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Public Health Youth Ambassador Program: Educating and Empowering the Next Generation of Public Health Leaders to Build Thriving Communities

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Summary: Through a collaboration among Fairfax County Health Department (FCHD), Fairfax County Public Schools (FCPS), Morehouse School of Medicine (MSM), George Mason University College of Public Health, federally qualified health centers, hospital systems, non-profits, and other agencies, this initiative targets underserved high school students as a way to increase diversity among community health professionals, build generational health, and provide participants with tools to enhance their post-secondary educational and career opportunities.

Key words: High school academic supports, community health development, mentoring, community health workers, career and college readiness, low-income high school students, Community Health Worker Education Program.

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D egun as a pilot project in March 2022, the Public Health Youth Ambassador Program $\mathbf{B}_{(PHYAP)}$, trains underserved high school students as community health workers (CHWs) in Fairfax County, Virginia. Community health workers, trusted individuals from the community they serve, provide culturally and linguistically relevant health education, help people access care, offer translation services, advocate for individual and community health needs, and provide direct services.¹ Through a collaboration among Fairfax County Health Department (FCHD), Fairfax County Public Schools (FCPS), Morehouse School of Medicine (MSM), George Mason University College of Public Health, hospital systems, and other agencies, this initiative works to increase diversity among community health professionals, build generational health, and provide participants with tools to enhance their post-secondary educational and career opportunities. A \$3.875 million Health and Human Services, Office of Minority Health (OMH) grant, focused on mitigating the COVID-19 pandemic effects through capacity-building efforts, provided the project's seed money.² The Public Health Youth Ambassador Program primarily serves students from Fairfax County's east central Public Use Microdata Area (PUMA), which includes Annandale, West Falls Church, and Bailey Crossroads.

Limited racial or ethnic diversity among community health professionals including clinical providers, public health practitioners, and other paraprofessionals contributes to poor health outcomes.³ Racial and cultural concordance between health care providers and their patients can create a shared identity, enhance trust, and improve communication.⁴ In turn, this relationship has the potential to improve health care access and quality, as well as improve health outcomes.⁴ Implementing effective population health strategies requires a diverse public health workforce that mirrors the population for whom they provide services. Diverse practitioners improve interventions within neglected communities, facilitate culturally appropriate services, and drive innovative structural change.⁵

The Community

Located in Northern Virginia near Washington D.C., Fairfax County has 1,138,331 people, 47% of whom identify as White, 20% Asian, 17% Hispanic, 10% Black, and 6% multiracial or other. Over 30% are foreign-born and 38% speak a language other than English at home (compared with 14% and 22% in the United States).⁶ While the county has excellent health outcomes on average, historical inequities and their root causes are disproportionately clustered within populations of color and immigrants. According to the Vital Conditions for Health and Well-being Framework, these conditions include "basic needs for health and safety, belonging and civic muscle, thriving natural world, humane housing, lifelong learning, reliable transportation, and meaningful work and wealth."^{7[p.6]}

Dramatic wealth inequities exist within Fairfax County. Compared with White families, whose median income is \$159,373, the median household incomes for Hispanic (\$99,878), Black (\$108,840) and Asian (\$137,311) families are lower by 44%, 37%, and 14% respectively.⁸

Within Fairfax County's east central PUMA, the median family income (\$102,454) is 35% lower than in the county, and the poverty rate (11.5%), is over twice as high

(5.6%).⁹ The federal poverty level and income alone do not adequately reflect the economic challenges facing families.

The ALICE (Asset Limited, Income Constrained, Employed) Threshold of Financial Survival, created by United Way of Northern New Jersey United for Alice in 2009, measures the minimum income a family needs to afford household necessities (housing, childcare, food, transportation, health care, technology, taxes) by household composition within a particular county.¹⁰ Those families not meeting the Household Survival Budget fall below the ALICE Threshold. In Fairfax County, disparities fall along color lines. Forty percent of those falling below the ALICE Threshold identify as Black, followed by Hispanic (39%), two or more races (33%), Asian (25%), and finally White (19%). Over half (52%) of all full-time workers in this PUMA did not earn enough to support the Household Survival Budget for one adult and one child. The proportion rises to 82% for Hispanic full-time workers.¹⁰

According to 2018–2022 insurance estimates, populations of color and immigrants are less likely have health insurance than White people. For example, 22% of the Hispanic, 8.2% of the Black, and 16% of the foreign-born community members were uninsured, compared with 5% of the White residents.¹¹ Health care access, economic conditions and other social determinants of health had a harmful effect on premature death rates for the county's Black and Hispanic populations during the pandemic.¹² Between 2020–2021, Black individuals were 1.6 times (522.8 per 100,000) more likely to die prematurely than Whites (480.8 per 100,000). Hispanic individuals were 2.5 times more likely to die from COVID-19 than Whites (81.9 per 100,000 compared with 32.6 per 100,000, respectively).¹²

Fairfax County Public Schools system data also show disparate outcomes based on race. Hispanic and Black students make up almost two-fifths of the school's population (28% and 10%, respectively). Yet combined, these students represent over two-thirds (69%) of those who are economically disadvantaged.¹³ Hispanic students are 48% more likely than White students to spend one or more hours going to work (22.7% compared with 15.3%).¹³ In addition, Hispanic and Black students are disproportionately underrepresented in advanced academic programs and overrepresented among those who drop out, graduate later than expected, and are chronically absent compared with their White and Asian peers (Figure 1).

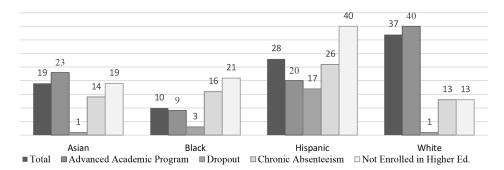


Figure 1. Percent of Fairfax County public school students by race/ethnicity within groups 2022–2023.

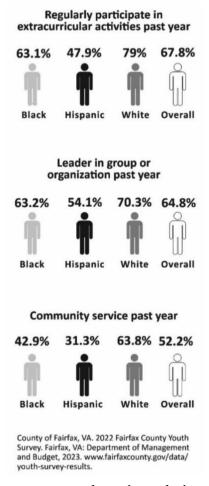


Figure 2. PHYAP increases opportunities for students of color. *Note:* PHYAP = Public Health Youth Ambassador Program.

Research has provided evidence that students of color face multiple social and economic barriers to engaging in leadership roles, participating in extracurricular activities, and completing service hours, all of which enhance social/emotional growth and affect students' access to post-secondary education.¹⁴ Data from the 2022 Fairfax County Youth Survey show that Asian, Black, and Hispanic students are respectively 5%, 10%, and 23% less likely to report being leaders in a group or organization in the past year than White students (Figure 2).¹³ This difference holds true for participating in extracurricular activities and community service in the past year and mirrors research that shows how socioeconomic barriers and historical exclusion continue to affect students of color's ability to participate in activities beyond the school day.¹³⁻¹⁵

Program Overview

While all sophomores or higher within FCPS with a minimum 2.5 grade point average may apply, PHYAP focuses on students who reside in vulnerable communities, are underrepresented in community health careers, and are disproportionately represented in populations with poor health outcomes. Staff recruit students through diverse means. To apply, students and their parents complete an online application that gathers basic demographic information, eligibility verification, and a brief student essay.

The Morehouse School of Medicine High School and Young Adult Community Health Worker Curriculum (HSCHW) provides a bedrock from which to continuously engage participants throughout high school and their post-secondary lives. Delivered via Canvas,¹⁶ an online learning platform, this 20-module course aligns with CHW Core Consensus (C3) Project's core competencies.^{17,18} It teaches leadership, communication, and care coordination skills, as well as introduces population health, community engagement, and health disparities.

In addition to teaching CHW competencies, the curriculum and classroom discussions allow students to explore societal underpinnings that reinforce structural racism and limit their access to conditions that would allow them to thrive.¹⁸ It encourages students to look at the root causes behind their community's poor health outcomes and the disproportionate burdens they encounter daily.¹⁹ Through classroom exercises, participants identify a health issue that resonates with them and develop culturally relevant solutions. This groundwork drives the development of a Community Health Project. Within PHYAP, participants developed 58 projects, some of which focused on increasing access to healthy foods in afterschool programs, health screenings for underserved populations, the health consequences of vaping, and awareness about the negative impact of energy drinks.

Finally, each participant completes a multi-layered, 70-hour practicum in community settings such as hospitals, clinics, schools, and community centers. Students' time may be divided among shadowing practitioners, observing interactions, attending staff mentoring sessions, and engaging in community outreach at farmers' markets or vaccination clinics. This field work allows participants to apply their CHW competencies, enhance critical thinking, gain a broader understanding of health inequities, and be exposed to various public health careers with practitioners who had diverse histories and racial/ethnic backgrounds.

The pilot program evolved through an iterative process over 13 months, which included five cohorts consisting of 114 students. Among the 82 who completed the program, participants ranged in age from 14–19 years. Sixty-five percent were eligible for free or reduced lunches. Students identified as Hispanic alone (52%), Black alone (48%), White-Hispanic (1%) and other/two or more races (3%). Only 34% of the students reported English as their primary language, with 30% reporting Spanish and 21% two or more non-English languages. Among students who spoke languages other than English in the home, 58% of the families spoke Spanish, 13% Arabic, 14% Amharic, 9% Twi, and 6% Tigrigna. Participants' families immigrated from 18 countries and Puerto Rico. While 70% of the students were born in the United States, nearly all their parents

(91%) were born elsewhere. Approximately 48% of parents were born in South and Central American countries, and 38% were born in African countries.

Originally, FCHD subcontracted with a community-based organization (CBO) that works with immigrant families to improve economic and educational outcomes, to serve as project's public schools implementation lead. The collaboration facilitated a speedier hiring process and ready access to youth of color and extended FCHD's connection to the school district. Since the CBO worked directly with youth and their families, they had a specific infrastructure in place (i.e., permission slips, recruitment processes, and intake forms) and a working knowledge of FCPS that made it possible to implement programming with a short lead-up time.

The CBO hired a bilingual program coordinator, who also served as an instructor. The coordinator, a former principal with 12 years of classroom experience, could communicate with Spanish-speaking family members in their preferred language. As the cohorts progressed, FCHD and project staff worked with FCPS to move the program from summer programming across multiple community sites into the schools themselves during advisory periods, a shift that dramatically increased retention rates from 24% in Cohort 1 to 96% in Cohort 3. The retention rate averaged 72% across all cohorts. Providing the program during school hours decreased transportation barriers, competition with extracurricular activities (e.g. work, athletics, enrichment programming), and distance-based enrollment challenges.

Lessons Learned, Into the Future

Despite extensive local support, the program faced many challenges, foremost of which is operationalizing a program that could work across complex systems. For example, multi-level county government approval processes delayed hiring and subcontracting. Sharing selected participant data between government organizations proved challenging, as families had to provide information to both entities. The inability to share data also limited everyone's capacity to synchronize information such as attendance, assignment completion, and grades promptly.

Students faced an array of challenges. First, PHYAP does not provide credit towards FCPS graduation, forcing students to prioritize completing program assignments or graduation requirements. While incorporating PHYAP into the school's advisory period provided a dedicated space and approximately 18 hours of monthly class time, occasionally participant and school district needs consumed a portion of that time. These conflicts created varied attendance rates. In addition, students could not consistently access the HSCHW training videos on school equipment due to FCPS internet firewall restrictions.

Public Health Youth Ambassador Program instructors attempted to address these competing needs by extending deadlines, providing alternative assignments, and forgiving work assigned during excused absences. While this flexibility allowed more students to complete the program, the incongruity between these solutions and the way that the Morehouse School of Medicine learning management system (LMS) allowed staff to calculate the grades significantly lowered some students' final grades. According

to LMS reports, students earned a 74% average across all cohorts. As noted earlier, while most students spoke English as a primary language, 58% also spoke Spanish. Accordingly, staff provided all application and evaluation materials (pre/posttests) in Spanish and English.

Technology, information access, and language issues meant that many families struggled to use the online application. This affected program deadlines and start dates. To ensure equitable access to PHYAP, staff worked with individual families to complete the form, created bilingual (Spanish/English) videos explaining the application process, and decreased the documentation burden.

During PHYAP's implementation, staff within each partnering organization developed a deeper understanding of the assets and limitations across systems and forged trusting relationships that facilitated creative solutions among challenging situations. The program went through a series of iterative improvements geared towards sustainability: integrated in-person instruction into the school day during students' advisory periods; changed staffing configurations; developed agreements with health systems to provide field experiences; created a flexible platform of practicum hour opportunities; and standardized recruitment, screening, and application processes (Box 1).

The PHYAP pilot provided rich information about effective strategies to implement a youth development program focused on providing community health career pathways within Fairfax County's vulnerable communities. Through discussions with students, staff, collaborators, and other thought partners, FCHD adapted the original model to increase youth engagement and resiliency, enhance college/career readiness, and formalize collaborative efforts. Based on these lessons, FCHD focuses on cross-cutting strategies across four focus areas (outreach/engagement, workforce development, youth development, and sustainability), summarized in Box 2.

A mixed methods evaluation that includes qualitative and quantitative data will monitor the initiative's outcomes and impacts related to sustainability, community engagement, and interagency collaboration, as well as the participants' CHW competencies, resiliency, and likelihood to initiate and pursue a public health related career.

On the surface, PHYAP supports equitable workforce development, addressing the ongoing diversity gap between those receiving community health services and those providing them. The program also helps students understand the root causes of the injustices and inequities which can affect their and their families' opportunities to thrive, including inequitable distribution of good pay, fulfilling jobs and careers, and financial security that extends across the life span.⁷

The Public Health Youth Ambassador Program highlights multiple pathways to community health careers that move beyond the traditional STEM curriculum that focused on clinical or research careers rather than public health. The program provides participants tools to improve their post-secondary educational and career opportunities and enhance critical thinking, community health competencies, and communication skills. Over time, PHYAP also aims to increase diversity among health providers within underrepresented communities. Finally, PHYAP ensures that Fairfax County youth are better equipped to access economic and social opportunities, share in economic growth, live healthy lives, and contribute to the well-being of their community.

Box 1. ITERATIV	Box 1. ITERATIVE SHIFTS AND FUTURE PLANS	SUANS	
	Initial	Pilot	Future
Participants	Black and Hispanic students in grades 10–12 Currently enrolled in HSCHW class	nts in grades 10–12 CHW class	 Underserved students in grades 10–12 Currently enrolled in HSCHW class + alumni
Timing and Location	 Completed during summer to early fall Multiple community locations including school setting 	 Completed within school semester during advisory period Lewis, Justice, and Mt. Vernon high schools with community locations 	 Completion across school year as a general course requirement Expand to other high schools in vulnerable communities + evening and Saturday academies
Curriculum and Staff	HSCHW1 instructor	HSCHW1 lead instructor w/ guest lecturers	 HSCHW + GMU-CPH Public Health Training Course Project Manager supported by class instructors + guest lecturers
Practicum	Ad-hoc field experience w/ community partners	Field experience w/targeted community partners	PLUS • health department options
Completion requirements	75% grade average, consistent class attendance, develop, and present community health project, up to date with assignments	PLUS • participate in field experience	PLUScomplete at least 40 practicum hoursscore 85% on posttest

Box 2. NEW DIRECTIONS

- ✓ Develop an *Advisory Council* that includes participants, parents, collaborative partners and FCHD staff to provide oversight and thought leadership
- ✓ Implement an *Alumni Network* that will serve those pursing diverse postsecondary career and educational pathways
- ✓ Co-design and implement a *mentoring program* between community health professionals, PHYAP high school students, and alumni
- Implement a Community of Practice capacity-building and continuous engagement opportunities that will serve program graduates who pursue postsecondary educational pathways
- ✓ FCHD staff will work with collaborative agencies to implement *career readiness workshops* for PHYA participants and alumni.
- ✓ Office Hours will provide dedicated time with community health leaders who will provide guidance related to career and education pathways
- ✓ FCHD staff will work with high school seniors who receive Morehouse certificates to pursue *paid apprenticeships* by identifying opportunities, assisting students with their application and interview preparation, and providing references

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References

- Smithwick J, Nance J, Covington-Kolb S, et al. 'Community health workers bring value and deserve to be valued too:' key considerations in improving CHW career advancement opportunities. Front Public Health. 2023;11:1036481. https://doi.org/10.3389/fpubh.2023.1036481 PMid:36969656 PMCid:PMC10030954
- Alper J, Dixit N, McHugh K. Engaging community health workers/youth ambassadors to improve health literacy: a workshop. Washington, DC: National Academies, Sciences, Engineering, Medicine, 2023. Available at: https://nap.nationalacademies. org/read/27146/chapter/1. https://doi.org/10.17226/27146
- 3. Wilbur K, Snyder C, Essary S, et al. Developing workforce diversity in the health professions: a social justice perspective. Health Professions Education. 2020;6(2):222–9. https://doi.org/10.1016/j.hpe.2020.01.002

- 4. Alsan M, Garrick O, Graziani G. Does diversity matter for health? Experimental evidence from Oakland. American Economic Review. 2019;109(12):4071–4111. https://doi.org/10.1257/aer.20181446
- Coronado F, Beck AJ, Shah G, et al. Understanding the dynamics of diversity in the public health workforce. J Public Health Manag Pract. 2020 Jul–Aug;26(4):389–92. https://doi.org/10.1097/PHH.000000000001075 PMid:31688743 PMCid:PMC7190406
- U.S. Census Bureau. American Community Survey 1-year estimates. Washington, DC: U.S. Census Bureau, 2022. Available at: http://censusreporter.org/profiles /05000US51059-fairfax-county-va/.
- 7. Milstein B, Roulier M, Kelleher C, et al. Thriving together, a springboard for equitable recovery & resilience in communities across America. Atlanta, GA: Centers for Disease Control and Prevention, 2020.
- U.S. Census Bureau. Median income in the past 12 months (in 2022 inflation-adjusted dollars), American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1903. Washington, DC: U.S. Census Bureau, 2022. Available at: https://data.census.gov/table/ACSST1Y2022.S1903?q=fairfax%20county%20virigina%20median%20 household%20income.
- U.S. Census Bureau. American Community Survey 1-year estimates. Washington, DC: U.S. Census Bureau, 2022. Available at: https://censusreporter.org/profiles /79500US5105907-fairfax-county-east-central-annandale-west-falls-church-baileys -crossroads-puma-va/.
- 10. Abrahamson A, Anglin A, Connelly C, et al. ALICE in the crosscurrents. Staunton, VA: United Way of Staunton, Augusta County & Waynesboro, 2023. Available at: https://www.unitedwaysaw.org/alice-crosscurrents.
- U.S. Census Bureau. Selected characteristics of health insurance coverage in the United States. American Community Survey, ACS 5-Year Estimates Subject Table, S2701. Washington, DC: U.S. Census Bureau, 2022. Available at: https://data.census .gov/table/ACSST5Y2022.S2701?q=S2701: SELECTED CHARACTERISTICS OF HEALTH INSURANCE COVERAGE IN THE UNITED STATES&g=050XX00US5 1059_860XX00US22041,22044,22309.
- 12. Woolf SH, Chapman DA, Lee JH, et al. Dying too soon. Richmond, VA: VCU Center for Society & Health, 2023. Available at: https://novahealthfdn.org/resources/dying -too-soon-report.
- 13. County of Fairfax. 2022 Fairfax County Youth Survey. Fairfax, VA: Department of Management and Budget, 2023. Available at: www.fairfaxcounty.gov/data/youth -survey-results.
- 14. Park JJ, Kim BH, Wong N, et al. Inequality beyond standardized tests: trends in extracurricular activity reporting in college applications across race and class. (EdWorkingPaper). Providence, RI: Annenberg Institute at Brown University, 2023:23–749. Available at: https://doi.org/10.26300/jkcy-x822.
- Meier A, Hartmann BS, Larson R. A quarter century of participation in school-based extracurricular activities: inequalities by race, class, gender and age? J Youth Adolesc. 2018;47(6):1299–1316. https://doi.org/10.1007/s10964-018-0838-1 PMid:29536328 PMCid:PMC6776430
- 16. Instructure, Inc. Canvas. Salt Lake City, UT: Instructure, Inc., 2024. Available at: http://instructure.com.

- 17. Rosenthal EL, Menking P, St. Joh J, et al. The Community Health Worker Core Consensus (C3) Project. El Paso, TX: Texas Tech University Health Sciences Center, 2022. Available at: https://www.c3project.org/.
- Morehouse School of Medicine. Community health worker training program for high school students & young adults. Atlanta, GA: Morehouse School of Medicine, 2022. Available at: https://www.msm.edu/Education/PipelinePrograms/hscommunity healthworker.php.
- 19. Williams-Livingston AD, Ervin CE, McCray GC. 2020. Bridge builders to health equity: the high school community health worker training program. J Ga Public Health Assoc. 2020;8(1):14.

https://doi.org/10.20429/jgpha.2020.080114