

HBCU Trains Contact Tracers in Communities of Color

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ABSTRACT

In June 2020, the University of the District of Columbia began a dual virtual skills certificate program in response to the COVID-19 pandemic. The historically black college and university's (HBCU) introductory program prepared individuals for careers as Contact Tracers and Community Health Workers. A sample of 55 students participated in the pilot program to learn how to investigate the spread of the COVID-19 virus. The program targeted District residents who received Temporary Assistance for Needy Families (TANF) benefits. The TANF program provided work readiness training to low-income families to enable them to move from public assistance to self-sufficiency. Program participants earned a dual certificate in Contact Tracing and Community Health Worker after completing the 20-hour program. The UDC work readiness program created a career pathway in healthcare which combines education, training, credentialing. The program includes support services to assist individuals with advancing in a high-demand occupation while earning a living wage. The demand for contact training demonstrates that HBCUs are a viable option to engage communities of colors to reduce the transmission of the COVID-19 virus.

Keywords: COVID-19; Contact Tracing; Work Readiness; Historically Black Colleges and Universities (HBCUs); Temporary Assistance for Needy Families (TANF).

INTRODUCTION

Nationwide, the COVID-19 pandemic has created an increased demand for Contact Tracers. The University of the District of Columbia (UDC) created a unique program to train students to help increase the District of Columbia's Contact Tracer workforce capacity and expand their infrastructure. The University of the District of Columbia is a public historically black land-grant university, and it is the only public university located in Washington, D.C. The historically black college and university (HBCU) was established in 1851. The University has employed a culturally informed approach to reduce the disproportionate impact of COVID-19 on communities of color. The University of the District of Columbia is one of the few if not only HBCU, that offers free introductory, skills-based workforce readiness training for Contact Tracing.

Tracking the spread of the coronavirus can help reduce the transmission of new infections. This pandemic is responsible for infecting individuals with the disease called COVID-19. [1] In the United

States, communities of color have been disproportionately impacted by the pandemic. In the District of Columbia, communities of color are faced with high rates of infections and have been adversely impacted by the COVID-19 pandemic. According to the statistics released by the District of Columbia Executive Office of the Mayor, as of April 23, 2020, 112 out of 139 the lives lost in the nation's capital were African American compared to 15 Caucasians, nine Latinos and three Asians. [2]

Contact Tracers assist in the fight against the pandemic by calling individuals who have been infected by the disease. Contact tracing is a long-used public health tool. It aims to break the chain of transmission of infectious diseases. [3] It is the process of identifying individuals (*also known as contacts*) who have been in proximity with an infected person. Contact Tracing is key to reducing the number of individuals infected by the disease. An expanded public health infrastructure, especially Contact Tracers, will be needed if the infection rate continues to rise.

Crystal Watson, a senior scholar at the Johns Hopkins Center for Health Security warned, "We need to hire up to 100,000 or more individuals to perform this work." According to a report from the Johns Hopkins Center for Health Security, recommended that "Before the United States can reopen safely, a new Contact Tracing workforce of at least 100,000 must be in place to trace the contacts of individuals diagnosed with COVID-19. [3]

Contact Tracers face challenges when attempting to communicate with communities of color. Experts recommend that policymakers should engage community members in the development of contact tracing programs. This is especially important when working with low-income communities and communities of color. Individuals in these communities may be suspicious of the health care system, especially as they are facing high rates of infection. Every aspect of a contact tracing program must be examined. [4]

In response to the COVID-19 pandemic, the University of the District of Columbia's Paving Access Trails to Higher Security (PATHS) program introduced the Contact Tracing training in June 2020. The program was created to provide work readiness skills and support services to enable District residents to become self-sufficient. The program aligns directly with the University's mission to serving the needs of the community of the District of Columbia.

BACKGROUND

The program began in 1997 in response to the Personal Responsibility Work Opportunity Reconciliation Act of 1996 (PRWORA). The legislation is a major welfare reform. President Bill Clinton signed PRWORA into law on August 22, 1996. This fulfilled his 1992 campaign promise to end welfare. [5]

The 1997 law created the Temporary Assistance for Needy Families (TANF) program, which became effective on July 1, 1997 [6]. The TANF program replaced the Aid to Families with Dependent Children (AFDC) program. The AFDC program had been in effect since 1935. It supplanted the Job Opportunities and Basic Skills Training program (JOBS) of 1988. [7] The TANF program was reauthorized in the Deficit Reduction Act of 2005. The University's School of Business and Public Administration (SBPA) oversees the Paving Access Trails to Higher Security (PATHS) workforce readiness program.

Prior to the pandemic, the PATHS program offered in demand and credentialed work readiness training to 700 TANF participants annually. For more than two decades, the PATHS program offered certificate training for a Child Development Associate (CDA), Home Health Aide (HHA), Hospitality and Food Safety Handler. In the last two years, the program expanded its career pathways training to include Concierge Essentials, Property Management, Microsoft Office and Entrepreneurship.

The idea behind a work/career readiness certificate/credential is that potential employees who have achieved a set level of proficiencies in areas needed for entry-level jobs will be provided with a certificate or credential that will signify to employers their level of readiness to be employed. [8]

CREATION OF HEALTHCARE CAREER PATHWAYS

The PATHS program offered a virtual skills-based training to 55 students in five cohorts from May to September 2020. The curriculum focused on work readiness behaviors, coaching and vocational training. The training prepares individuals for career pathways in healthcare. The interactive course was taught via Blackboard four days a week.

The PATHS Contact Tracer training is different from other contact tracing programs in several ways. The skills-based training includes a focus on how to communicate with individuals with special needs. According to Dr. Bonnielin Swenor, Director of the Johns Hopkins' Disability Health Research Center, "Communicating with individuals with special needs poses challenges as information is quickly changing". [9]

The PATHS training teaches participants how to identify neighborhood specific resources for individuals who are quarantined and/or in isolation. Program participants can return to obtain refresher training at any time. The program participants represent the communities most impacted by the pandemic. This helps to build trust and a rapport with individuals or contacts.

The University of the District of Columbia offers free virtual skills-based workforce readiness training to District of Columbia residents. Eligible participants must receive TANF benefits in the District of Columbia. The District of Columbia's TANF program provides cash assistance to families in need and supportive services. Families enrolled in the District's TANF program may receive benefits if they are income eligible and have a child in their home.

The UDC's PATHS program employs a Two-Generation (2Gen) Approach to serve individuals and families. The approach aims to engage both children and parents collectively. According to the Aspen Institute, the 2Gen approach encompasses the family well-being by engaging both the children and parents together. The PATHS program employs the 2Gen approach as a roadmap to assess a family's needs and barriers. The approach emphasizes education, economic assets and literacy, social capital and health and well-being to create a legacy of economic security that passes from one generation to the next. [10]

SUPPORT SERVICES

The PATHS program provides vocational assessments, intensive case management, job coaching towards education and employment goals, skills training and support services. Individuals receive financial assistance to enroll in postsecondary educational program or professional certificate

and/or licensing programs. Participants also receive transportation fare cards, uniforms for employment, mental health screenings and access to an onsite clothing boutique.

While these initiatives have not been rigorously evaluated, they aim to increase employment and reduce reliance on TANF benefits. States often provide a range of work supports— intensive case management, rehabilitative services, job coaching and support groups, and referral to other services. [11]

State programs create individual plans geared to helping individuals overcome varied and multiple challenges. The PATHS program creates Individual Responsibility Plans (IRPs) for each participant. The IRP outlines the specific employment goals and work activities and supports for the individual. The IRP identifies support services and barriers that may interfere with the individual's ability to obtain employment. Intensive case management models often connect individuals with mental health counseling, substance abuse treatment, vocational rehabilitation and domestic violence services. [10] The PATHS Case Manager assists the individuals with preparing their IRP.

Work readiness programs help individuals with navigating the array of support services. Instead of having to find their way to each service, hard-to-employ TANF recipients have easier access. [11] The PATHS program assists TANF participants with financial literacy education, childcare referrals, behavioral and/or mental health and substance abuse referrals and domestic violence referrals). Many local offices facilitate program interactions through TANF-funded contracts, formal collaborations, or referrals, though states struggle with integrating services while maintaining a work focus and operating with limited resources.[11] The District of Columbia Department of Human Services contracts with the UDC PATHS program and other TANF Employment Providers (TEP) to administer work readiness services and programs to TANF participants.

An analysis of 20 rigorous evaluations found that work readiness programs boosted employment and earnings about as much for the most disadvantaged recipients as for others. [11]

BARRIERS

The TANF recipients in the PATHS program faced employment barriers, such as childcare, lack of education, work experience and access to technology. The most common employment barriers TANF recipients face are lack of education or work experience, mental and physical health conditions, work experience and childcare. [12] The training was conducted during the pandemic. Most of the students required childcare. The District of Columbia was under a stay-at-home order. Students were engaged in remote learning. Several participants found it difficult to balance their respective training while managing their child(ren)'s home schedule due to the pandemic.

All the participants possessed a high school diploma or general equivalency degree (GED). Contact Tracers are only required to have a high school degree. Hasak strongly asserts that if an applicant doesn't have a bachelor's degree, their chances of being considered for this in-demand job – especially when compared to other candidates who may have recently become unemployed but have multiple degrees – are very low. He maintains that this exacerbates the inequality of opportunity.[13]

None of the participants possessed previous experience working as an outreach representative, community health worker, in-person assister or navigator. The current job market requires this type of experience for a Contact Tracer. Access to technology was a key barrier. Several families shared school-issued tablets with their children to complete the course. A minimal number of students utilized their cell telephones to participate and complete the course.

COMMUNITY NEEDS

According to health equity advocates and community leaders, “there are complex, deeply rooted barriers to engaging people of color in contact tracing efforts, which attempt to find and notify anyone a COVID-positive person has interacted with to stave off community spread”. [14] Enlisting community leaders to promote safety measures will positively promote the uptake of such behaviors. [15] Contact tracing is critical in communities of color.

“Everyone sees that there’s a need to reach pockets of individuals who may not have the same access to information that others do,” said Liany Arroyo, Hartford’s Health and Human Services Director. [14]

Health proponents declare that the best intentions to promote cultural competency and health equity is not enough to engage communities of color. Decades of substandard health care service delivery and being used as experiments weigh heavily in communities of color. Dr. James Hildreth, President and Chief Executive Officer (CEO) of Meharry Medical College, another HBCU, notes, “The history of abuse at the hands of America’s medical establishment, and of misunderstanding rooted in cultural differences, is too long and fraught with missteps”. [16]

Pat Baker, President and CEO of CT Health Foundation, a health equity group, asserts that “The health system has a really painful and at times ugly history over how it has treated and experimented on people of color,” which is playing and shaping into their consciousness. Baker argues that in communities of color, there is “fundamental distrust” and a “real reluctance to participate” in government health initiatives, including contact tracing efforts that require them to divulge private information. [14]

The PATHS program offers dual certifications in Contact Tracing and Community Health Worker (CHW). Investing in community health workers (CHWs) can help address the social determinants of poor health that disproportionately affect low-income, minority populations and that are magnified during times of crisis. These employees can help improve material conditions, facilitate access to health care systems, and provide psychosocial support. [17]

Community Health Workers (CHW) are trained and trusted members of local communities who share real-world experiences with their neighbors and peers. They are experts in navigating complex systems of care, serving as a link between clinical and community-based services and the people who need them most. [17] The majority of the PATHS program participants reside in Wards 4, 7 and 8 of the District of Columbia. These communities have been most impacted by COVID-19. Health workers can also enlist the assistance of community leaders— trusted sources of information—to go door to door promoting behavior change. [18] The involvement of trusted community members in promoting social distancing, mask wearing, and quarantining is critical for communities to embrace these behaviors. The PATHS Contact Tracer training program teaches

individuals the basics of contact tracing and how to be culturally sensitive to the needs of communities of color while identifying culturally specific resources for individuals.

It is important for Contact Tracers to be aware of cultural sensitivities and assist individuals to navigate the public health systems in which they are employed. Many public health departments are hiring individuals who represent diverse cultural backgrounds and languages to build trust and communication. Fairfax County Government in northern Virginia is recruiting a large number of Community Health Workers. These trained community members understand the specific neighborhood demographics, characteristic and populations that require support. [17]

According to Hasak, policymakers can implement an inclusive Contact Tracing workforce by setting aside a percentage of contact tracing jobs for those Americans who have not enjoyed the benefits of their state's broader economic success. [19] Many individuals from affected communities by the economic downturn possess skillsets that position them to leverage local knowledge, language skills and community capital to perform Contact Tracer jobs.[20] Community organizations offer researchers an entry point into diverse, low-income areas where community members are wary of outside experts. [21] The PATHS program graduates provide skilled capital in communities of color. This is a key asset that will separate them from thousands of individuals in an applicant pool.

The PATHS Contact Tracer program curriculum is led an Epidemiologist, Nurses and other skilled professionals. The curriculum highlights mandated reporting, health information privacy and confidentiality, cultural competency, communicating with individuals with special needs, use of technology, medical terminology, cultural competence, resource identification and critical thinking skills. Many of the students have utilized community-based services and built relationships with these organizations.

CURRENT GAPS

Nationwide, public health agencies are relying on introductory online courses to train entry-level COVID-19 Contact Tracers. This enables state and local agencies to quickly train and certify new Contact Tracers. The training is for individuals interested in entry and mid-level COVID-19 Contact Tracer positions. Individuals do not need to have a public health background to complete the course. The introductory training focuses on building knowledge for remote contact tracing. [22]

According to the National Public Radio (NPR), health experts recommend a minimum of 180,000 Contact Tracers are needed. [23] An expanded public health workforce will help reduce the infectious disease outbreak of COVID-19. Contact tracing requires a dedicated workforce with critical thinking, investigative and people skills. On April 23, 2020, Muriel Bowser, Mayor of the District of Columbia, established the District of Columbia Contact Trace Force to recruit additional Contact Tracers in the District of Columbia. [2]

The Contact Trace Force supports the District of Columbia's Department of Health's critical operation to contain the spread of COVID-19 and prevent hospitalization and death. This is achieved through rapid and robust case identification, case investigation and contact tracing resulting in safe isolation and quarantine for all District residents. This workforce of disease investigators is essential and part of the District's emergency response who operates seven days a week.

In April 2020, the District of Columbia Department of Health employed 65 Contact Tracers. This team initially traced approximately 70% of the confirmed cases in the District of Columbia. [2] The District of Columbia's Department of Health began recruiting a team of 200 Contact Tracers. [2] The beginning salary for a Contact Tracer with the Government of the District of Columbia is \$51,000. [24]

In June 2020, the District of Columbia, Guam and the Northern Mariana Islands and seven states (Alaska, Massachusetts, Missouri, New York, Oregon, Vermont and West Virginia) were sufficiently staffed with Contact Tracers. This was based upon their population and COVID-19 rates during a 14-day period. [23]

Universities and Community Colleges have assumed a greater role in Contact Tracer training. At least 20 colleges and universities offer introductory online courses for COVID-19 Contact Tracers. Less than five historically black colleges and universities (HBCUs) offer virtual skills-based training to teach individuals to become Contact Tracers. An opportunity exists for HBCUs to engage impacted communities by providing culturally competent contact tracing training.

William Sutherland maintains that HBCUs are relevant and necessary in 21st Century America. He proclaims, "HBCUS are critical not only for urban America but every community of today and tomorrow's knowledge-based technological society." [24] Hildreth shares a similar sentiment with Sutherland. The Infectious Disease Specialist contends, "HBCUs are uniquely qualified to navigate the long-standing racial divides that have resurfaced amid the pandemic". Hildreth is advocating for HBCUs to provide expanded testing and contact tracing as well as training for a health workforce to meet the "unique needs of vulnerable, low-income of African Americans and underrepresented communities. [16]

Johns Hopkins University, Purdue University Global and the University of Houston are offering free online Contact Tracer classes. [25] Temple University, in Philadelphia, debuted a contact tracing certificate program in June 2020 to its students, health professionals and overall public. [26] While several universities and colleges have created Contact Tracer certificate programs, communities of color continue to mistrust the concept. According to Philip Ricks, PhD, Global Disease Detection Analyst at the Centers for Disease Control (CDC) and Prevention, "An immediate barrier is inherent distrust toward healthcare in communities of color due to experienced biases and mistrust of authority." [27] The PATHS Contact Tracer program offers an inclusive training with cultural humility to establish an effective and safe contact tracing program for communities of color.

PROGRAM DESCRIPTION

At the onset of COVID-19, the PATHS program offered workplace readiness skills training and three certificate-training programs from May to September 2020. The PATHS team emailed preliminary training interest surveys to 123 students. Of the 123 students, 55 students responded to the survey and enrolled in the virtual skills training. The workplace readiness skills were included in the training program. These skills are important because they ensure individuals have the basic academic, critical thinking and personal skills necessary to maintain employment. Academic skills such as reading, writing, basic math and communication skills are critical for optimal job performance.

The certificate programs included a dual certification in Community Health Worker and Contact Tracer certification. The other program offerings included the Microsoft Office Specialist and Certified Guest Service Professional certificate programs. There were 54 students who attended the Information Session for the Community Health Worker/Contact Tracer certification. Twenty-two participants opted to participate in the Microsoft Office Specialist certification.

FINDINGS

All 55 participants enrolled in the dual Community Health Worker and Contact Tracer certification. Thirty-seven individuals enrolled in the work readiness training only. Twelve students enrolled in the Microsoft Office Specialist and 12 students enrolled in the Certified Guest Service Professional. All 55 students completed the Contact Tracer certification. Forty-three students completed the Community Health Worker certification. Thirty-seven students completed the work readiness training coupled with another training. Twelve students completed the Certified Guest Service Professional training. Nine students completed the Microsoft Office Specialist.

Technology

Students utilized a combination of cell phones, tablets and/or laptops to participate in the Webex video conferencing and online trainings. Several students shared tablets issued by their child's school.

Enrollment

Forty-eight percent of the participants enrolled in the Community Health Worker and Contact Tracer training programs; thirty-two percent enrolled in the work readiness skills-based training; ten percent of the participants enrolled in the Certified Guest Service Professional training; and ten percent of the participants enrolled in the Microsoft Office Specialist certificate training.

Completion Rates

Thirty-five percent of the students completed the Contact Tracer certification. Twenty-seven percent of the students completed the Community Health Worker training. Twenty-four of the students completed the work readiness skills-based training. Eight percent of the students completed the Certified Guest Service Professional certification. Six percent completed the Microsoft Office Specialist certification.

Employment

Two individuals who participated in the program secured employment as Contact Tracers. This demonstrates a greater need for training opportunities to develop and expand a community-based workforce to promote career pathways and long-term sustainable growth.

Enrollment and Completion Comparison

An examination of the enrollment and completion rates indicates that 55 students enrolled and completed the Contact Tracer certification. All 55 students enrolled in the Community Health Worker training while 43 students completed the Community Health Worker certification.

Thirty-seven students enrolled and completed the work readiness skills training. Twelve students enrolled and completed the Certified Guest Service Professional certification. Twelve (12) students enrolled in the Microsoft Office Specialist certification. Nine students completed this training.

Demographics of the student population:

- Fifty-five participants were female and African American.
- Fifty-four students were heads of households.
- One student represented a two-person headed household.
- One student experienced domestic violence.
- Fifty-five participants required childcare

The initial implementation of the program demonstrated minimal impact for the full student population. There was significant impact in the interest in a healthcare career pathway. This was demonstrated by the number of individuals who enrolled and completed by the Community Health Worker and Contact Tracer training programs.

CONCLUSION

As District of Columbia policy makers seek to build trust within communities of color, they will need to identify strategies inclusive of the affected communities in contact tracing and public health outreach efforts. The findings demonstrated a strong interest in the Contact Tracer and Community Health Worker certifications. The PATHS workforce efforts have long run services in collaboration with community-based partners. Increased efforts will need to be developed to increase the human capital to better serve communities of color.

The engagement of HBCUs in contact tracing education and outreach may prove to be an equalizer for proactively addressing COVID-19 inequities. "From inception, HBCUs were created out of great social need, and while great social need still persists, today's challenges are different. Today, HBCUs have a great opportunity to redesign the institutions for 21st century sustainability yielding long-term positive outcomes. HBCUs have a huge opportunity to be "catalysts for innovation." [28]

Policymakers will need to make long-term investments in communities that have experienced economic hardships. Community-based training programs provide an opportunity for communities to promote economic recovery. Programs, like the PATHS program, create opportunities for residents to improve their knowledge and skills, earn a living wage and begin a career pathway.

Recommendations

- Leverage the current human capital built by the University of the District of Columbia's PATHS program to develop a citywide Contact Tracing Corps. The University of the District of Columbia PATHS program administers a culturally competent curriculum. The PATHS program provides a direct inclusive and equitable pipeline of healthcare professionals and workforce. The citywide Contact Tracer Corps training program would be inclusive of communities of color specifically Wards 4, 7 and 8.
- The University of the District of Columbia must open its online skills-based Contact Tracer training to all District residents. As the demand for Contact Tracer staffing increases, there will be a need to train additional individuals and communities. This training must be readily available to meet the growing demand for a public health workforce in affected communities and the public.

- Expand the current Contact Tracer curriculum. The University of the District of Columbia must build a curriculum to address the specific needs of the Latinx populations in Ward 4 and African American populations in Wards 7 and 8.
- The Department of Health should recruit the University of the District of Columbia PATHS Contact Tracers. The recruitment of individuals who represent communities of color can build a sustainable health outreach employment in affected communities. This will assist individuals in achieving their employment and self-sufficiency goals.
- Collaborate with public health sororities and fraternities at HBCUs. The District of Columbia should collaborate with allied health sororities and fraternities at HBCUs to perform community service projects.
- Partnerships with community-based job training organizations in communities of color. Training staff at community-based organizations will enable the District of Columbia to develop an inclusive Community Health Worker (CHW) workforce. This is especially important in hotspot areas.
- Address the barriers (language, disabilities, financial, etc.) that prevent communities of color from participating in contact tracing efforts to better understand the scope of deaths and confirmed cases, and considerations for providing telehealth services.
- Educate community-based providers on how to improve the cultural competencies of their staff.
- Ensure that all neighborhoods have broadband Internet and adequate neighborhood resources. The quality of and access to groceries, medical care and housing in neighborhoods East of the River must be improved to ensure that individuals who have tested positive are able to fully quarantine and/or isolate themselves without harming other individuals. Internet connectivity is important for individuals who are communicating with Contact Tracers and medical personnel via telehealth sessions.
- Create social media messaging. Focused social media messaging efforts will enable policymakers to communicate dedicated messages to communities of color in the Washington metropolitan area.
- Public health messaging on public transportation. The placement of banners with public health messages related to contact tracing on the Washington Metropolitan Area Transportation Authority's (WMATA) buses and subways is a mechanism to engage affected community members.

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