

Overview

The Community Health Systems Lab is a new interdisciplinary research center in the Department of Family & Social Medicine that will harness both the science of implementation and expertise of communities **to reimagine how community health can be delivered and valued**. Our aim is to accelerate health equity in the Bronx by working with local communities through innovative empowerment structures that take an assets-based approach. Health systems research is too often influenced by the interests and practices of academic institutions and researchers, without **meaningful input or participation of patients and communities** leading to evidence that less applicable or does not consider the complexities involved in context-based adaptation. In contrast, the Community Health Systems Lab will **close the research gap between evidence and practice** in a manner that **elevates community involvement** while applying implementation research. CHSL will engage local community residents, organizations, government, and frontline service providers to guide the definition and selection of research questions, implementation strategy and evaluation design. Responding to community priorities, the Center will identify scalable solutions culled from global best practice that leverage community assets and community-driven approaches to reduce disparities in health outcomes. As the most diverse county in America, the Bronx represents a global microcosm for bi-directional research that can inform health systems in the United States and abroad. The Bronx faces multiple social and economic challenges that negatively impact access to healthcare and health outcomes. By expanding beyond the traditional boundaries of geography and embracing a global-to-local philosophy, CHSL will adapt best practices and integrate novel technologies from around the world to test interventions that improve the quality of life for Bronx communities

Vision

To close the gap between evidence and practice using implementation research and community engagement.

Mission

To accelerate health equity by reimagining how community health can be delivered and valued.

Core Principles

- Accelerate Health Equity
- Catalyze Community Engagement
- Broad-based Interdisciplinary and Inter-Sectoral Collaboration
- Learning Health Systems Approach
- Global-to-Local philosophy
- Scientific Rigor combined with Pragmatic Study Design
- Durable, Cost-Effective Solutions

Value Proposition

Montefiore Health System (MHS) is the largest provider of health care services for Bronx residents, one of the most diverse and resource poor counties in the United States. MHS consists of eleven hospitals, including a Children’s Hospital, an extended care facility, a School of Nursing, and state-of-the-art primary and specialty care provided through a network of more than 200 locations across the region, including the largest school health program in the nation and a home health program. Montefiore’s ambulatory network currently provides high quality primary care to over 300,000 Bronx residents. Montefiore has a long history of community-based partnerships including directing a practice-based research network, the New York City Research and Improvement Networking Group (NYC RING). In 2018, Montefiore Health System (MHS) acquired Albert Einstein College of Medicine and has since been moving toward a learning health system approach. Defined by the Institute of Medicine (IoM), a learning health system is a system in which science, informatics, incentives, and culture are aligned for continuous improvement and innovation, with best practices seamlessly embedded in the delivery process and new knowledge captured as an integral by-product of the delivery experience.

To facilitate this paradigm shift, MHS/AECOM leadership is investing in cross institutional partnerships to fully leverage the research rigor that exists at an academic center such as AECOM in order to improve healthcare and create value. There have also been seismic shifts in the need for, and financial support of, research that builds more equitable healthcare services and the role of communities in designing inclusive healthcare systems. The Center will take advantage of these timely investments and changes within the healthcare ecosystem and provide unique value to communities and to the fields of health care and social justice, through the following strategies:

Apply research resources to “real-world” issues in primary care and community health

Health service research and resources should focus on the clinical and social challenges that matter to community residents. The Center will prioritize research agendas to address needs identified by frontline providers and community stakeholders. Using community-engaged research approaches including Stakeholder Studios and community research advisory boards, community members or local experts will be involved throughout the process of research design, including identifying and formulating both problems and possible solutions.

Adapt models and lessons learned in international settings to transform health care delivery in the U.S.

Some of the most innovative approaches to serving low-income and hard-to-reach populations have originated outside of the US, in systems where innovation is driven by high need and low resources. The Center will actively engage in a global learning approach by partnering with Integrate Health’s Community Health Systems Lab (CHSL), an embedded implementation research unit of an international organization that is at the leading edge of innovation in

Use implementation science methods to improve care, expand access, and better integrate community-oriented primary care

Leverage existing institutional resources to enrich the Center's impact

service delivery and improvement science. CHSL is currently leading two pragmatic trials to evaluate the effectiveness and implementation of an integrated primary care approach that IH and the Togolese Ministry of Health (MOH) have developed that integrates professional CHWs with improved primary care in public clinics, thus strengthening both community and clinical healthcare services simultaneously. Preliminary results of CHSL's pilot study reveal a 50% reduction in under-five mortality in areas where the integrated primary care program is implemented. Lessons learned from Togo can be translated to settings such as the Bronx, and vice versa.

Strong primary care systems that integrate community health approaches are associated with better outcomes at a lower cost by reducing unnecessary utilization of hospital services. The Center will support pragmatic research initiatives that aim to reduce health inequities by improving quality and expanding access to community-oriented primary care services including initiatives that integrate healthcare and social services. The Community Linkage to Care (CLC) program, a social needs assessment and referral program developed with the community-based organization the Bronx Community Health Network in 2017, is one such initiative that aims to improve health inequities by providing a link to community-based resources for social needs in a primary care setting using community health workers.

The Center will serve as an organizing body for internal partnerships within Montefiore Health System, including areas of strong research expertise; extensive operational infrastructure including a community health center network, value-based care management services, and efforts to address social determinants of health; and educational programs for researchers and for the primary care physician workforce. By partnering with skilled and mission-driven colleagues at Montefiore, the Center will be able to achieve an amplified impact on the health of the Bronx and beyond, while amplifying and elevating community voices.

Research Focus

The Center will serve as an organizing structure for both ongoing and planned activities that are related to defined content areas which include a focus on, though are not limited to:

Community Oriented Primary Care (COPC): This is the primary content area that the Center aims to improve, including a special emphasis on the optimization of community health worker integration in the primary care setting and efforts to engage communities and primary care centers. Understanding how health systems interact with CBOs is critical at this time as vulnerable communities encounter the adverse effects of social determinants, especially during the COVID-19 pandemic.

Social Determinants of Health: Comprehensive COPC necessarily requires attention to needs outside of the traditional clinic purview and includes issues that patients identify that may influence and affect their health and well-being. Measuring social determinants of health and how and why they vary over time is important to designing interventions that can overcome entrenched systemic and racial barriers in healthcare.

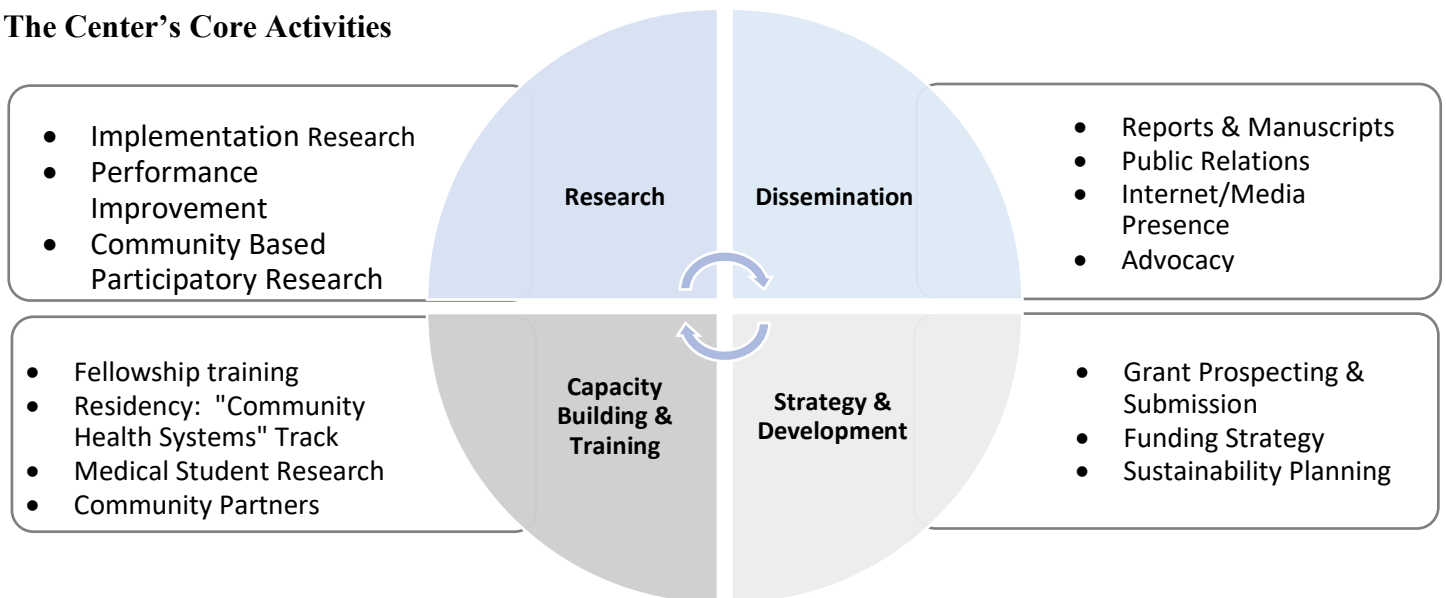
Cost Effectiveness Research: To achieve equity in healthcare, it will be critical to maximize the efficiency and effectiveness of limited resources. Exploring the drivers of performance and mechanisms that lead to positive change as well as their relative cost effectiveness will be valuable for system level policy development and financing.

By focusing on these content areas, the Center will direct implementation and delivery of services through research, social mobilization, and education/training support both for affiliated faculty and community-based organizations with which the Center partners. The Center will employ a Community Engagement Coordinator, a community member, who will provide coaching and mentoring to research and data staff within partnering community-based organizations. Example activities organized by area are shown in the following figure.

Core Capabilities

The Center’s core capabilities are divided into four areas: (1) Strategy & Development, (2) Capacity Building & Training, (3) Research, and (4) Dissemination. The figure below outlines the key components for each.

The Center’s Core Activities



Current Research Programs

Faculty in the DFSM have been conducting several research studies that are now included under the auspices of CHSL. Current research projects are summarized in the table below.

Research Program	Donor/Location	Aims
Community Linkage to Care Scale - Pediatrics	Doris Duke Charitable Foundation/ The Bronx	The aim of the Community Linkage to Care program is to improve health outcomes for children in the Bronx while demonstrating cost savings to Montefiore Health System. The program will scale-up Montefiore’s current social needs screening program and link 2,000 families to social needs support annually while building the evidence base to support further investment in the program on a sustained basis by Montefiore and payors. This will be accomplished by planned expansion of the Community Linkage to Care Program to Pediatric primary care clinics and the Children’s Hospital at Montefiore.
Global Learning Network to Advance Health Equity: A Learning Collaborative	RWJF The Bronx	The long-term goal is to work with U.S. communities to adopt and adapt GL for health equity. The operating hypothesis is that a higher volume of GL projects, accompanied by an energetic strategy team, convinces decision makers of the value in GL and adapting that learning to improve health equity and wellbeing in the U.S. Our activities would catalyze change by networking across learning communities, which will grow and expand, as the network expands.
COVID-19 U.S. Resources and protections for vulnerable and high-risk communities (RESOUCÉ) Study	RWJF/UCSF The Bronx	Through SIREN, we will recruit currently or recently-enrolled participants and caregivers of participants (for pediatric-focused studies) from established research studies underway in Community Health Centers or Federally Qualified Health Centers. Follow-up assessments will occur every 3 months for a total of 6 months in a random sample of 20% of participants enrolled in the baseline survey in order to capture changes over this dynamic period of the pandemic. We will collect clinical, demographic, behavioral, and socio-economic measurements enabling us to identify key barriers and facilitators to accessing COVID-19 testing and care and to adherence to self-isolation measures
Integrated Community Health Systems Strengthening Initiatives	Integrate Health Togo	The prevalence of maternal and child morbidity and mortality in Togo, particularly in the northern regions, has remained high despite global progress. This study aims to

Research Program	Donor/Location	Aims
		<p>evaluate the effect and implementation strategy of the Integrated Community-Based Health Systems Strengthening (ICBHSS) initiative which seeks to address service gaps while strengthening the public sector health system in northern Togo. The initiative was implemented over 48 months in the catchment areas of 21 public sector health facilities.</p>
<p>COVID-19 Impact on Maternal and Child Health Utilization</p>	<p>Northwestern Togo</p>	<p>Aim 1. Measure the differences in change in maternal and under-five healthcare utilization related to the COVID-19 response.</p> <p>Aim 2. Explore factors influencing maternal and under-five healthcare utilization in intervention facilities following the start of the COVID-19 pandemic.</p>

Key Publications

Unmet social needs and no-show visits in primary care in a US northeastern urban health system, 2018–2019

KP Fiori, CG Heller, CD Rehm, A Parsons, A Flattau, S Braganza, K Lue, ...
American journal of public health 110 (S2), S242-S250

Social risks among primary care patients in a large urban health system

CG Heller, AS Parsons, EC Chambers, KP Fiori, CD Rehm
American journal of preventive medicine 58 (4), 514-525

Integrating Social Needs Screening and Community Health Workers in Primary Care: The Community Linkage to Care Program

KP Fiori, CD Rehm, D Sanderson, S Braganza, A Parsons, T Chodon, ...
Clinical pediatrics 59 (6), 547-556

From policy statement to practice: integrating social needs screening and referral assistance with community health workers in an urban academic health center

K Fiori, M Patel, D Sanderson, A Parsons, S Hodgson, J Scholnick, ...
Journal of primary care & community health 10, 2150132719899207

Toward Understanding Social Needs Among Primary Care Patients With Uncontrolled Diabetes

EC Chambers, KE McAuliff, CG Heller, K Fiori, N Hollingsworth
Journal of Primary Care & Community Health 12, 2150132720985044

Chronic pediatric health conditions among youth living in public housing and receiving care in a large hospital system in Bronx, NY

EC Chambers, C Heller, K Fiori, K McAuliff, CD Rehm
Global pediatric health 7, 2333794X20971164

Assessing the Integrated Community-Based Health Systems Strengthening initiative in northern Togo: a pragmatic effectiveness-implementation study protocol

ME Lauria, KP Fiori, HE Jones, S Gbeleou, K Kenkou, S Agoro, ...
Implementation Science 14 (1), 1-13

Closing the delivery gaps in pediatric HIV care in Togo, West Africa: using the care delivery value chain framework to direct quality improvement

K Fiori, J Schechter, M Dey, S Braganza, J Rhatigan, S Houndenou, ...
AIDS care 28 (sup2), 29-33

Getting there: overcoming barriers to reproductive and maternal health services access in Northern Togo—A Qualitative Study

J Arnold, M Samson, J Schechter, AS Goodwin, S Braganza, GC Sesso, ...
World Medical & Health Policy 8 (3), 223-244

Patient-Reported Factors Facilitating Participation in Prevention of Mother to Child Transmission of HIV Programs in Kara, Togo, West Africa

EC Loccoh, D Azouma, K Fiori Jr, S Gbeleou, J Schechter, LR Hirschhorn
World Journal of AIDS 4 (04), 446

Core Team



Anna Flattau, MD, MSc, MS, is Vice Chair for Clinical Services and Director of Strategic Development in the Department of Family & Social Medicine. She is Senior Strategic Advisor for the Community Health Systems Lab. Dr. Flattau received her medical degree from Harvard Medical School and completed residency training at Columbia University Medical Center. She earned a master's degree in health promotion from the London School of Hygiene and Tropical Medicine, and a master's degree in clinical research methodology from Albert Einstein College of Medicine. She completed an executive education program at Harvard Business School in managing health care and was appointed an innovation advisor to the Center for Medicare and Medicaid Innovation. Prior to joining Montefiore as Vice Chair, Dr. Flattau was chief clinical officer of OneCity Health, where she provided physician leadership for clinical and care management initiatives under New York State's DSRIP program, and senior assistant vice president at NYC Health + Hospitals, the country's largest public hospital system.



Kevin Fiori MD, MPH, MSc is the Executive Director of the Community Health Systems Lab. He is the Medical Director for Montefiore Health System's Office of Population and Community Health and Assistant Professor in both Pediatrics and Family and Social Medicine, Albert Einstein College of Medicine. His research aims to address health disparities in communities both in the Bronx and abroad and is primary investigator on multiple ongoing implementation research studies in Togo, West Africa and the Bronx. His domestic research focuses on integrating social needs screening and community health workers outreach in Bronx primary care centers.



Earle Chambers, MPH, PhD is the Senior Research Advisor for the Community Health Systems Lab. In addition to being a devoted partner and the father of two young boys, Dr. Earle Chambers is an associate professor of Family and Social Medicine at the Albert Einstein College of Medicine in the Bronx, NY. He is also the Director of Research for the Department of family and social medicine at Montefiore. Dr. Chambers completed his post-doctoral training at the New York Obesity and Nutrition Research Center at Columbia University. His research examines the intersection of the social and built environments on chronic disease risk among vulnerable populations. Dr. Chambers' research has been supported by NIH, the Robert Wood Johnson Foundation, and the MacArthur Foundation.



Adam Sirois, MPH, is the Director of Strategy and Operations for the Community Health Systems Lab. He brings more than two decades of global health experience to the CHSL team. His career started in global development consulting where he focused on designing and implementing community-based health programs with a wide range of non-profit organizations. Starting from 2000, he has led primary healthcare reforms in central Asia with USAID, refugee health programs in the Middle East with the United Nations, and conducted health services research with the World Health Organization. His research has focused on HIV/AIDS prevention in Africa, access to health, education, and mental health services in the Middle East, and emergency medical care in Central Asia.
