalized by Total Households Below Poverty Level

- 0 - 0.2
- 0.2 - 0.4
- 0.4 - 0.6
- 0.6 - 0.8
- 0.8 - 1

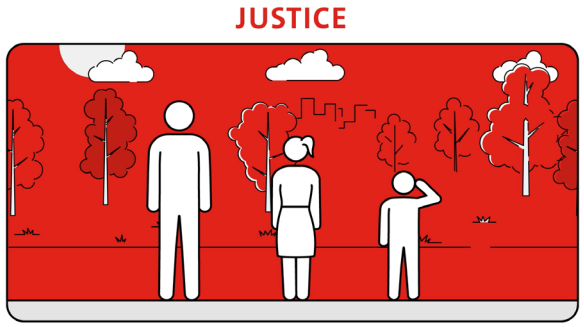
Sources: US Census Bureau 2000

…three options

Self-reported, Individual-level SDoH Data Elements	Neighborhood-level SDoH Data Elements	Social-risk Indices
Focused, Phased Screening	Community Health Risk Assessment	Following as a tool for external agencies/entities
Paired with referral programs	Community Service Planning	

Why should we invest resources in SDoH screening?

1. To advance the hospital's equity goals



2. To improve patient outcomes


RESEARCH ARTICLE | DETERMINANTS OF HEALTH

HEALTH AFFAIRS > VOL. 41, NO. 7 : | TYPE 2 DIABETES & MORE

Food Insecurity, Missed Work
Hospitalizations Among Worki
US Adults With Dia

Joshua M. Weinstein, Anna R. Kahkoska, and Seth

Prev Med Rep. 2021 Sep; 23: 10
Published online 2021 May 18.

Link between redempt
readmissions

Population Health Management > Vol. 19, No. 6 > Original

Food Insecurity in Patient
Utilization

Etienne J. Phipps, S. Brook Singletary, Clarissa A. Cooblall, Horacio

Published Online: 1 Dec 2016 | https://doi.org/10.1089/pop.201

3. To respond to external requirements and rankings

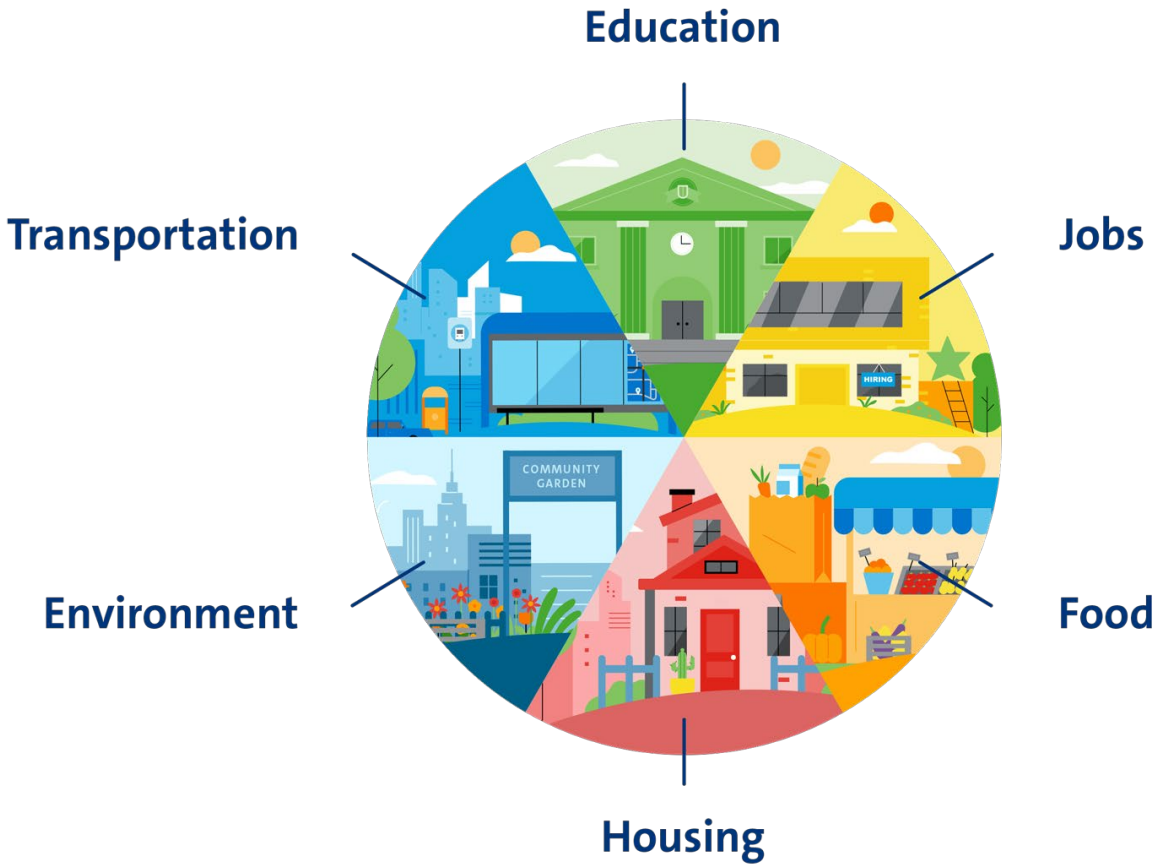
BEST HOSPITALS U.S.News & WORLD REPORT RANKINGS

NCQA Measuring quality. Improving health care.

CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

The Joint Commission

LEAPFROG HOSPITAL SAFETY GRADE A B C D F



To address the health-related social needs that affect patient health outcomes, NYP is committed to implementing Social Determinants of Health (SDoH) screening and navigation in departments and practices across the enterprise.

Social Determinants of Health Screening Overview

ED

- ED Navigators

Outpatient

- Community Health Workers

Inpatient

- Multiple (SW, CM, other)

Consistent **Domains**: Food, Housing, Transportation

Standardized **Workflows**: Epic & NowPow/UniteUs

Consistent **Definitions & Reporting**

Campus-specific Clinical Champions

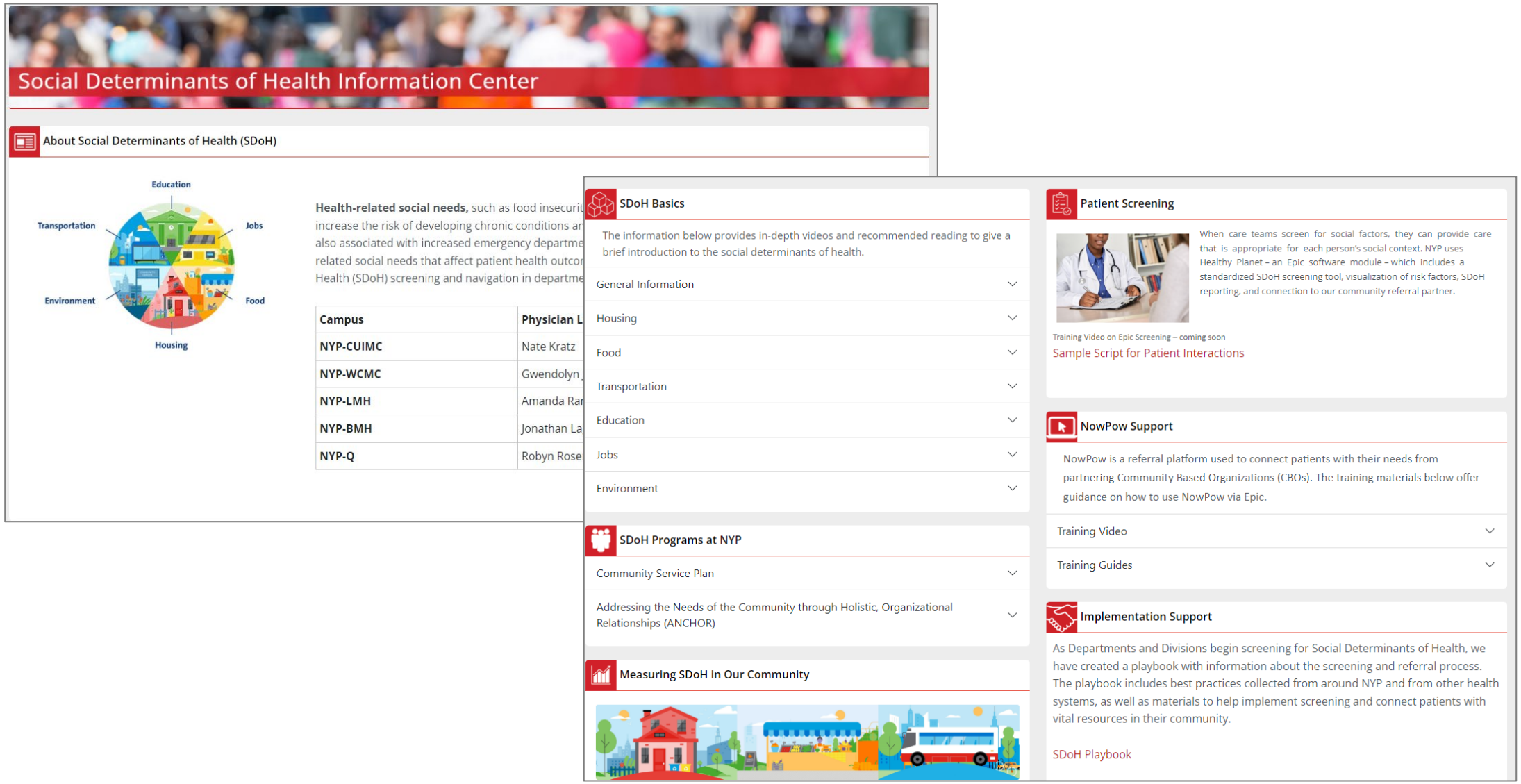
Social Determinants of Health Screening Overview

01 Resource Development

- Site Champions
- Training Materials
- Epic Screening Tools
- NowPow Interface
- Staff Resources (infonet)
- Patient Resources (nyp.org)

☑ **Jun 2022**

Social Determinants of Health Resources & Materials



Social Determinants of Health Screening Overview

01 Resource Development

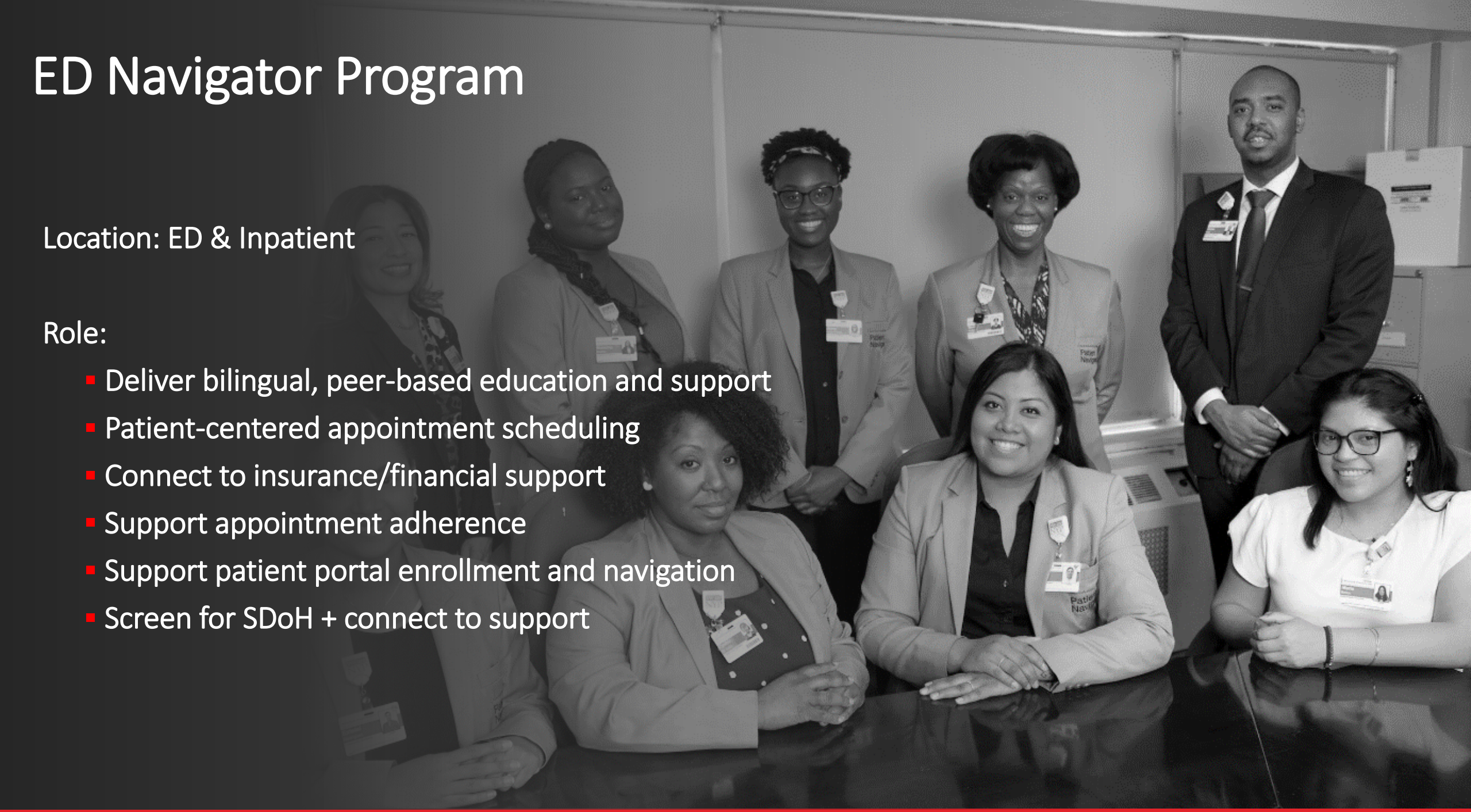
☑ Jun 2022

02 Emergency Department (ED) Screening

- Patient Navigators to Support Screening
- ED Physician Champions

☑ Sep 2022

ED Navigator Program



Location: ED & Inpatient

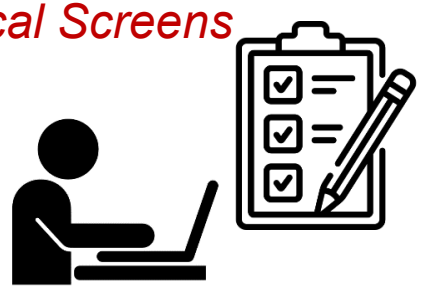
Role:

- Deliver bilingual, peer-based education and support
- Patient-centered appointment scheduling
- Connect to insurance/financial support
- Support appointment adherence
- Support patient portal enrollment and navigation
- Screen for SDoH + connect to support

Patient Level SDoH Screening at NYP

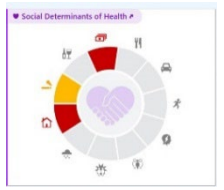
Patient Identified for SDoH Screening

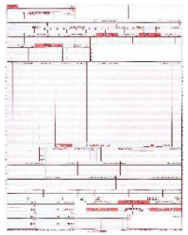
SDoH Screen Completed *with other Clinical Screens*



SDoH Coded *in chart and on claim*

Epic





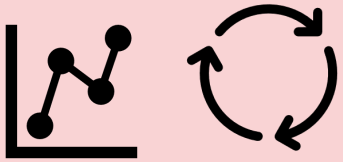
Low-risk

Resource List

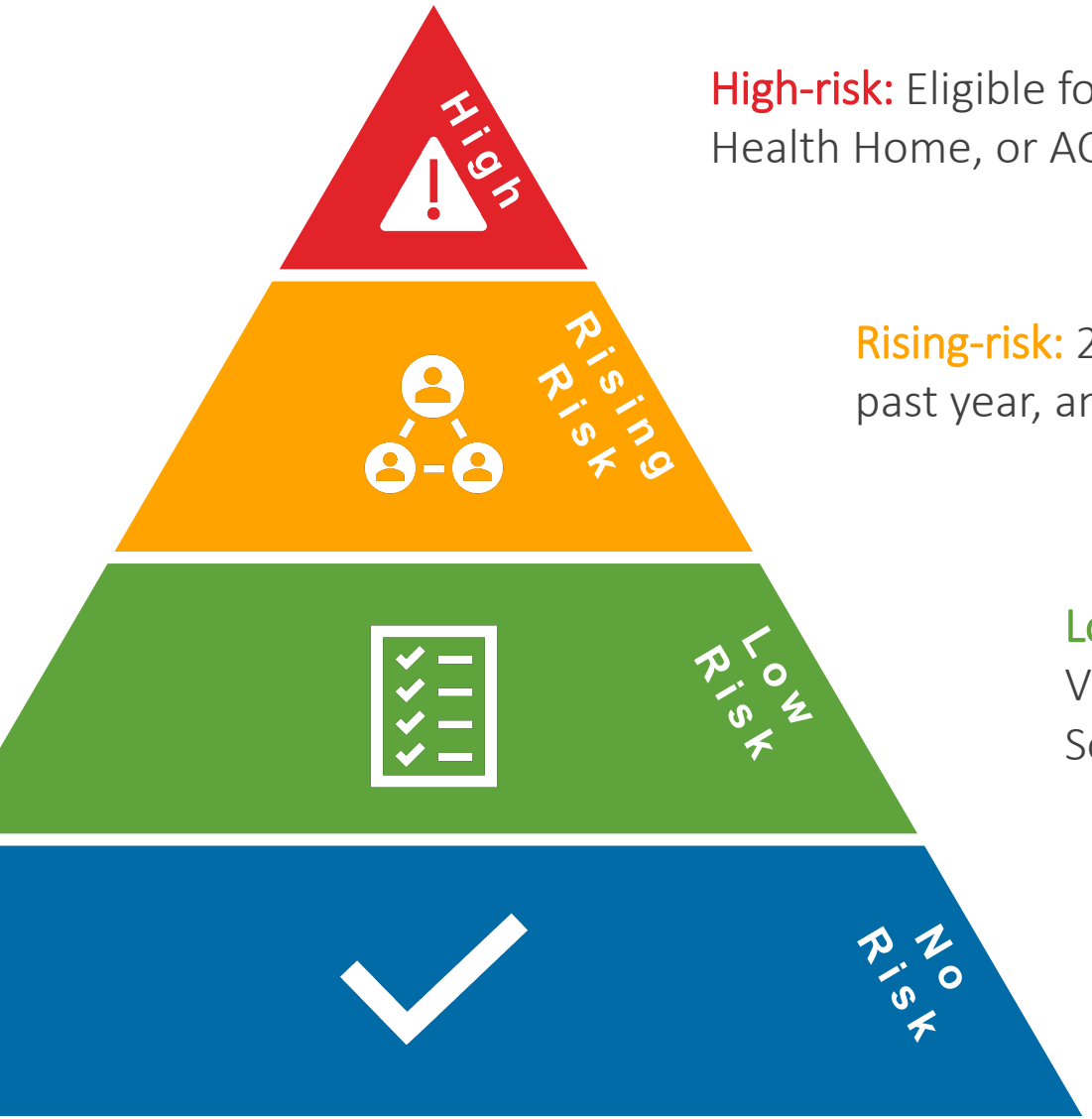
Rising-risk

CBO Referrals

Follow-up and Monitoring



Risk Stratification



High-risk: Eligible for a special program, such as Health Home, or ACO support

Rising-risk: 2+ Emergency Dept Visits in the past year, and 1+ Social Need

Low-risk: 0-1 Emergency Dept Visits in the past year, and 1+ Social Need

No risk: No social needs

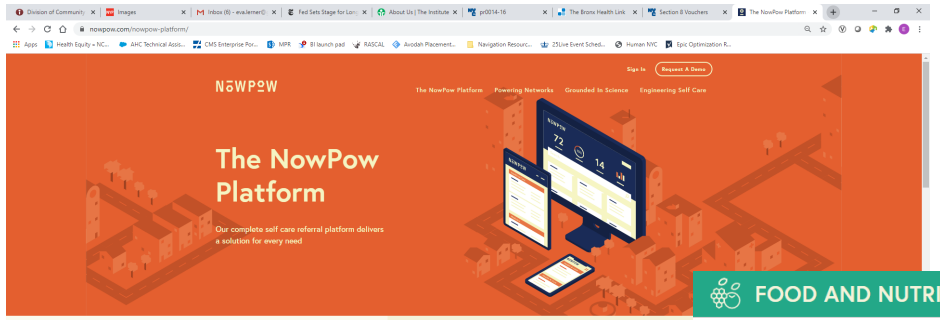
ACTION

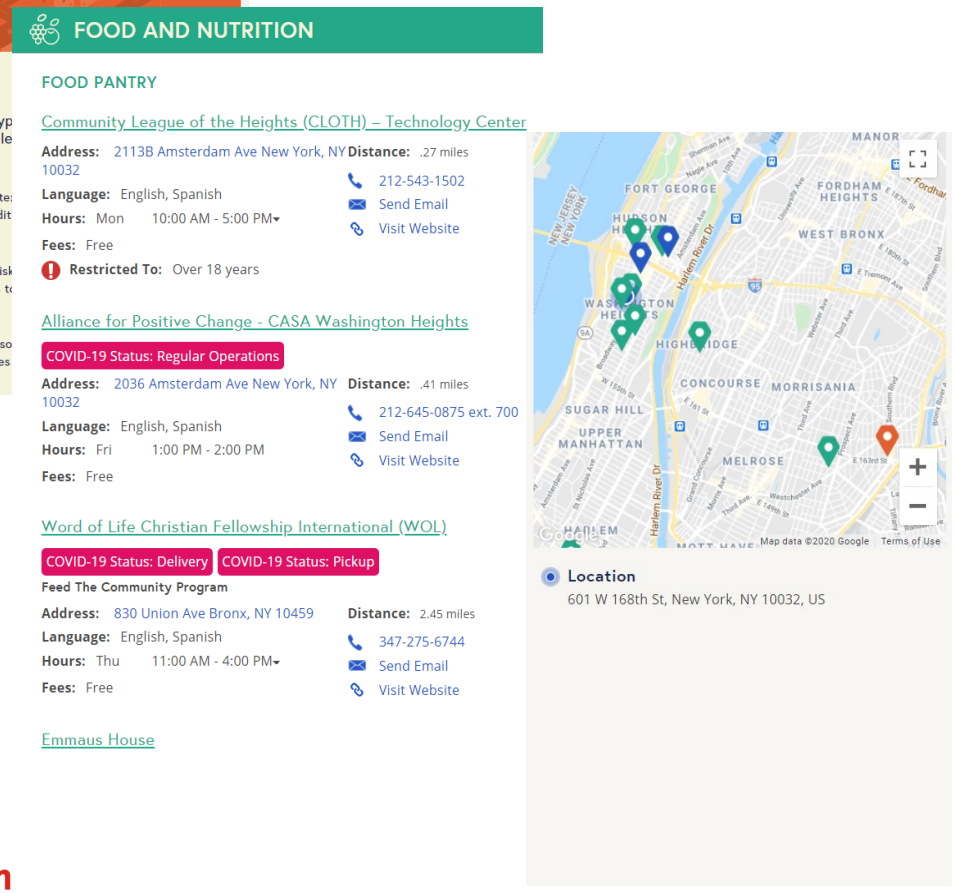
- ✓ Refer to Health Home
- ✓ Closed-loop Navigation by Navigators, CHWs, or CRCs
- ✓ Health eRx community resources
- ✓ No action

SDoH Screening and Referral Program

NowPow allows the user to engage with:

- Community Resource Directory
- Tracked Referrals
- Co-management





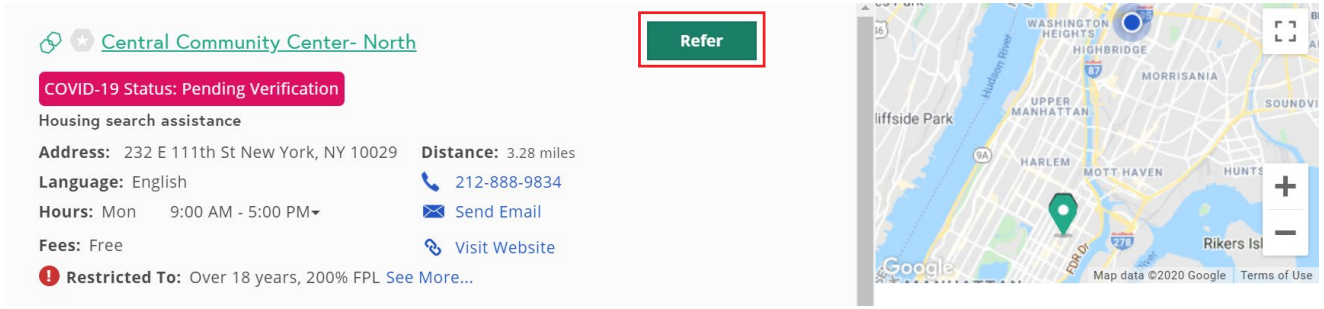
SDoH Screening and Referral Program

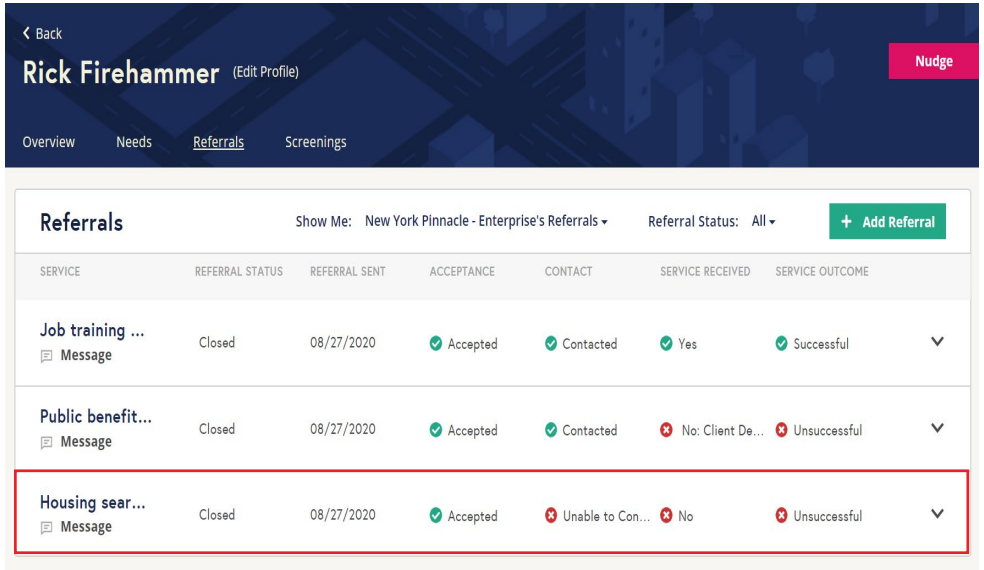
Healthcare Provider
- Sends Referral
- Closes the loop with patient

Patient
- Works with community service provider
- Updates healthcare provider on status of needs

NOWPOW

Community Service Provider
- Receives referral
- Closes the loop with healthcare provider





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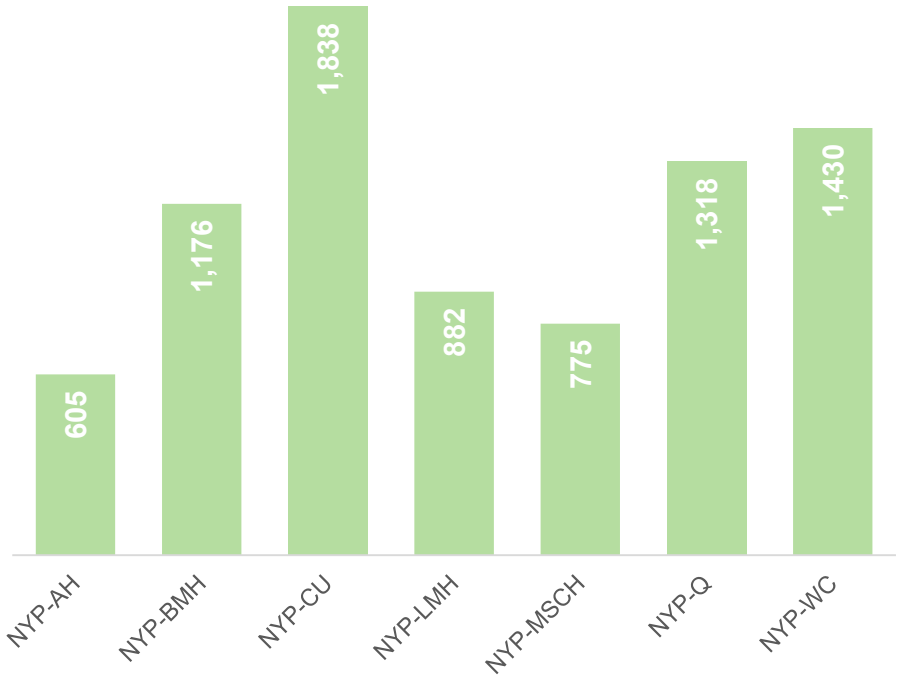
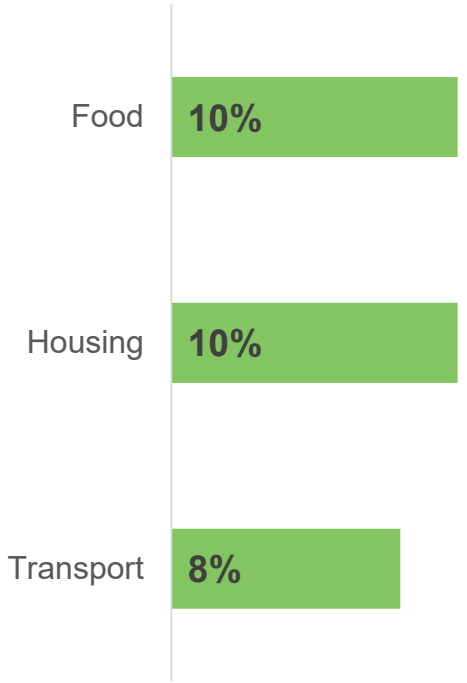
8k+ screens



Nov 1, 2022 – March 25, 2023

700 (8%) Low-risk Patients

750 (9%) Rising-risk Patients



SDoH Screening Overview

01 Resource Development

02 Emergency Department (ED) Screening

03 Outpatient Screening

- Community Health Workers to Support Screening

☑ Jun 2022

☑ Sep 2022

☑Nov 2022

Community Health Worker Program

Location: Outpatient, Community

Role:

- Deliver bilingual, culturally sensitive, peer-based education and support
- Provide home visits and appointment accompaniment
- Connect to social services and support
- Help patients to set and achieve program goals
- Support patient portal enrollment and navigation

Outpatient Screening and Referral Process

Screening	Epic MyChart	Telephone screen	Kiosk screen	In-person screen

Referral	Low-risk: Waiting Area as a Literacy and Learning Environment (WALLE) Team	Rising-risk: Community Health Worker Team

ED

- ED Navigators

Outpatient

- Community Health Workers

Inpatient

- Multiple (SW, CM, other)

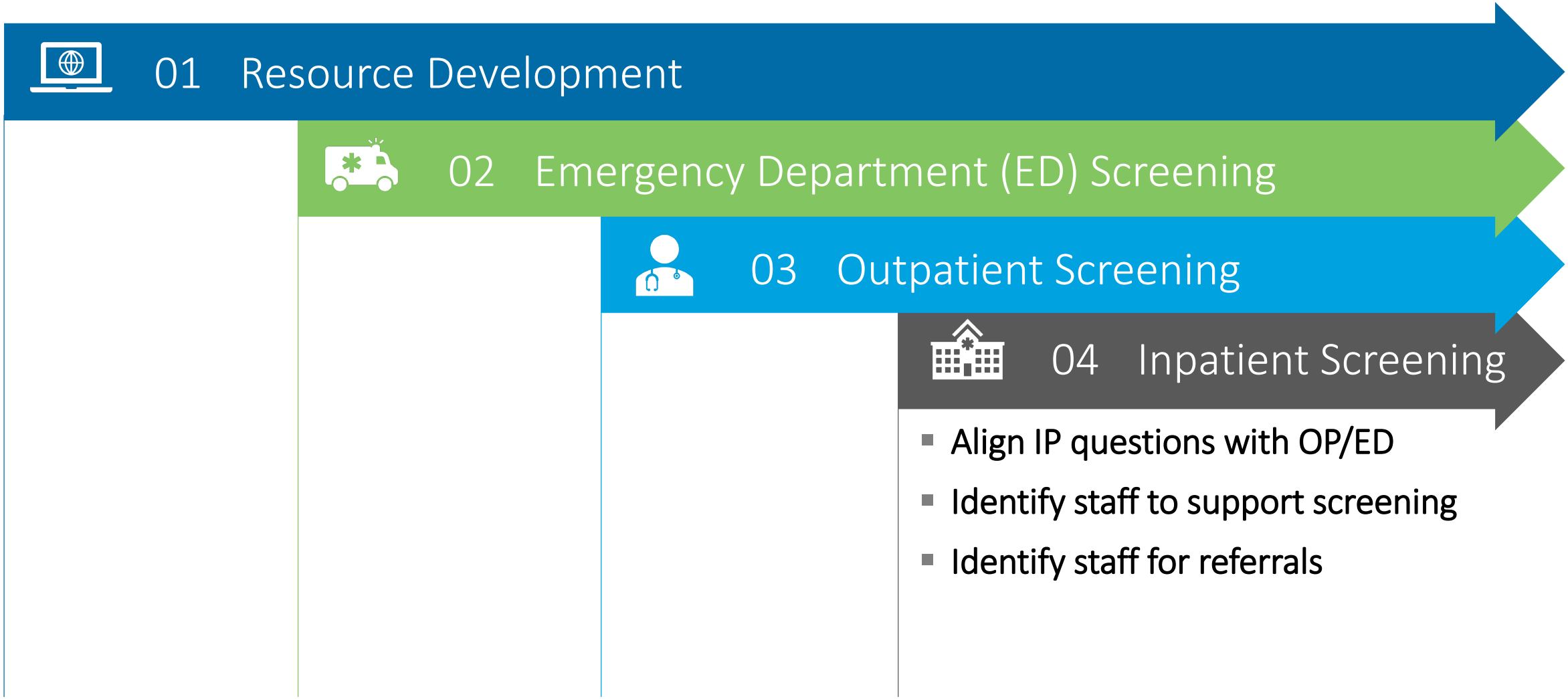
- NYP has a long history of SDoH screening and referral
- Practices in various stages of implementation
- SDoH playbook & resources developed to support practices

22,000+

Patients screened at Outpatient sites

Nov 1, 2022 – March 25, 2023

Social Determinants of Health Screening Overview

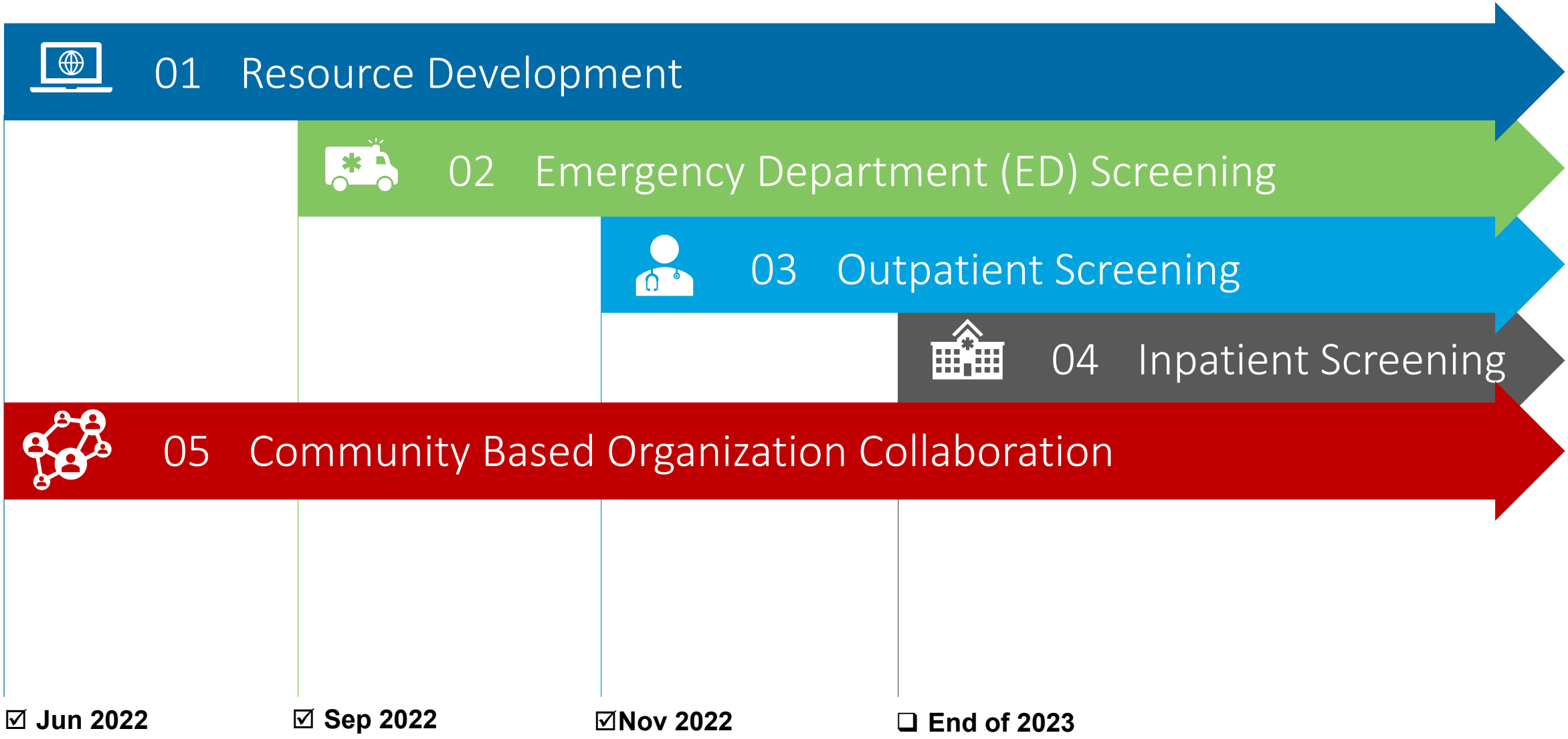


ED	Outpatient	Inpatient
▪ ED Navigators	▪ Community Health Workers	▪ Multiple (SW, CM, other)

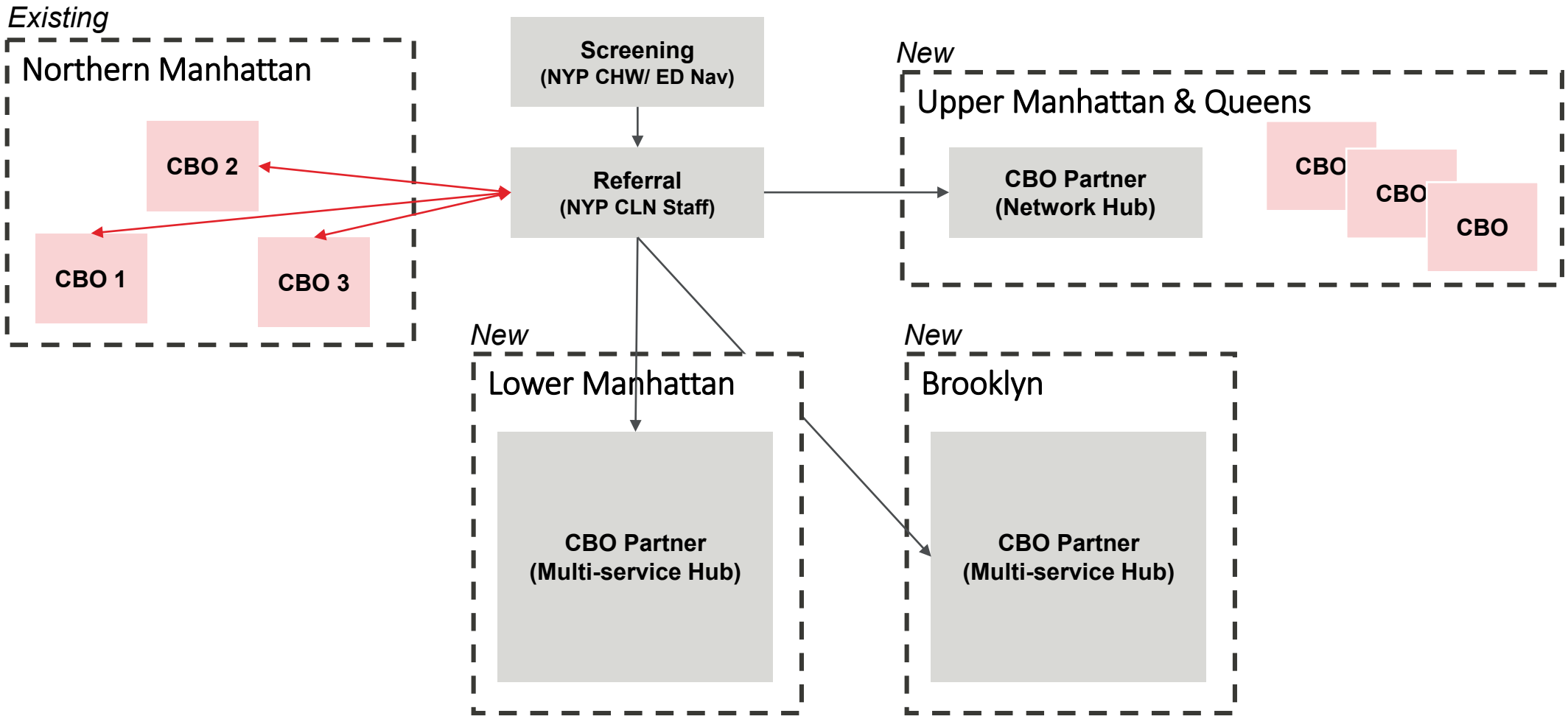
2023 Enterprise-Wide Goal:

Implement a standardized process for Screening of Social Drivers of Health (SDoH) upon admission and process to track positive screens

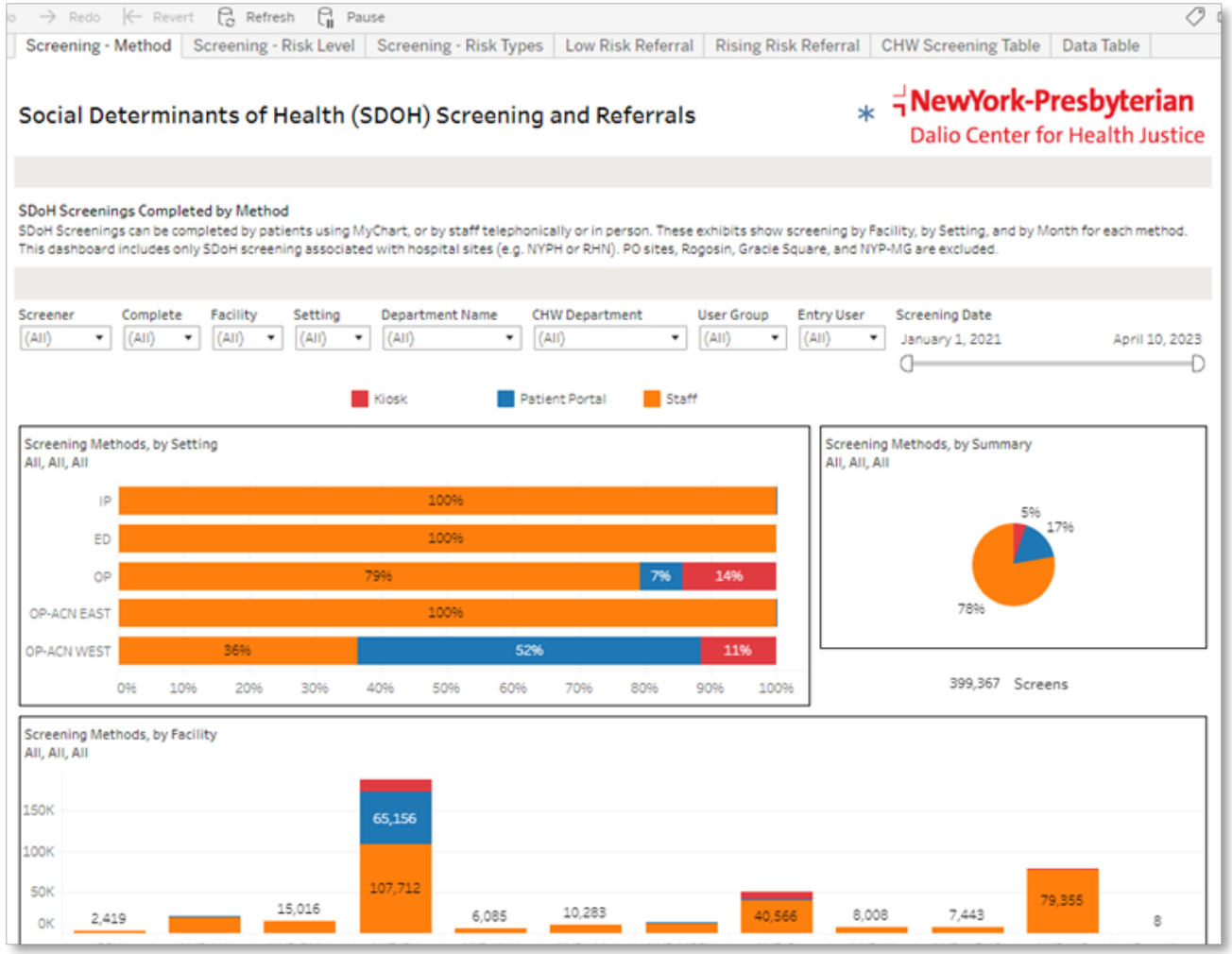
Social Determinants of Health Screening Overview



Network Development: Hub and Spoke Model



CBO = Community Based Organization
CHW = Community Health Worker
CLN = Closed Loop Navigation



Measuring & Monitoring

Opportunities & Next Steps

Systems & Workflows:

Providing Services:

External Factors:

Opportunities & Next Steps

Systems & Workflows:	IT & EMR Workflow	Interoperability for CBOs	Coding & Data Capture
Providing Services:			
External Factors:			

Opportunities & Next Steps

Systems & Workflows:	IT & EMR Workflow	Interoperability for CBOs	Coding & Data Capture
Providing Services:	Policy Gaps	Sustainability	Resource Directory
External Factors:			

Opportunities & Next Steps

Systems & Workflows:	IT & EMR Workflow	Interoperability for CBOs	Coding & Data Capture
Providing Services:	Policy Gaps	Sustainability	Resource Directory
External Factors:	Alignment with 1115 Waiver	Regulatory Compliance	Health system collaboration

Thank you

NewYork-Presbyterian

Upcoming series

DEI best practices

This four-part series explores how to implement best practices in diversity, equity and inclusion using a quality improvement framework. Participants will learn practical steps to help hospitals and health systems evaluate, set measurable goals and track improvement. Attendees will learn strategies for integrating DEI into the organization's culture, fostering accountability and measuring impact.

Sessions will be held on the following dates from noon to 1 p.m.:

- Wednesday, May 24
- Wednesday, May 31
- Wednesday, June 7
- Wednesday, June 14

Register for the series here.

ADVANCING HEALTHCARE
EXCELLENCE AND INCLUSION

Questions?

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