Cases in An Equity Approach to Pandemic Preparedness and Response
PPR_02 July 2020

Contact tracing and equity: The role of wrap-around support in combating COVID-19 in Massachusetts

On April 3, 2020, Massachusetts Governor Charlie Baker announced the launch of a statewide contact-tracing initiative with Partners in Health (PIH) to accelerate efforts to contain the spread of COVID-19. More than a month had passed since a biotechnology conference in Boston had convened 175 executives from around the world and subsequently seeded outbreaks across Massachusetts and beyond (Stockman and Barker, 2020). Other sources of community transmission were also at play, and the state was bracing for a surge of COVID-19 cases.

Massachusetts is home to four medical schools, and dozens of hospitals and, yet, those hospitals quickly become overwhelmed by cases of COVID-19. Governor Baker understood the importance of a comprehensive approach that both prepared the hospitals for the oncoming surge and could stop the community-based spread of infection. He worked to broker deals between the Commonwealth of Massachusetts and manufacturers of PPE, supported the deployment of field hospitals, and sought to buttress prevention efforts across the state. The Department of Public Health in the Commonwealth is a world-renowned public health organization, and, as in all states, is tasked with outbreak surveillance and prevention of a few hundred infectious diseases. Yet nearly everywhere, including Massachusetts, prevention efforts were outmatched by the scale and speed of the COVID-19 pandemic.

Massachusetts is also home to Partners In Health, a 35-year-old medical nonprofit organization that is known for its work around the world to make a preferential option for the poor in health care; meaning that PIH holds itself accountable for ensuring the poorest and most vulnerable people get care. Around the world, PIH partners with governments and affected communities to improve health outcomes by working on prevention, treatment, and the provision of social

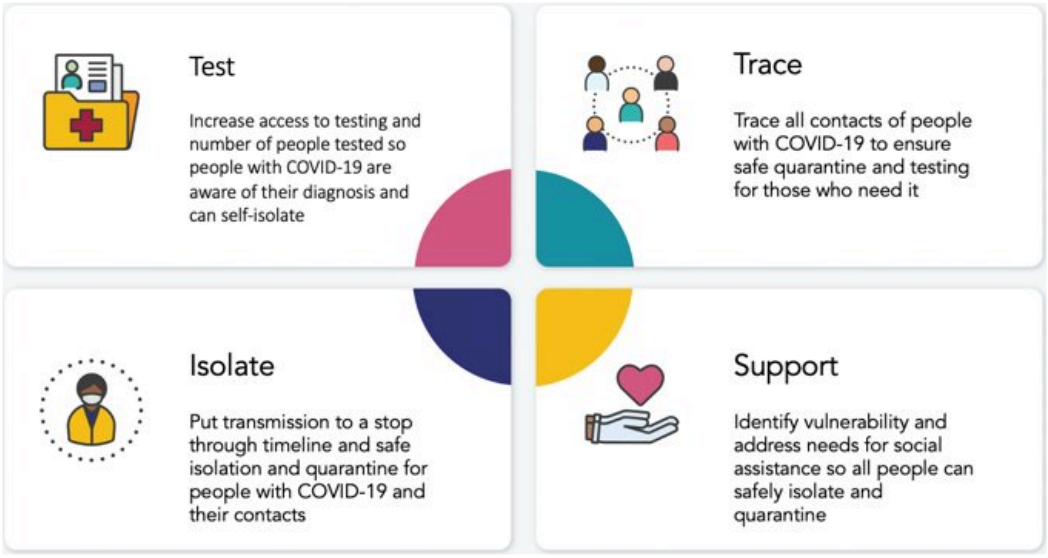
support. Because of PIH's expertise in this comprehensive approach to fighting epidemic diseases like Ebola in West Africa, cholera in Haiti and HIV and TB around the world, Governor Baker asked PIH to support the Department of Public Health's work on COVID-19.

Creation of the Community Tracing Collaborative

The Massachusetts COVID-19 Community Tracing Collaborative (CTC) was formed to support the Massachusetts Department of Public Health (DPH) and local boards of health in their contact tracing efforts. The CTC brought together DPH, the Commonwealth Connector (the state's marketplace for health and dental insurance), and PIH. To help break the chain of transmission, the CTC dramatically scaled up the state's ability to investigate all those newly diagnosed with COVID-19 (cases), counsel them on isolation, and enumerate their contacts. The CTC rapidly calls all contacts and informs them of their status, refers them for testing, and lets them know that they (as contacts) could also be contagious and become sick--and therefore need to self-quarantine for 14 days, until the danger of disease transmission passes.

This contact tracing and counseling is critical, yet PIH knows from years of experience that the poorest and most vulnerable people generally do not have the agency--or economic means, to quarantine to protect themselves and their families. This was true in Ebola, and is true in COVID-19. Social distancing, quarantine and isolation, while critical, are economically regressive tools that make taking theory to practice incredibly difficult or impossible for many people. In other words, without food, safe housing or paid leave, it is impossible to quarantine. Thus, PIH created a cadre of Care Resource Coordinators (CRCs) as part of the CTC to work with anyone who was referred from a case investigator or contact tracer and who needed social support.

Massachusetts Community Tracing Collaborative



Care Resource Coordinators work to make safe quarantine possible

The CRCs play a critical role by working to ensure that the epidemic response is as equitable as possible. They speak 23 languages, and come from impressive backgrounds such as in social work, nursing, health policy, psychology, and public health. Most importantly, they have knowledge of Massachusetts and local community resources.

During a brief home assessment in the initial conversation with cases and contacts, the case investigators and contact tracers identify areas of social assistance needed, and refer to the CRCs. CRCs then talk with these vulnerable people to gather more information. CRCs and families work together to identify their specific needs. The CRCs accompany these individuals to help connect them to the vital resources needed to safely isolate or quarantine and to protect their loved ones.

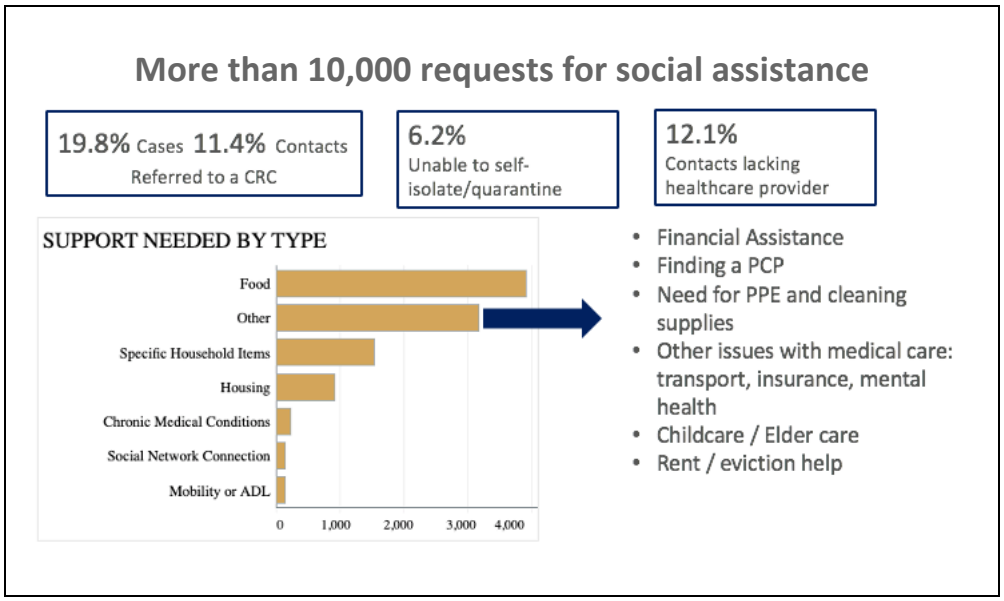
The CTC has found that nearly 20% of people testing positive for COVID-19, and 11% of their contacts need some form of social assistance to safely self-isolate. Each of these individuals are referred to a CRC. Food is the most common need--and that speaks volumes about the disparities driving the pandemic, and the actions needed to end it.

Although most of the earliest known cases in Massachusetts were among executives in the biotech industry, those individuals soon accessed care, and news of the contagion prompted social distancing for people who had the luxury of working from home. Meanwhile, the disease spread among communities whose members were essential workers, or who could not afford to stay home and miss work, or whose homes were crowded, or who had no access to health care. Requests for support to safely quarantine mounted.

Inequity and impact

By late May, the town of Chelsea (population 40,000) had an infection rate three times that of Boston, making it the highest in the state (Allen, Hohler, and Swidey, 2020). About 67% of its population is Latinx, 45% is foreign born, 70% speak a language other than English at home, and the per capita income from 2014-2018 was less than $25,000 (United States Census Bureau, 2019b). Other towns with large communities of color were also hotspots of suffering. Disease rates were high in places like Brockton, where 42% of the population is African American, and Lawrence, where 80% of the population is Latinx (United States Census Bureau, 2019a,c).

The CTC was particularly concerned about reaching these and other high-risk communities. To do so, more was needed: partnerships with local organizations that were known and trusted and would support CTC efforts. The CTC began collating resources and over the first several weeks of the program identified almost 700 organizations or resources that could provide some type of assistance. A database organized these resources by category, county/region of the state, and town, becoming a vital resource available to every CRC.



The CTC adopted an inclusive approach to step up its outreach to vulnerable communities. It launched a series of virtual town halls, working with local health and government officials, media personalities, community-based organizations, and local influencers. One statewide town hall was hosted by black faith leaders. Held on Zoom, it was also broadcast on Facebook live and simulcast on local public access TV or radio. Other town halls were held in the languages commonly spoken in the community. The CTC also increased its efforts to recruit Care Resource Coordinators directly from the communities to be served: people known and trusted and deeply familiar with the social services available to help people in quarantine. Today, 25% of CRC are staff from local Community Health Centers.

CRCs are often called upon to do a superhuman job. As they learn the needs of their clients, they must pull together the threads of services available: food, rent assistance, alternative shelter, medicine delivery, soap, disinfectant, paper products, transport to the doctor, baby formula, diapers. The people they reach out to are often in crisis, they and their family members are sick, they may have no health insurance, perhaps they are undocumented, out of work, or at risk of eviction.

One CRC recalls a man who had been job searching when he learned he had been exposed to someone with COVID-19. He put his job search on hold. He had no health insurance. The CRC team assisted him in signing up for state health insurance and finding a Primary Care Provider, and having his medications delivered. He made it through quarantine and shared his gratitude for the CRC team.

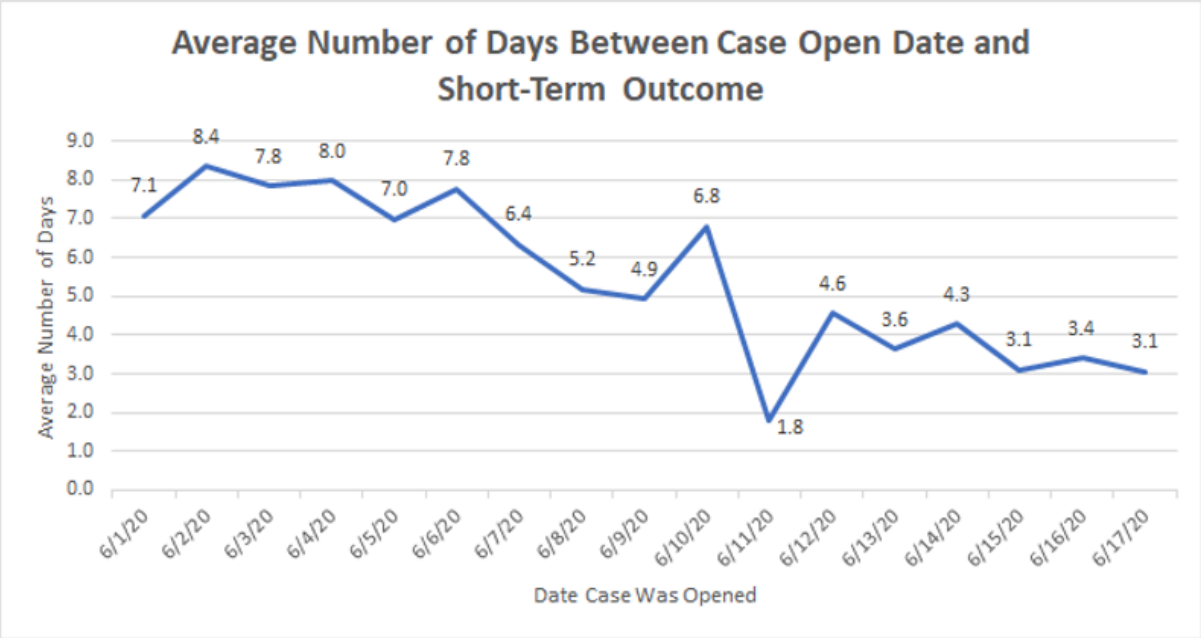
CRCs also uncovered a variety of medical needs. These included questions on symptoms, concerns about medications, the need for testing referrals, and complex situations involving

pregnancy and small children. More than 12% of contacts reported lacking a primary health care provider, and connecting people to the clinical care they needed became an important aspect of the CRC work.

Clinical care referral pathways were designed to connect patients and contacts to rapid medical follow up and long-term medical care. The provision of clinical care is a basic human right and instills long term trust between the community and health system. In addition, support for the public provision of healthcare prior to, during and after the epidemic is the most durable form of pandemic preparedness.

Another CRC helped a 13-year-old girl taking care of a six-month old baby. The girl's mother was in the hospital with COVID-19. As the Boston Globe reported, the family was undocumented, and the girl's mother told her daughter not to ask for help, for fear of immigration officials or child protective services (Allen, Hohler, and Swidey, 2020).

Given the complex and difficult situations CRCs were called upon to help resolve, the CTC paid close attention to their training, from curriculum on psychosocial support to dealing with domestic violence or immigration concerns. With experience and more organizational resources available, CRCs were able to significantly reduce the amount of time it took to successfully connect a person in quarantine with the support they needed.



Based on Cases Opened in June, as of 6/24/20

From social needs to social determinants of health

By July 6, Massachusetts had completed 1,134,568 tests for COVID-19 since the start of the pandemic. For the week ending July 6, they yielded a statewide positivity rate of 1.8%, a decrease of 94% since April 15 (Massachusetts Department of Public Health, 2020a). But from town-to-town, that rate varied enormously. The small community of Bolton (population 5,400), with a median household income of more than $155,000 and a 93% white population, had a positivity rate of 2.89% as of July 1st. The positivity rate in Brockton at the start of July was 24.27% (Massachusetts Department of Health 2020c).

While CRCs can do everything possible to connect individuals with material and social needs, the reality is that those resources are not always available. The fight to end COVID-19 is therefore also a call to action to both rebuild the public health infrastructure and to address the social determinants of health through publicly supported systems—thus addressing the conditions that shape health as people are born, grow, live, work and age. They include factors like socioeconomic status, education, neighborhood environment, employment, and social support networks, and access to health care (Artiga and Hinton, 2018).

The data and experience of the CTC has identified resource gaps that can help to inform policy development. PIH and the CTC have stood with Community Health Centers in advocating for an emergency infusion of $50 million. The Commonwealth of Massachusetts quickly allocated the funds, which are being used to bolster staffing and build near-by testing sites.

COVID-19 has laid bare the fragmentation of the public health system, and extreme disparities in access to care, to income, to basic necessities and social services—all of which are themselves social determinants of health. It is clear that the epidemic in Massachusetts—and the United States—will not end until these disparities are addressed and resources focused on improving access to quality health care and building public health capability in the most impacted communities.

References

Allen, E., Hohler, B., and Swidey, N. (2020) 'The Virus's Tale,' The Boston Globe*, 30 May. Retrieved from: https://apps.bostonglobe.com/metro/graphics/2020/05/coronavirus-tale/*

Artiga, S. and Hinton, E. (2018) 'Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity," Kaiser Family Foundation*, 10 May. Retrieved from: https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/*

Massachusetts Department of Public Health (2020a) 'Massachusetts Department of Public Health COVID-19 Dashboard--Dashboard of Public Health Indicators,' Massachusetts Department of Public Health*, 6 July. Retrieved from: https://www.mass.gov/doc/covid-19-dashboard-july-6-2020/download*

Massachusetts Department of Public Health (2020b) 'Massachusetts Department of Public Health COVID-19 Dashboard--Weekly COVID-19 Public Health Report,' Massachusetts Department of Public Health, 1 July. Retrieved from: https://www.mass.gov/doc/weekly-covid-19-public-health-report-july-1-2020/download

Stockman, F., and Barker, K. (2020) "How a Premier U.S. Drug Company Became a Virus 'Super Spreader,'" The New York Times, 12 April. Retrieved from https://www.nytimes.com/2020/04/12/us/coronavirus-biogen-boston-superspreader.html

United States Census Bureau. (2019a) 'Quick Facts: Brockton City, Massachusetts,' United States Department of Commerce*, 2019. Retrieved from: https://www.census.gov/quickfacts/fact/table/brocktoncitymassachusetts/RHI225219*

United States Census Bureau. (2019b) 'Quick Facts: Chelsea City, Massachusetts.' United States Department of Commerce*, 2019. Retrieved from: https://www.census.gov/quickfacts/fact/table/chelseacitymassachusetts/RHI825219#RHI825219*

United States Census Bureau. (2019c) 'Quick Facts: Lawrence City, Massachusetts.' United States Department of Commerce*, 2019. Retrieved from: https://www.census.gov/quickfacts/lawrencecitymassachusetts*