

Okenfe Lebarty, MA<sup>1</sup> John Flateau, PhD,<sup>2</sup> J. Phillip Thompson, PhD,<sup>3</sup> Maurice Reid,<sup>4</sup> Bruce Richard,<sup>5</sup> Shari Suchoff, MPP<sup>1</sup>

<sup>1</sup>Department of Population Health, Maimonides Medical Center, <sup>2</sup>Dubois-Bunche Center for Public Policy at Medgar Evers College, <sup>3</sup>NextShift Collaborative, LLC, <sup>4</sup>Alliance for Healthy Communities, <sup>5</sup>1199SEIU

## INTRODUCTION

In 2016, the Maimonides Medical Center (MMC) Department of Population Health, the DuBois-Bunche Center for Public Policy at Medgar Evers College, and NextShift Collaborative, LLC initiated a community-driven research project using Participatory Action Research (PAR) to study social determinants of health (SDOH) in Brownsville and East New York, two communities in Brooklyn, NY in which the avoidable death rate is 54% and 40%, respectively. Residents of these communities are predominantly young, black, Hispanic/Latino, and/or foreign-born, and experience higher poverty rates, gaps in care, and negative health outcomes than in Brooklyn or NYC overall (NYC 2015 Community Health Profiles: Brooklyn Community Districts 5 and 16).

Notably, the PAR methodology:

- Engages entire communities in a collaborative process
- Enables those most impacted by the research to frame the questions, design, methods, and recommendations to drive change
- Acknowledges neighborhood residents and local stakeholders' personal experiences as valid and, in fact, critical to identifying community assets, developing recommendations, and initiating and implementing action plans

## METHODS

### Assembling the Research Team

- The research team of twenty-eight young adults included:
  - Urban planning graduate students from Massachusetts Institute of Technology and the Pratt Institute
  - Undergraduate students from Medgar Evers College
  - High school students recruited from World Academy for Total Community Health High School and the NYC Summer Youth Employment Program
  - Community health workers from the NYC Department of Health and Mental Hygiene
- Team leadership included graduate students and professors from NextShift Collaborative, LLC and the Dubois-Bunche Center for Public Policy at Medgar Evers College.
- The team adopted the name Wellness Empowerment for Brooklyn (WEB).

### Background Research and Stakeholder Interviews

- WEB conducted background research on community leadership and organizations, local politics and policy, the local health care system, and existing efforts to address social determinants of health (SDOH) in Brownsville and East New York.
- Based on initial research, WEB identified key community stakeholders to target for interviews, which focused on the intersection of the stakeholders' areas of work and community health as well as community assets across six domains: social, human, physical, political, institutional, and financial.

## METHODS (cont.)

### Participatory Action Research

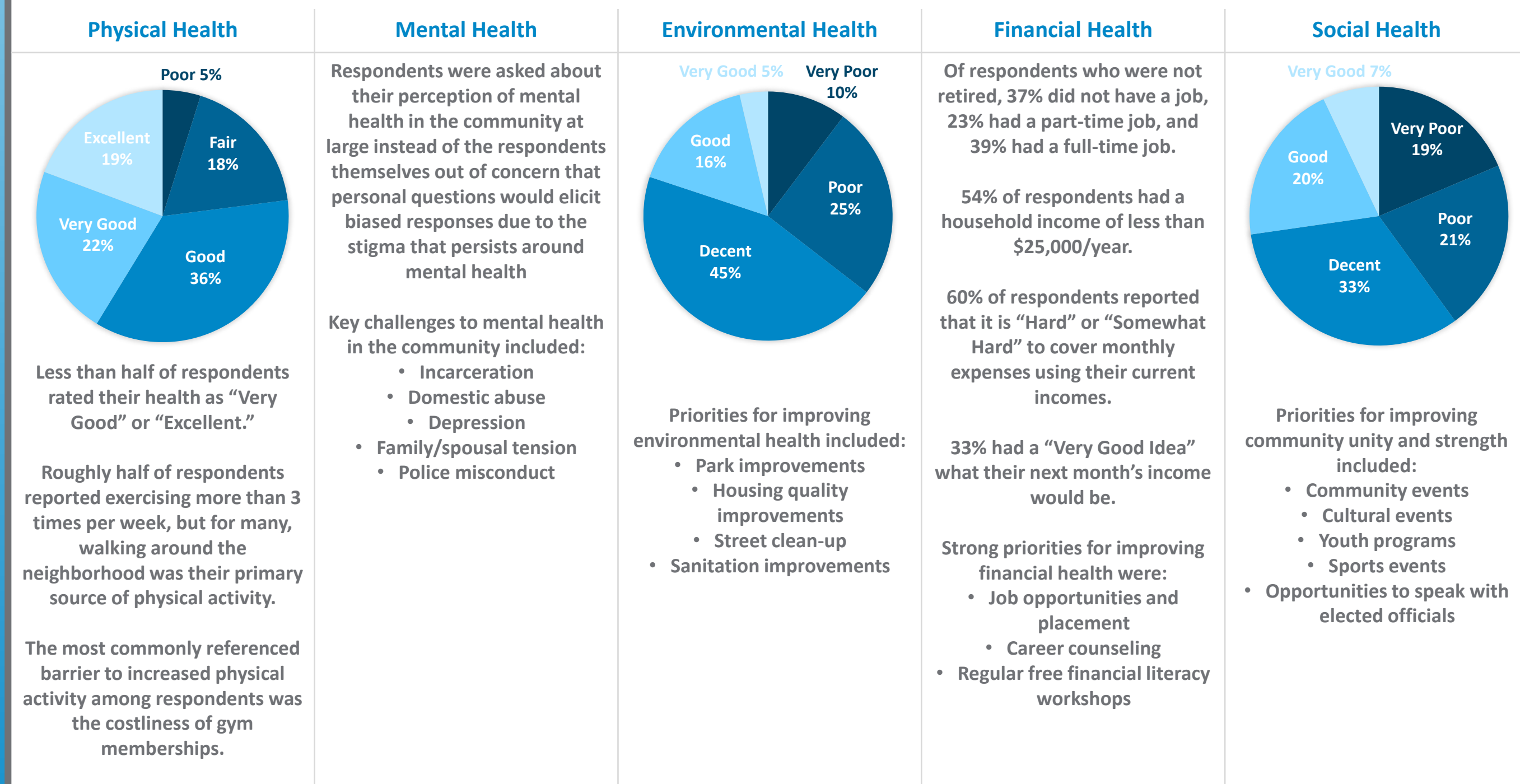
- Drawing from research and personal understandings of SDOH in the target neighborhoods, WEB developed an overarching research question to guide their inquiry:

**“How do we mobilize the Brownsville and East New York communities to address the social, physical, and environmental inequalities that affect health?”**

- WEB chose and designed three research tools:
  - Survey – to gather information on residents' priorities for improving community health across physical, mental, environmental, financial, and social dimensions
  - Neighborhood observation and photo documentation tool – to inventory healthy and unhealthy features of the neighborhood environments
  - Participatory mapping tool – to gather resident input on where in their community they felt safe or unsafe, and healthy or unhealthy

## RESULTS

- WEB conducted 525 surveys through a convenience sampling of residents of Brownsville and East New York in parks, recreation facilities, and NYC Housing Authority and senior housing buildings.



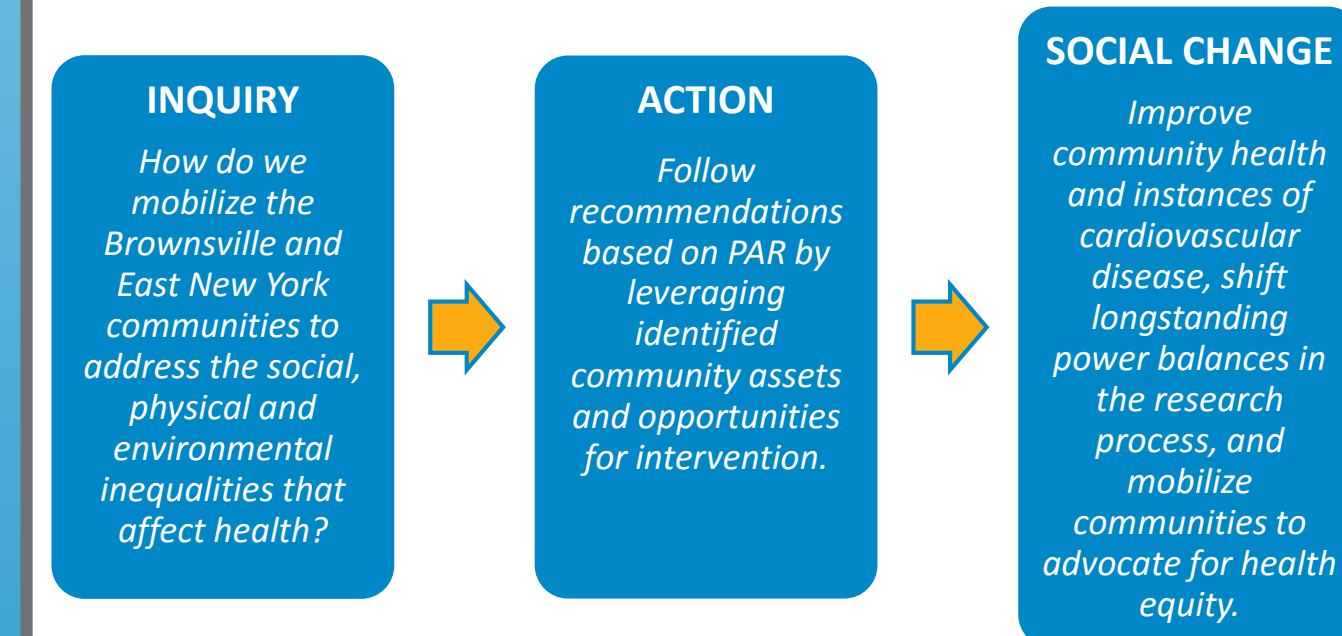
### Nutrition

- WEB also surveyed residents on their nutritional habits and the availability of healthy foods in their neighborhoods.
- Over half of respondents indicated that there was at least one day per week when they could not afford to eat nutritious meals and for 25% of respondents, this was most days or every day.
- Half of respondents reported having access to affordable quality produce in their neighborhood; an additional 20% said that while they did have access in their neighborhood, they could not afford it.

## CONCLUSIONS

- The PAR survey identified food justice/nutrition and physical activity as the community's greatest concerns. Due to the complexity of the social determinants of cardiovascular health and the unique needs in these neighborhoods, a systems-level change approach would be the most effective way to meaningfully address these challenges.
- Upon the study's completion, the MMC Department of Population Health published a report documenting the communities' priorities, recommendations for change, and several proposals for how to leverage community assets, including:
  - Developing hydroponic farming curricula for students of all ages
  - Exposing students to gardening and food projects
  - Constructing a skyponic farm
- The MMC Department of Population Health established a Food Justice Workgroup, which is now working with NYC's Director of Food Policy to distribute discount cards for produce.
- Plans are underway to build a hydroponic farm at a hospital and public school within these neighborhoods and to support a physical activity program at two public schools in Brownsville and East New York.
- Evaluation of PAR's impact will direct future initiatives/investments.

## PUBLIC HEALTH IMPLICATIONS



- Unlike conventional research, PAR uses inquiry to prompt social change through action.
- PAR shifts the balance of power in communities by allowing residents to participate in research processes that will determine and drive changes in their lives.
- Placing the community—particularly students—at the study's helm and involving schools, local government, health care facilities, and community-based organizations in actions to improve nutrition and physical activity are all reflections of how PAR supports community building.
- Additional PAR studies have been completed in Bedford Stuyvesant, Crown Heights and East Flatbush (2017) and Canarsie, Flatbush, and Flatlands (2018).