

Report to the Community

April-June 2024

Equity in Action: Using Analytics to Inform Our Work

The MetroHealth System's Institute for H.O.P.E.² (Health, Opportunity, Partnership, Empowerment and Equity) is regarded as a national model for the advancement of health equity through its initiatives to address social drivers of health (SDOH). One of the reasons it has achieved this reputation is its use of data to best understand the needs of the community and to develop the most effective ways to help.

"Any disciplined effort aimed at meaningfully addressing health disparities must have a systematic and comprehensive data collection and analytics approach," said Institute for H.O.P.E.² President Srinivas Merugu. "We are building a sophisticated super structure on the strong foundation laid since 2019, when the Institute for H.O.P.E.² was first established."

Since its founding, MetroHealth's Institute for H.O.P.E.² has screened more than 158,000 unique patients to assess their risk for 11 SDOH domains: food insecurity, housing stability, lack of transportation, intimate partner violence, financial strain, housing problems, lack of physical activity, digital connectivity, social isolation, lack of utilities and daily stress. In addition to the SDOH screening, the Institute also collects data on employment and educational status through the electronic health record.

Using this information, the Institute's Population Health Data and Analytics team has created a real-time online dashboard to support staff in their efforts to screen and address patient social needs and deploy strategic community investments. The dashboard offers robust insights, including individual and community-level data. It also presents evidence of the correlation between a patient's risk and healthcare utilization, medical conditions and other SDOH risks, a unique feature built within the dashboard.

As part of the screening, the Institute asks the patients if they

would like help in addressing any of their social needs.

"We found in the earlier stages of our work that just because a patient screens positive for risk doesn't mean they want our help, or they may not feel at risk," said Kevin Chagin, Director, Population Health Data and Analytics. "And we still ask patients who don't screen at risk if they would like help because we don't want to miss anyone."



Kevin Chagin

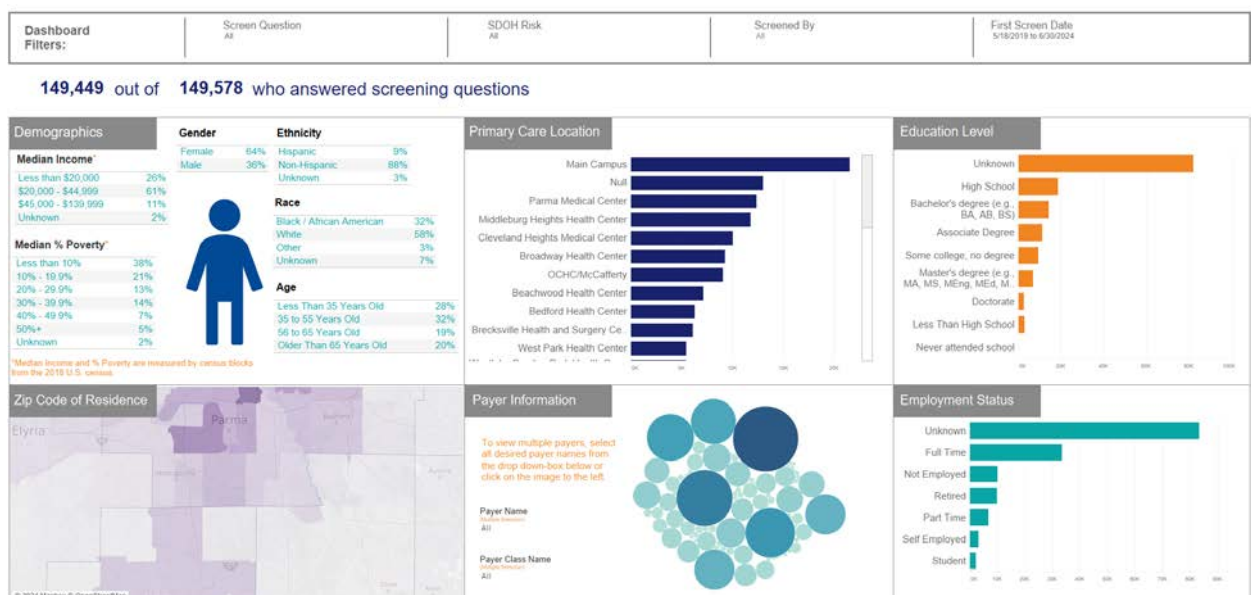
As part of our effort to help address the social needs identified through these screenings, MetroHealth partnered with Unite Us in 2020 to build the Unite Ohio network – an electronic referral care platform. The platform allows the Institute to cross-collaborate with partners to connect patients with the programs and services that offer help.

The Data and Analytics team plays a role in monitoring the referral process through Unite Ohio and to other internal programs to ensure patients' needs are met and to reduce duplication. The team evaluates processes and impact through interviews with patients, providers and partners.

When possible, randomized controlled trials also are conducted. The team assesses the strengths and gaps within its social delivery system to identify scalable programs and modify others for continued improvement. Outcomes are tracked at the individual and community levels to confirm impact and cost effectiveness; insights drawn from the data also are used to inform policy changes.

SDOH Category Breakout

MetroHealth Institute for H.O.P.E.™



Segment of the SDOH Dashboard developed and monitored by MetroHealth's Population Health Data and Analytics team.

Real-Life Impact of Data Analytics

One of the most valuable sources of data the Population Health Data and Analytics team uses is the Institute for H.O.P.E.² Social Drivers of Health Patient Screening, a questionnaire that asks patients about factors that can affect their ability to live a healthy life, like financial resource strain, food insecurity, access to transportation and safe housing.

These screenings help MetroHealth understand our patients' most pressing needs, so we can develop effective interventions to help.

Kevin Chagin, director of Population Health Data and Analytics, said MetroHealth's approach to health data differs from others because the analytics team isn't just involved at the end of the process to analyze the data collected. The team is active at the beginning, helping the Institute for H.O.P.E.² staff design the screening questions to elicit the most meaningful information and devising various methodologies to administer the screening.

It's information that has been used to develop innovative programs, including the **Food as Medicine (FAM) Clinic**, which is changing the lives of MetroHealth patients like **Rafael Cruz**. Rafael, who has Type 2 Diabetes, screened as at risk for food insecurity. So, he was referred to the clinic by his doctor to receive support, including a three-day supply of nutritious food for everyone in his household, and nutrition education.

Before he began attending the clinic in September, Rafael's hemoglobin A1C was a dangerously high 13.3. This persistently high blood glucose led to complications of other serious medical conditions. After eight months of working with the FAM clinic team, his A1C fell to 6.6.

"Before, I ate what I could afford, and a lot of times that was food like instant ramen noodles or grilled cheese," said Rafael, who has appointments at the clinic every two weeks. "It wasn't nutritious, but it allowed me to survive. Now, working with the Food as Medicine Clinic, it at least assures me that, for the days after I visit, I am eating healthy, quality food. And I am feeling much better than I did before."

Quarterly Updates

The Institute's Population Health and Data Analytics team actively gathers, monitors and provides the necessary data for grant submissions and various programs and services. Additionally, the team conducts program evaluations when needed. This support is essential for the success of many of our programs and services, including those listed below.

- Over the past school year, our School Health and Food Security Programs invited area high school students to participate in **Youth Advisory Councils**. The goal was to develop projects aimed at addressing food insecurity in their communities. As part of this initiative, two students from Cleveland Heights High School presented their project at the National School-Based Health Alliance Be the Change Youth Training Program in Washington, D.C. This project was funded with grants from the state and national School-Based Health Alliance and Share Our Strength's No Kid Hungry Campaign. [Click here](#) for more information.
- The **Unite Ohio** platform plays a pivotal role in our strategy, enabling us to identify patients' unmet social needs and ensure they receive the right resources at the right time. The platform features a comprehensive, searchable list of Cleveland-area organizations and their services, now numbering more than 300. This quarter, nearly 1,500 referrals by MetroHealth staff have helped connect 915 patients with essential resources, like fresh food, digital access, utility assistance, and transportation.



COMMUNITY OUTREACH, RESEARCH & EVALUATION

This quarter, our work was recognized and celebrated with **three prestigious awards**. We participated in **62 community events**, reflecting our dedication to the communities we serve. We also shared our program findings in one publication and at **12 regional and national conferences and webinars**.

Highlights include:

- At the American Hospital Association's Accelerating Health Equity conference in Kansas City, Mo. in May, Kevin Chagin, Director of Population Health Data and Analytics, discussed the next steps healthcare systems should take after implementing social needs screenings.
- MetroHealth's Community Mobile Team, a Community Health Center service, received The City Mission HEART Award in April. These units provide basic health care check-ups and screenings for City Mission residents. [Click here](#) to learn about Brandi, a City Mission resident, and how MetroHealth and others helped her family thrive.
- In April, Jin Kim-Mozeleski, PhD, from Case Western Reserve University and Institute for H.O.P.E.² staff published an article, "[A Randomized Trial to Address Food Insecurity and Promote Smoking Cessation Among Low-Income Adults](#)" in the Journal of Primary Care & Community Health.

