

Community Testing in High-priority And Marginalized Populations (CHAMP)

Shannon Dowler, Sam Thompson, Brin Phillips

In an effort to facilitate an equitable COVID-19 testing strategy early in the pandemic, North Carolina piloted a high-throughput testing model called Community Testing for High-priority and Marginalized Populations (CHAMP). Learnings from this initiative spurred a continuation of this model in the state's vaccine approach. The focus on COVID-19 equity, both in testing and in vaccine distribution, has made North Carolina a leader across the country.

Introduction

In May 2020, COVID-19 case rates were steadily climbing in North Carolina and testing was difficult to access outside of a hospital. By June 2020, there were early indicators of a surge on the horizon and the state was only testing an average of 97,000 people per week. Of the tests being performed early in the pandemic, the majority were in White populations even though we could already see differences in poor outcomes in Black/African American, American Indian/Alaskan Native, and Latinx populations infected with the virus around the country. The North Carolina Department of Health and Human Services (NCDHHS) identified the need to rapidly increase access to COVID-19 tests for all people in the state, regardless of insurance, legal, or socioeconomic status.

NCDHHS developed Community Testing for High-priority and Marginalized Populations (CHAMP) in an effort to increase COVID-19 testing availability to North Carolinians, specifically focusing on populations and areas with a growing deficit of testing resources. The CHAMP initiative grew out of a belief that in order to overcome existing inequities, a disproportionate share of resources needed to be invested in these communities. This resulted in a concerted effort to achieve health equity in the state's testing strategy. At the program's conclusion, the state averaged 179,000 tests per week and by December 2020 the number reached 364,000 tests per week.

The CHAMP team invited vendors to apply for a rapid-paced, community-based testing strategy that would need to be implemented within two weeks of notification of award. Using a data-driven approach, the CHAMP team identified ZIP codes based on the criteria of having both a relatively high number of Black/African American, American Indian/Alaskan Native, and Latinx individuals, as well as having no

testing sites. This data was further refined with filters such as burden of chronic disease (for Black/African American populations) and the presence of farmworkers (for Latinx populations) to narrow down final award locations. The NCDHHS contract procurement team also approved high-throughput testing vendors with the capacity to deploy vaccination sites in 10 ZIP codes simultaneously and manage a minimum of 100 tests per site per day. The CHAMP team ultimately identified 174 ZIP codes and awarded testing contracts to three vendors to set up no-cost testing sites to rapidly improve access to COVID-19 testing for historically marginalized populations.

The vendor contracts had unique parameters developed with the ultimate goal of providing an inclusive testing experience that would build the foundation for trusted partners to later offer the COVID-19 vaccine. When CHAMP launched in July 2020, many testing sites had a 14-day lag from sample collection to patient notification of results. CHAMP vendors had two unique testing requirements: add lab capacity to the state and provide rapid turnaround of testing with a maximum of 72 hours.

Additional unique requirements of vendors included requiring evidence that they partnered with local health departments and community agencies, appropriately marketed the opportunity prior to testing events, provided tests to all regardless of ability to pay, did not require state or federal identification, submitted race and ethnicity data in a timely fashion, provided culturally and linguistically appropriate services, and communicated test results to people tested within 24 hours of receipt.

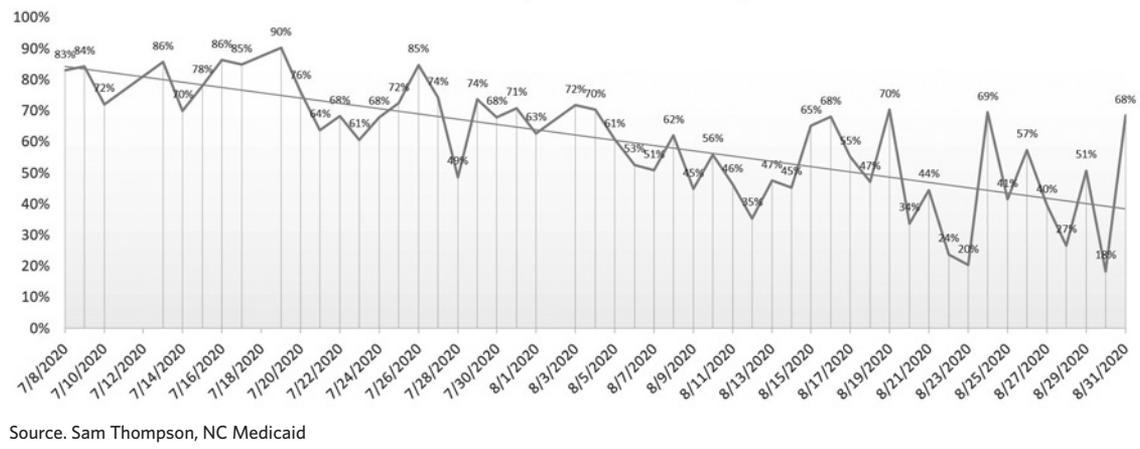
A unique "secret shopper" program was developed to oversee vendors and ensure services were provided consistently and to provide real-time feedback for rapid-cycle improvements. NCDHHS staff volunteers were trained on the tenets of the contract requirements and were randomly deployed to events around the state. The shopper had to alert the site supervisor of their presence at the end of the event and share feedback and opportunities for improve-

Electronically published July 6, 2021.

Address correspondence to Shannon Dowler, 154 Wilds Branch Rd, Marshall, NC 28753 (Shannon.dowler@dhhs.nc.gov).

N C Med J. 2021;82(4):282-283. ©2021 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved. 0029-2559/2021/82414

FIGURE 1.
Percentage of Members of Historically Marginalized Populations Tested by CHAMP Initiative by Date



Source: Sam Thompson, NC Medicaid

ment. This information was then submitted to a survey and the data was collected, reviewed, and sent to the vendor leadership team. The expectation of continuous quality improvements was paired with contractual withholds (meaning vendors would pay a financial penalty) for failing to meet contract requirements like the provision of culturally and linguistically appropriate services.

The CHAMP initiative ran from July 9 to August 31, 2020, collecting a total of 16,568 tests in the identified ZIP codes across 385 unique testing events (internal data, NCDHHS). Secret shoppers attended and evaluated 102 of these events. Approximately 61% of the people tested were categorized as falling into historically marginalized populations and 37% of the people tested were uninsured (internal data, NCDHHS). Of those who tested positive for COVID-19, there was a disproportionately high number of positives from historically marginalized populations.

The CHAMP team also learned that events were least attended on Tuesdays, Thursdays, and Sundays; events were best attended by historically marginalized populations if they were scheduled 10_{AM}-2_{PM} and 4_{PM}-6_{PM}; and events were best attended by these populations when held in community, residential, and faith venues rather than government venues.

While the state initially directed the vendors to specific ZIP codes, over time the vendors proposed ZIP codes that they felt would be as or more successful in providing tests to historically marginalized populations. However, evaluation

of the data suggested that state-selected locations resulted in higher testing in the desired populations. Over time, all vendors experienced diminished attendance at testing events by historically marginalized populations, coinciding with a move to vendor-selected ZIP codes (Figure 1).

The CHAMP initiative successfully provided COVID-19 testing at a critical time in the first surge of the pandemic in North Carolina by providing testing to its intended underserved populations. Race and ethnicity data were collected by vendors at a rate much higher than seen in other state and national testing venues, with 87% of recipient race and ethnicity collected (internal data, NCDHHS). Important learnings to inform future testing or vaccine events geared at serving historically marginalized populations point to locations, times, and days when partners might consider engaging these populations in events related to COVID-19. NCMJ

Shannon Dowler, MD chief medical officer, NC Medicaid, North Carolina Department of Health and Human Services, Raleigh, North Carolina.

Sam Thompson, MSW associate director of evaluation, NC Medicaid, North Carolina Department of Health and Human Services, Raleigh, North Carolina.

Brin Phillips quality and evaluation project manager, Accenture, Charlotte, North Carolina.

Michael Schwartz, MHA quality management consultant, Quality Management Team, Division of Mental Health, Developmental Disabilities and Substance Abuse Services, North Carolina Department of Health and Human Services, Raleigh, North Carolina.

Acknowledgments

Disclosure of interests. No disclosures were reported.