



Report of Findings from the HEAL Impact Study

Youth outcomes and experiences through the HEAL work-based-learning and career-exploration internship



Acknowledgments

This report was prepared by Bright Research Group on behalf of HealthPATH, a workforce- and youth-development program within Alameda Health System (AHS). Bright Research Group would like to acknowledge the commitment of HealthPATH and the HEAL staff, who generously gave their time for interviews, connected us with interns for focus groups, and provided us with access to data.



About HEAL

Health Excellence and Academic Leadership (HEAL) is an internship program that provides high school students of color with exposure to career opportunities in healthcare while building their professional and leadership skills through hands-on learning experiences, including shadowing clinicians within different hospital departments, skills workshops, seminars and panel presentations, and simulation-lab experiences. HEAL is a program within HealthPATH, a career-development program of AHS, that was founded as part of a \$10 million grant from The Atlantic Philanthropies to the Alameda Health System Foundation.

<http://healthpath-ahs.org/healprogramapply/>

About Alameda Health System

AHS serves California's East Bay and its diverse community's healthcare needs. The AHS public health system of care includes five hospitals and four wellness centers across the East Bay, from Oakland to Newark.

<http://www.alamedahealthsystem.org/>

About Bright Research Group

Bright Research Group (BRG) is a women- and minority-owned research, evaluation, capacity building, and design firm based in Oakland, California. This report was written by Vanetta Thomas, Moira DeNike, and Allie Hu-Nguyen.

Suggested citation: Thomas, V., M. DeNike, and A. Hu-Nguyen. "Report of Findings from the HEAL Impact Study" (2020).

brightresearchgroup.com

TABLE OF CONTENTS

Introduction.....	1
Methods.....	4
Findings.....	5
Student Enrollment and Engagement.....	5
Impact and Future Aspirations.....	10
Value and Youth Experience	15
Conclusion.....	18
Appendix	20
2018–2019 HEAL Cohorts	20

INTRODUCTION

Work-based learning (WBL) programs, such as internships and apprenticeships, in healthcare settings have lasting impacts on students, safety net hospitals, schools, and—ultimately—the community. WBL programs provide students with skills to succeed in the classroom and the workforce, putting them on a trajectory toward success. For students with diverse learning needs, WBL programs deliver hands-on applied learning that traditional classrooms cannot offer them.¹ WBL programs prepare students for future careers in healthcare by providing a better understanding of healthcare careers through exposure to a variety of jobs; workplace and technical skill development via experience; and mentorship from healthcare professionals.¹

For low-income youth of color, WBL programs provide workplace experiences, social capital, and professional skills development that they may not have access to elsewhere. They gain the most from these programs, demonstrating improvements in school attendance and completion of coursework as well as overall higher graduation and employment rates.^{2,3} Those young people who do pursue a healthcare career gain access to a living wage job while also contributing to their community. Additionally, safety net hospitals that prioritize the enrollment of low income youth of color into WBL programs cultivate a future healthcare workforce that reflects the community it serves and strengthen their standing as anchor institutions. A culturally competent and racially/ethnically diverse healthcare workforce leads to improved quality of care for communities

What is HealthPATH?

HealthPATH is a workforce development initiative of AHS that is rooted in AHS's mission of "Caring, Healing, Teaching, Serving All."

HealthPATH aims to improve the lives of Alameda County residents by providing education and training that lead to careers in healthcare. To that end, HealthPATH offers and coordinates seven different work-based internship opportunities for middle-school students to adults. No other Bay Area hospital system has built a similar network of WBL opportunities.

HealthPATH was launched with a \$10 million grant from The Atlantic Philanthropies in 2015. The Atlantic grant was part of a \$23 million investment in Oakland—which included grants to AHS, the Oakland Unified School District, and the Alameda County Health Care Services Agency—to build pathways into healthcare careers for under-represented youth and young adults.

1. Darche, S., N. Nayar, and K. R. Bracco. "Work-Based Learning in California. Opportunities and Models for Expansion," WestEd (2009). https://www.wested.org/online_pubs/workbasedlearning.pdf

2. Lerman, R. I. "Expanding Apprenticeship: A Way to Enhance Skills and Careers" (Urban Institute: Washington, DC, 2010).

3. Holzer, H. J., and R. Lerman. "Work-Based Learning to Expand Jobs and Occupational Qualifications for Youth," *Challenge* 57, no. 4 (2014): 18–31. doi: 0.2753/0577-5132570402

of color.⁴ Employers, such as healthcare systems, can gain a 200% return on investment through instituting WBL programs.⁵

The HEAL program is a signature program within the larger HealthPATH umbrella network of WBL programs and part of AHS's 10-year vision to create linked learning pathways between the Oakland Unified School District Health Academies and the public hospital system. HEAL aims to shrink the advantage gap that exists in Alameda County between low income youth of color and more privileged youth in accessing WBL experiences in healthcare settings. HEAL provides high school students of color in Alameda County with an immersive healthcare internship that places them on a pathway toward healthcare careers. In 2018, AHS, through funding from The Atlantic Philanthropies, engaged Bright Research Group to conduct an independent evaluation of HEAL. The evaluation explored the impact of HEAL on current and former interns and the value of the experience from a youth perspective. This report documents the findings from the evaluation.

About Health Excellence and Academic Leadership (HEAL)

HEAL partners with Oakland public high schools to recruit students of color who are interested in a healthcare career. The program aims to engage youth who are historically underrepresented in the healthcare professions, regardless of their level of academic performance. To cater to a diversity of students, HEAL offers multiple cohorts that vary in length throughout the year, from summer intensives to yearlong programs, and includes specific cohorts for interns from continuation high schools and for boys of color (see the Appendix). During the academic year, some HEAL cohort activities are integrated with the school day, while others take place after school.



HEAL's program is rooted in the best practices of WBL and consists of four core components—orientation, classroom sessions, departmental rotation, and a simulation lab. HEAL integrates engagement in the workplace, a key element of WBL, which includes three interrelated factors: in-

4. Jackson, C. S., and J. N. Gracia. "Addressing Health and Health-Care Disparities: The Role of a Diverse Workforce and the Social Determinants of Health," *Public Health Reports*, 129, no. 2 (Washington, DC: 1974) (2014), 57–61. <https://doi.org/10.1177/00333549141291S211>

5. California Hospital Association (n.d). "Health Facility Work-Based Learning Program Guide." https://www.calhospital.org/sites/main/files/file-attachments/final_cha_work-based_learning_guide.pdf

depth engagement, communities of practice, and rotation.¹ HEAL hypothesizes that by exposing young people of color to a wide range of healthcare professions in an experiential learning format, interns will experience increased interest in the healthcare professions, engagement in school, academic aspirations, and—over time—educational and professional attainment.

All HEAL internships begin with a two week orientation that covers required training for any AHS staff and cultivates team building among cohort interns. During classroom sessions, HEAL staff engage with interns through an interactive curriculum that focuses on building the interns' professional skills, reflecting on their rotation experience, and expanding their understanding of career and education pathways. Classroom sessions also foster a sense of community among staff and interns. Departmental rotations, a distinguishing element of the internship experience, provide an opportunity for HEAL interns to shadow healthcare professionals in a range of AHS's departments, from the Emergency department to the Information Technology department. HEAL interns are matched with a department supervisor and participate as a member of the care team by assisting with tasks. Lastly, the simulation lab, which was built with funding from The Atlantic Philanthropies, offers HEAL interns additional opportunities for hands-on skill building through simulated procedures, such as CPR, vitals, sutures, and bedside care.

Through program participation, HEAL interns are exposed to four pillars of knowledge and skills that are foundational to their current and future success:

1. **Healthcare Careers:** Students learn about a broad array of healthcare careers and the education and training that are required for one to pursue those careers.
2. **Professionalism:** Students are exposed to the professional norms and skills necessary to be successful in a job in the healthcare field.
3. **Healthcare Skills:** Students learn the importance of collaboration and teamwork in the delivery of healthcare and the skills and attitudes needed for diverse cross-disciplinary teams to function effectively.
4. **Population-Health Management:** Students learn about the social determinants of health and how they affect the health and well-being of individuals and communities.

HEAL is built upon the premise that by providing interns with a classroom education and experiential exposure to a variety of healthcare careers and their pathways, they will identify an educational pathway toward a future healthcare career. As a result, interns are then motivated to attain higher education to reach their career goal. Ultimately, HEAL aims to build a diverse healthcare workforce that will advance health equity for communities of color in Oakland and beyond.

METHODS

AHS engaged Bright Research Group to evaluate the impact and value of HEAL from the perspective of current and former program interns. The following research questions were used to guide this study:

- What are the characteristics of program interns?
- What did interns find valuable about HEAL? How did youth experience the program, and was that consistent with the intended design?
- What impact did program participation have on future career goals, career attainment, and self-efficacy? How has HEAL contributed to the career aspirations of program graduates?
- How do young men of color experience the program? What are the barriers to engagement and messages that resonate with young men of color?

Researchers used a mixed-methods approach to capture the experiences, value, and impact of HEAL participation from a youth perspective:

Method	Description	Sample Size
Youth focus groups	Five focus group discussions were held with interns from in-school, after-school and summer HEAL cohorts	N = 40
HEAL participant survey	Participant surveys were disseminated to HEAL interns enrolled in the spring, summer, and fall of 2019	N = 146
Key informant interviews	Interviews were conducted with key stakeholders, including AHS Leadership, HealthPATH staff, and OUSD staff	N = 19
HEAL alumni survey	Alumni surveys were disseminated to former HEAL interns from November 2019 to December 2019	N = 256
Participant-data analysis	An analysis of demographic data collected from participants enrolled in HEAL from 2018 through the spring 2020 was conducted	N = 490

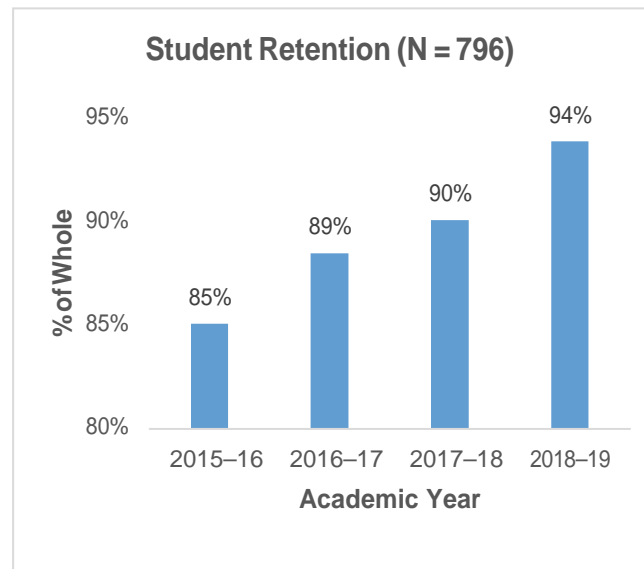
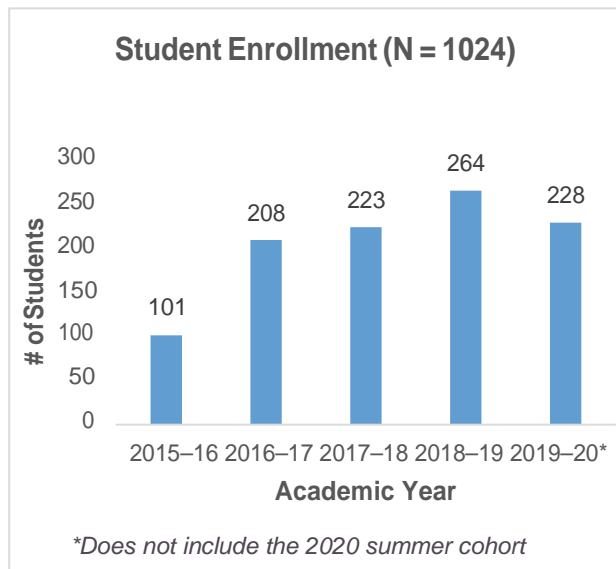
A content analysis was conducted to ascertain patterns and key themes from the focus group discussions and the open-ended responses in the HEAL alumni survey. In addition, bivariate quantitative analyses were conducted on all participant and alumni survey data. The following report summarizes findings on the characteristics of program participants and the impact of the HEAL internship.

FINDINGS

Student Enrollment and Engagement

Demand for HEAL is strong, shown via incremental increases in both student enrollment and retention.

In total, HEAL has provided WBL opportunities to over 1,000 youth from Alameda County over the last five years. HEAL is popular among interns and has experienced significant growth in enrollment and retention since 2015. From 2015 to 2020, student enrollment has increased by more than 150%, growing from serving 100 students each school year to 250 students last year. In fact, more interns are interested in the program than HEAL can accommodate. Last year, only two out of five student applicants were offered an internship. HEAL's retention rate has also increased over time, which indicates strong student engagement. Almost all of last year's interns (94%) completed the program.

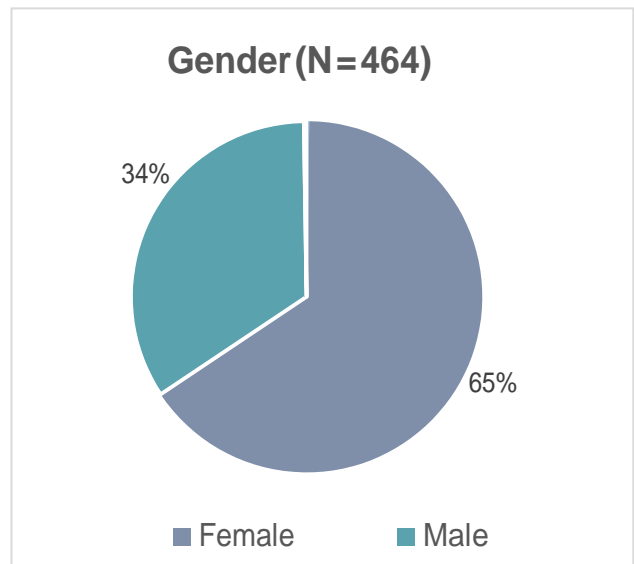
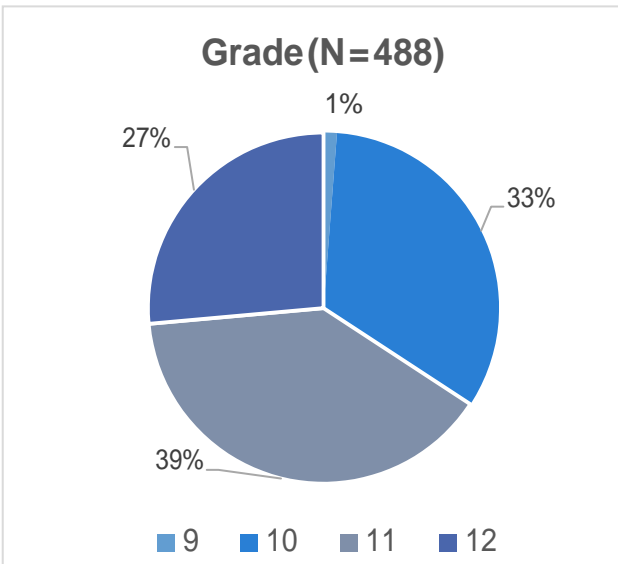
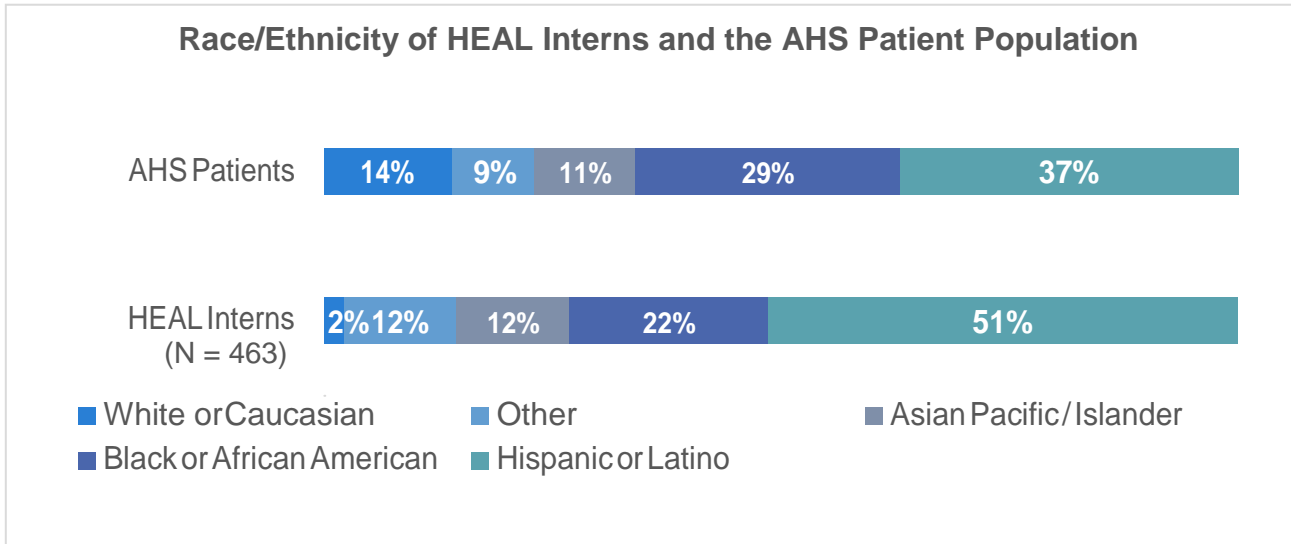


HEAL targets and enrolls high school interns from Alameda County who reflect the diverse patient population of AHS.

HEAL is effectively meeting its goal of providing WBL experiences to youth who are underrepresented in healthcare professions, which reflects the diversity of AHS's patient population. Similar to AHS's patient population, Black and Brown interns are strongly represented in HEAL's intern population: 51.4% are Hispanic or Latino, while 21.8% are Black or African American. Almost two-thirds of the interns are female. HEAL focuses recruitment toward 11th grade students, as it is a

critical year for college planning, and internships during this school year are most impactful in supporting college readiness.

**Data from 2018–2019 and 2019–2020 HEAL interns through the spring 2020 cohort*

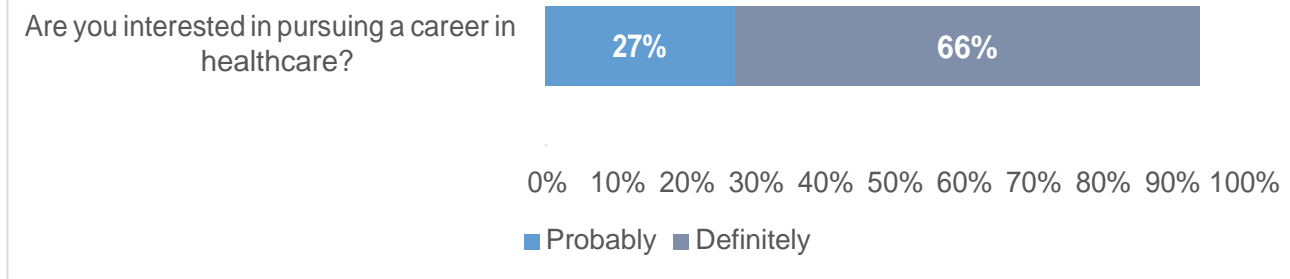


HEAL prioritizes enrolling interns who express an interest in pursuing a career in healthcare and giving back to their community.

Participant surveys indicate that HEAL is effectively attracting its prioritized population—students with a strong interest in the healthcare professions and in giving back to their community. Interns were mainly from Life Academy of Health and Bioscience (30.4%), Oakland Technical High School (15.3%), and Oakland High School (13.3%). More than two-thirds (69%) of HEAL interns are

currently part of a Health Academy or Pathway program at their school.⁶ The evaluation found that a large majority of HEAL interns (93%) were interested in pursuing a healthcare career and that 80% of interns were interested in working at a safety net hospital.

**Most HEAL Interns Are Interested in Pursuing a Career in Healthcare (N = 146)
 2019 Spring, Summer, and Fall Cohorts**



HEAL reaches and impacts students from traditionally marginalized or hard-to-reach populations.

While some high school internship programs select only the highest achieving students, the HEAL selection committee strives to use a holistic approach when reviewing each applicant and does not prioritize academic achievement as a selection criterion. Instead, HEAL aims to recruit young people of color with a passion for learning more about the healthcare professions. For example, during discussions with interns, first-generation students of immigrant families said that without HEAL, they would not have thought that a healthcare career would be feasible, nor would they have known the steps to take after high school to attain a healthcare profession.

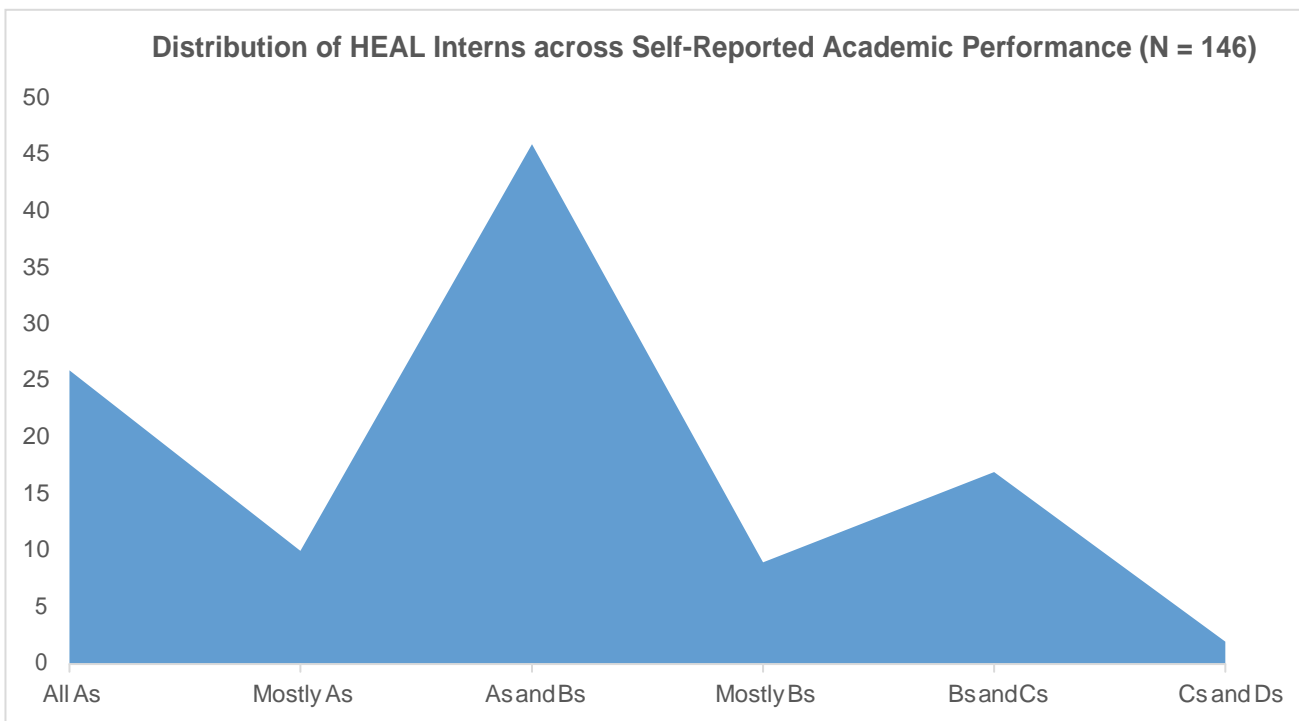
HEAL also partners with two continuation high schools (Rudsdale Continuation School and Dewey Academy) to engage students who are at risk of not graduating from high school or who are behind in their school credits. Approximately 10% of enrolled interns are from continuation high schools. Interns currently enrolled in a continuation high school were most likely to indicate that their HEAL experience increased their motivation to pursue a postsecondary education. Also, Black HEAL interns had significantly higher program value and satisfaction ratings when compared to interns of other ethnicities.

6. Health Pathways is a high school curriculum track that is part of a larger consortium of organizations collectively called the Alameda County Health Pathway Partnership (ACHPP), all working toward the mission of diversity in the healthcare-profession workforce.

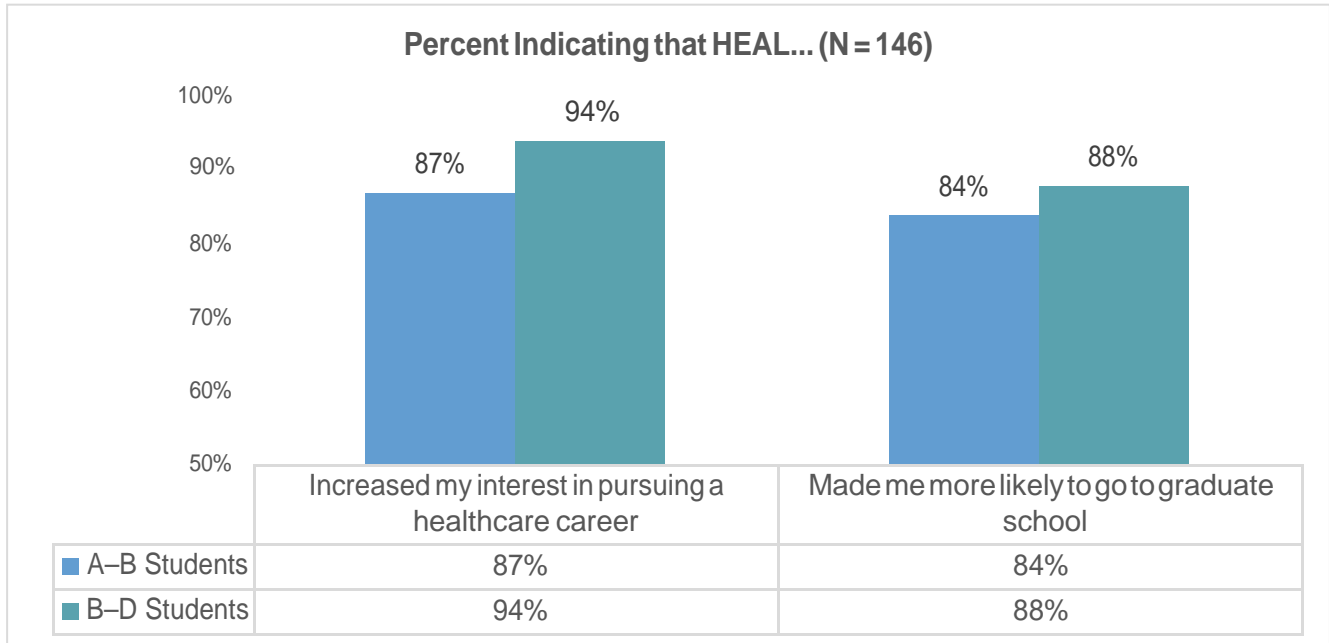
“I wasn’t even going to go to college. I was going to be done with school. But I want to be a nurse, so now I want to go to school for that. It made me realize that I really want to do this, and I’m going to go to college. I want to be in obstetrics and delivery. My family are, like, ‘OK, are you sure? You really want to be educated like that? We are Mayans. We don’t really do anything like that.’”

HEAL serves students across an academic spectrum and exposes interns to a wider array of healthcare professions than they may have been aware of prior to enrolling.

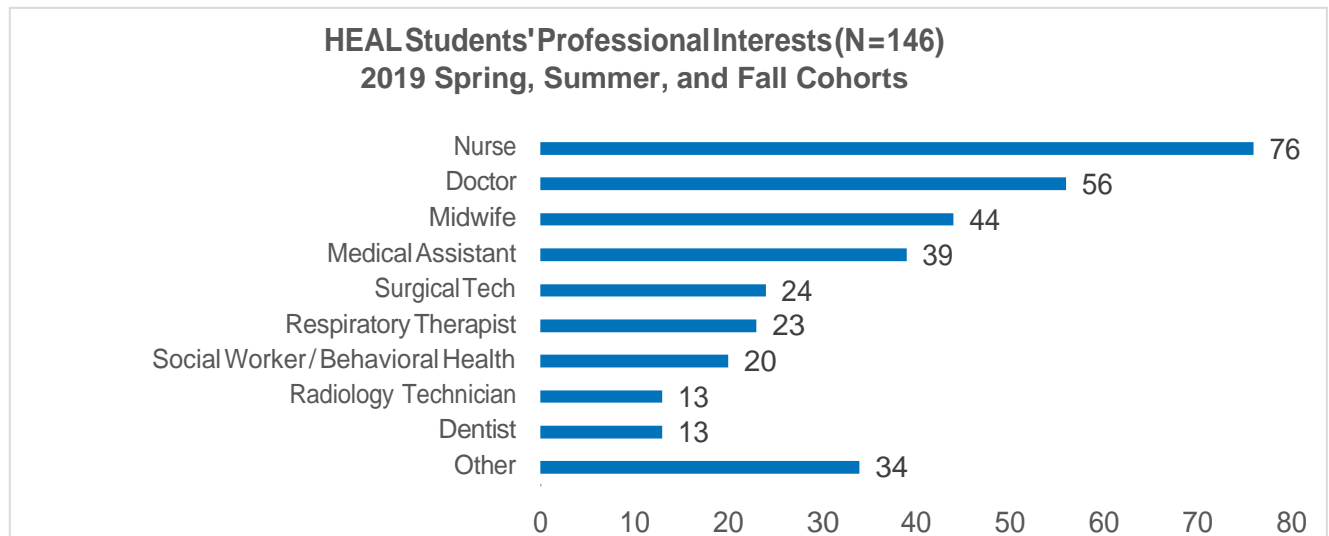
HEAL’s holistic approach to accepting candidates also includes the enrollment of interns with a diverse range of academic engagement and achievement; about two-thirds of HEAL interns reported receiving As and Bs, and 25% report receiving mostly Bs, Cs, and Ds.



Survey findings indicate that HEAL had a greater impact on interns who reported poorer academic performance at the time of program enrollment. Interns reporting that they received Bs and Cs or lower grades were more likely than interns with As and Bs to indicate that HEAL increased their interest in pursuing a healthcare career and made them more motivated to go to graduate school. Additionally, HEAL alumni who reported having done “poorly” or “average” in school had a higher average increase in healthcare career interest compared to interns who self-identified as having done “moderately well” or “very well” in school.



Lastly, raising awareness about the depth and variety of healthcare professions is an important objective of the HEAL curriculum. A large majority (84%) of HEAL interns indicated that participating in HEAL helped them clarify their career interests. Interns were most interested in becoming a nurse or a doctor but also expressed interest in other healthcare professions, such as a medical assistant, midwifery, and respiratory therapy.



Impact and Future Aspirations

Opportunities to network with and shadow hospital staff and guest speakers, especially minority staff, positively impacted HEAL interns' perceptions of the attainability of a career in healthcare.

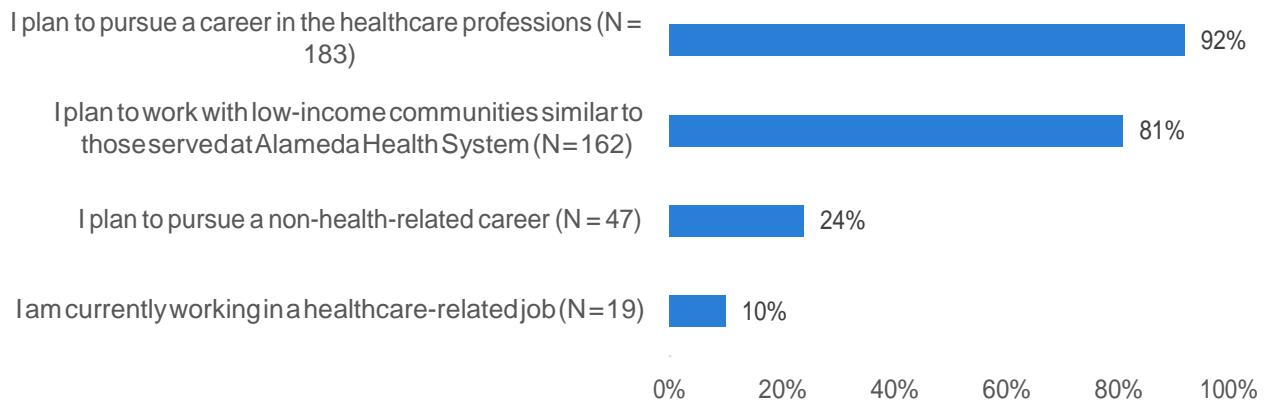
A goal of HEAL is to cultivate and increase the number of the next generation of healthcare professionals of color. HEAL interns have reported that observing people who look like them played a role in affirming their motivation to serve their community and/or work in a safety-net healthcare setting. Current and graduated HEAL interns also expressed that their understanding of the variety of healthcare professions increased as a result of their internship. Alumni survey findings found that interest in pursuing a healthcare profession significantly increased between the time they first applied for HEAL and the date on which they completed their internship. Nearly all alumni survey respondents (92%) intend to pursue a career in the healthcare professions, and four out of five plan to work with low-income communities.

"HEAL changed my goals because before I joined the HEAL program, I didn't see or wasn't aware of 1) trauma nurses; and 2) nurses of African American descent. So being in the HEAL program definitely changed my perception of nursing and also motivated me."

"With HEAL, I learned that there are many other jobs in the health profession that do not deal directly with patients, and I think that I would prefer those types of jobs."

"Before doing HEAL, I wanted to be an MD OB GYN. I thought that was the only way to work with pregnant women, but being in HEAL showed me something different. Through rotating in the women clinic and MCH, I was exposed to many health professionals who did exactly what I wanted to do. I still want to work with women, but now I want to be a CNM."

HEAL Alumni Professional Goals/Status (N = 199)





Isha Clarke

9th Grade at MetWest High School

Biracial

Profession of Interest: Surgeon

“Seeing the social and racial economics of Highland, and how that plays into medicine. You have a huge impact on people’s lives when you’re serving a population that’s constantly swept under the rug and that has a lot of trust issues. Through these programs, I realize I have motivation to change the face of medicine—literally. Maybe I will be an orthopedic surgeon and the only Black woman in the room.”

Youth indicated that their participation in HEAL impacted their educational engagement and future college plans.

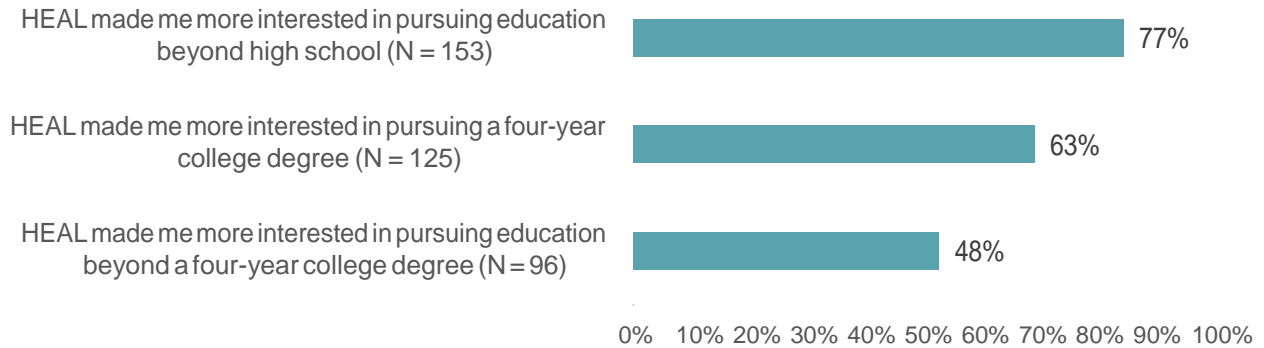
HEAL motivates young people of color to attain education beyond high school. When surveyed about their educational aspirations, a majority of HEAL interns indicated that their participation in HEAL motivated them to work hard in college, go to graduate school, and pursue additional healthcare-related WBL opportunities. Additionally, a majority of the surveyed HEAL alumni said that HEAL made them more interested in pursuing education beyond high school, and nearly half said that HEAL made them more interested in pursuing education beyond a four year college degree. The surveys also indicated that HEAL youth are more motivated to take their education seriously and that they have a clearer sense of their educational and career paths as a result of their HEAL experience.

“I loved being part of HEAL! I couldn’t go to a four-year college due to financial issues, but that didn’t stop me from pursuing a medical career. I did a nine-month medical-assistant program so I could start off in the healthcare setting sooner. I’m now working as a medical assistant, and I’m saving up money to do an RN program. I always think back about HEAL and how it helped me confirm that being in a healthcare setting was my purpose.”

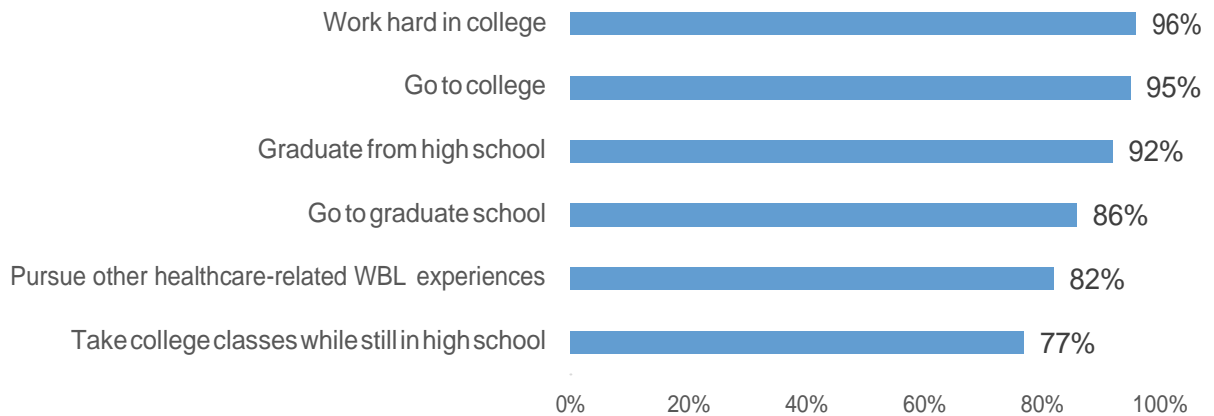
“After completing this internship, my views on everything changed. Being able to help people with things such as translating and giving directions helped me understand why it is so important to give back to my community.”

“Thanks to HEAL—it motivated me to pursue a healthcare career. It also taught me what a hospital setting is like. It gave me an idea of what to expect. I came into the program without an idea of what I wanted to be and came out with a set plan and goal.”

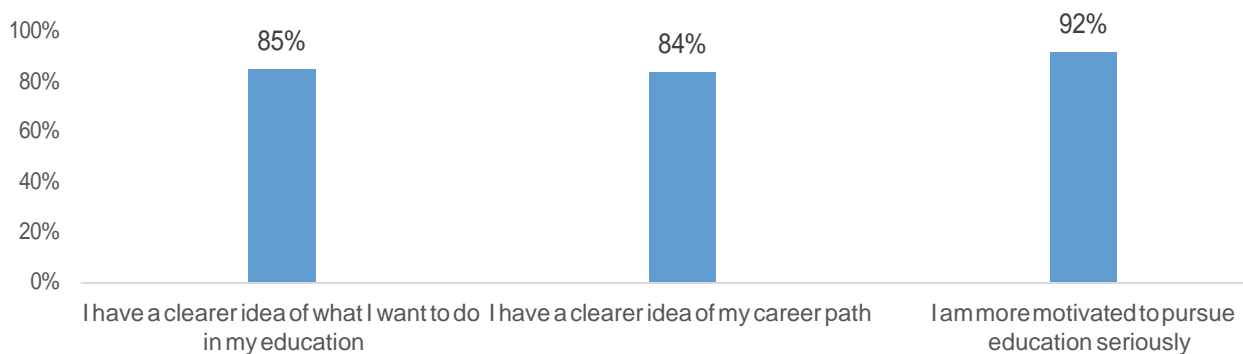
HEAL Impact on Future Goals (Alumni) (N = 199)

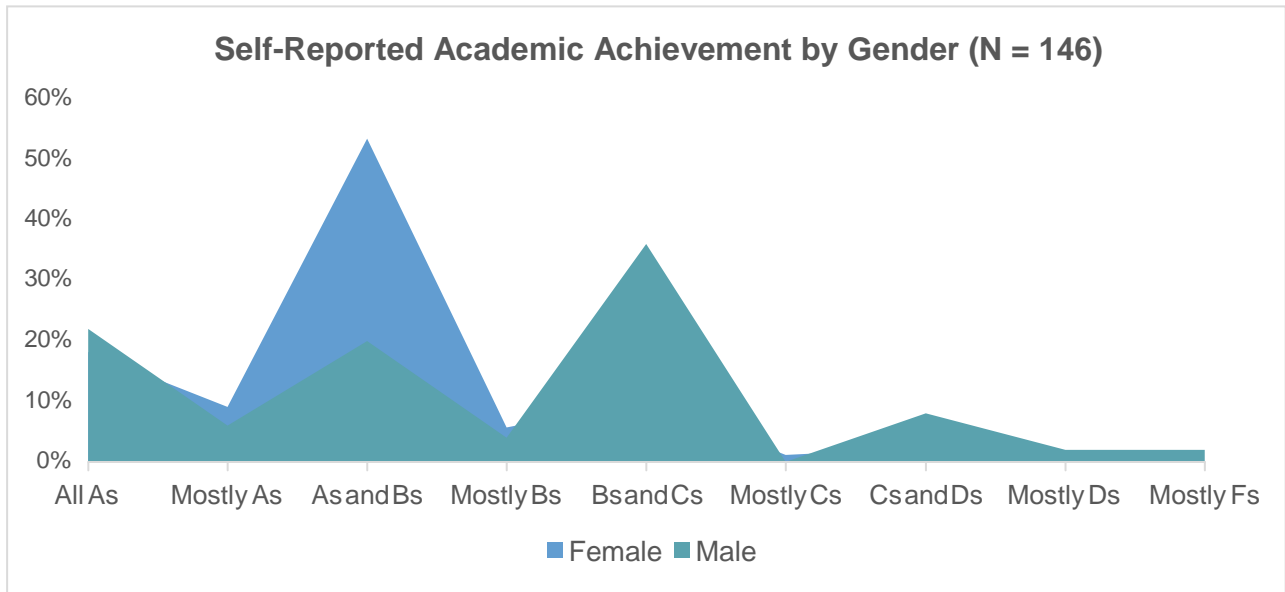


HEAL Impact on Educational Aspirations (% Agree with Statements) "Because of HEAL, I'm more motivated to..." (N = 146)



HEAL Impact on Career Aspirations (% Strongly Agree / Agree with Statements) "Because of HEAL..." (N = 146)





HEAL increases interest in healthcare professions among Black and Brown young men of color.

Young men of color have a substantially higher drop-out rate compared to their peers (22% vs. 9% for other students) and the lowest likelihood of graduating with the course requirements for the public university system in California (A–G) (25% vs. 50% for other students). Young male high school students are nearly twice as



likely as their peers to be classified as chronically absent (28% vs. 15% for other students) and are over three times as likely to be classified as severely chronically absent (15% vs. 4% for other students). As a group, 11th-grade young men of color have approximately twice the Distance from Standard (DFS) score as the district average in English Language Arts (meaning that they have twice the distance to grow in order to meet proficiency levels on standardized tests) and 2.5 times the DFS score in Math.⁷

7. Distance from Standard (DFS) is a measure that compares a school’s English Language Arts and Mathematics scale scores by grade to the state standard for “met.” The score that is produced means that the average student in the school scored that many scale score points above or below the “met” standard (<http://library.ccsa.org/advocacy/accountability/dfs.html>).



Ramon Neal

11th Grade at Oakland Technical School

Black

Profession of Interest: Doctor or Nurse

“I wasn’t very interested in the health field or doctors or nurses—or anything like that. I came to HEAL and fell in love with healthcare, especially working with children. It just shifted my whole outlook on what my future could be like if I take advantage of these opportunities. One of my most memorable experiences is when I saw two surgeries, including a man getting his prostate removed. I just thought that was mind-blowing. What other 16 year old can say they’ve seen the insides of people?”

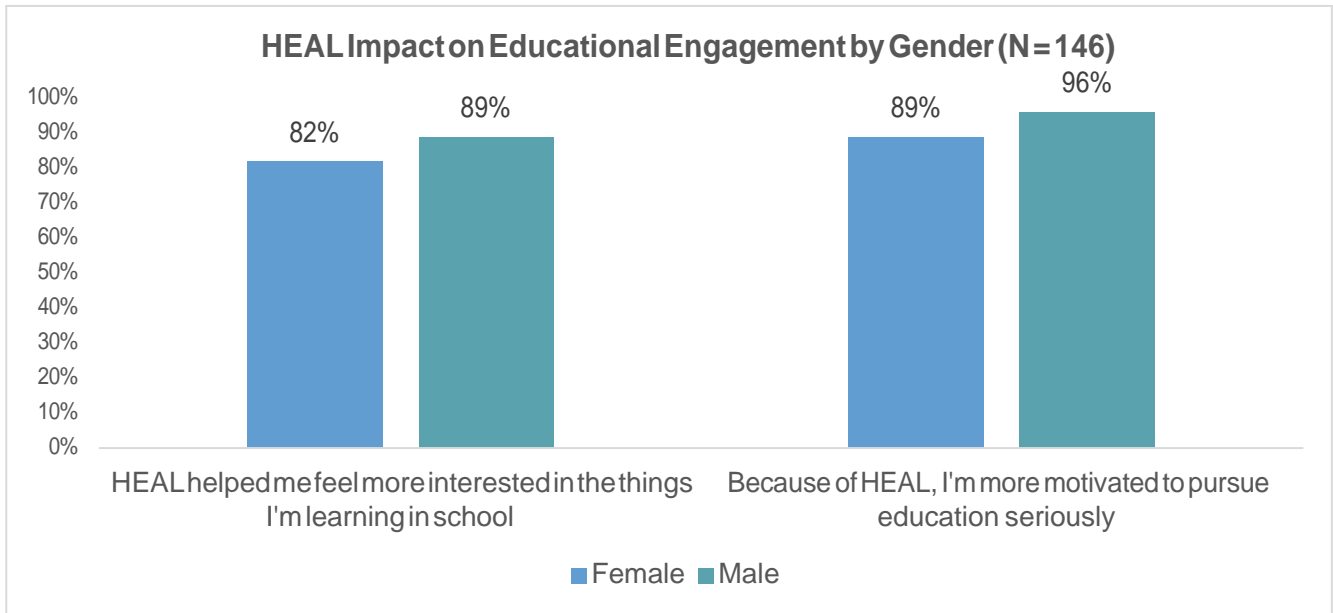
Boys and young men of color are also 2.5 times as likely to be suspended than their peers (5% vs. 2% for other students).⁸ Grades, absenteeism, and higher-than-average suspension rates can, and often do, impose barriers to acceptance into WBL programs for young men of color.

Recognizing the various barriers that young men of color may be facing that impede their access to internships and the fact that HEAL applicants are more likely to identify as female, HealthPATH increased their targeted recruitment efforts and established a Young Men of Color (YMOC) HEAL cohort. Alumni survey findings suggest that the YMOC cohort interns have been positively impacted by their HEAL experience, as there was a significantly higher average difference between their baseline career interest in healthcare professions and their follow-up interest as compared with interns in other cohorts (3.4 vs. 0.52).

“The HEAL program had helped me a lot because I learned new things, such as academic words and experience in health. I met new people, and also I learned how to work in groups/teams. Being in that program—it was not easy for me because I did not speak English, but other students helped me a lot. Sometimes they talked with me in Spanish. It was a great experience. I got to see many things. I went in three different departments, and I learned many things in each department. Now I am in college. Professors use a lot of academic words, and I can understand what they are saying because I learned them in the HEAL program.”

—Latino Male, HEAL Alum

8. All the young-male-of-color figures are comprised from combined data on the OUSD data dashboard for the 2018–2019 academic year for male students who identify as African American, Latino, Native American, Pacific Islander, or Filipino.

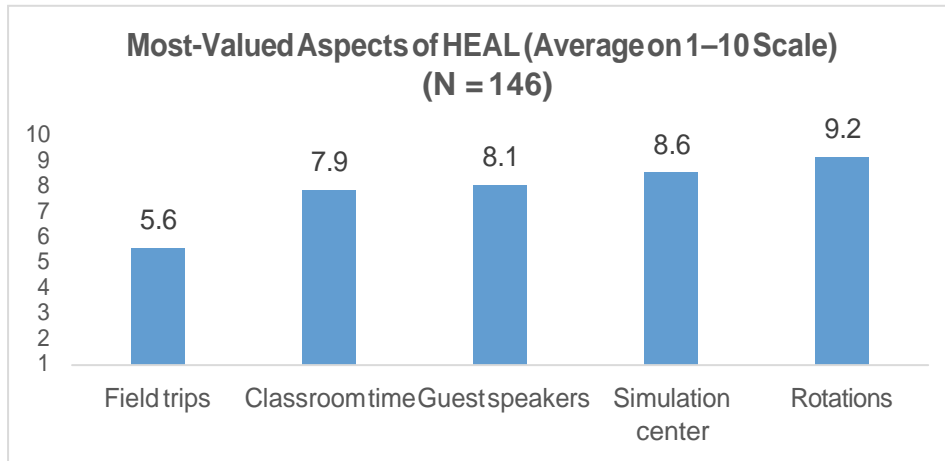


Male interns were more likely to self-report lower academic achievement than female interns were. In addition, the survey data found that relative to their female counterparts, male HEAL interns were more likely to indicate that HEAL made them more interested in what they were learning in school (89% vs. 82%) and that participating in HEAL made them more motivated to pursue their education seriously (96% vs. 89%). These differences were statistically significant and particularly meaningful, given the lower overall self-reported academic achievement of male interns.

Value and Youth Experience

HEAL interns value the hands-on, “front seat” exposure to healthcare professions they receive during their internship.

Rotations and simulation lab activities were cited as the most valuable experiences gained through HEAL. On a scale of 1 to 10 (10 being the highest), HEAL interns rated their rotations and the Simulation Center a 9.2 and 8.6, respectively. Furthermore, young people reported that their rotations through departments, such as the Emergency Department, Maternal & Child Health, and the Morgue, were the highlights of their HEAL internship.



“[We are] seeing events that you usually only hear of. When you watch TV and then actually see it in rotations, you are in the live action, which is exhilarating.”

Current HEAL interns spoke highly of the time they spent rotating through multiple hospital departments, and their praise was reinforced by both the alumni survey results and discussions with HealthPATH staff. Notably, HEAL interns and staff emphasized that the access interns have to hospital staff during their rotations deepens their understanding about different hospital departments and healthcare careers beyond being a doctor or a nurse. The collective feedback from current HEAL interns, HEAL graduates, and HealthPATH staff indicates that the value and impact of HEAL rotations are sustained well after the internship has ended.



Odalys Alva

11th Grade at Oakland Technical School

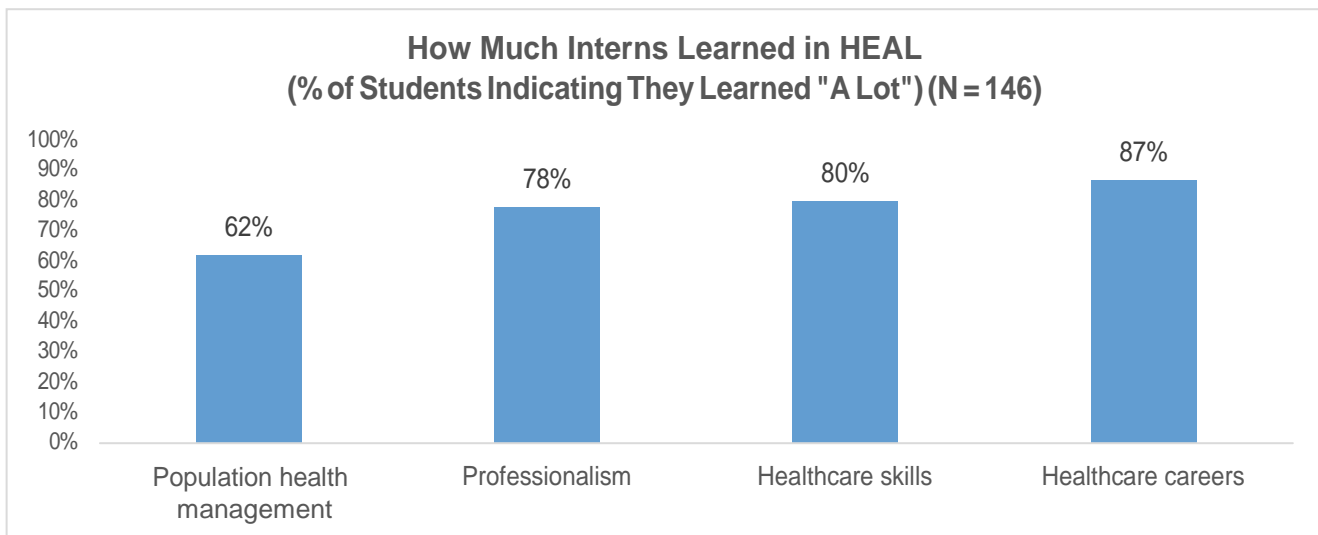
Latina

Profession of Interest: Midwife

I was able to help with a natural childbirth with a woman who had a little bit of trouble with the language, and I was able to translate and help her with it. The midwife gave me a lot of hands-on experience, which was very exciting. This experience gave me the push to be a midwife. I always knew I wanted to work with kids, but this exact moment, when I saw life being brought into the world, I was like, “This is what I want to do. This is my calling.”

Interns are acquiring knowledge and skills associated with HEAL’s program pillars: (1) healthcare careers; (2) professionalism; (3) healthcare skills; and (4) population-health management.

HEAL believes that the aforementioned pillars are critical to establishing a foundation that will reduce the disparities and barriers between underrepresented minority youth and their more privileged counterparts. HEAL interns come from diverse backgrounds, and for many, this internship is their first practical career experience.



HEAL staff design classroom sessions to prepare HEAL interns for their rotation experience, develop their skills and knowledge (both professionalism and proper etiquette for working in a healthcare setting), and apply their learning through the following:

- Role playing different scenarios to prepare youth for potential situations during their rotation and increase their self-efficacy in effectively communicating with others while advocating for themselves.
- Rotation reflections that allow interns to practice their public speaking skills while articulating new insights they have gained about the department they were in.
- Gallery walks around student-made posters on topics such as healthcare careers and social determinants of health that invite interns to think critically; write and share their questions about the posters; and discuss the posters among their peers.

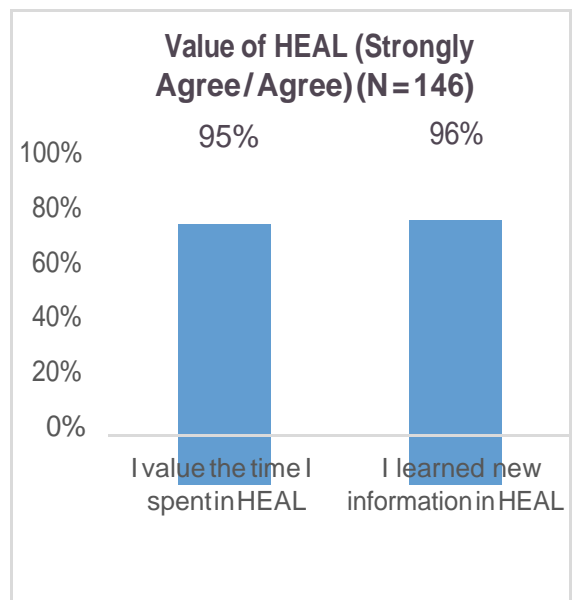
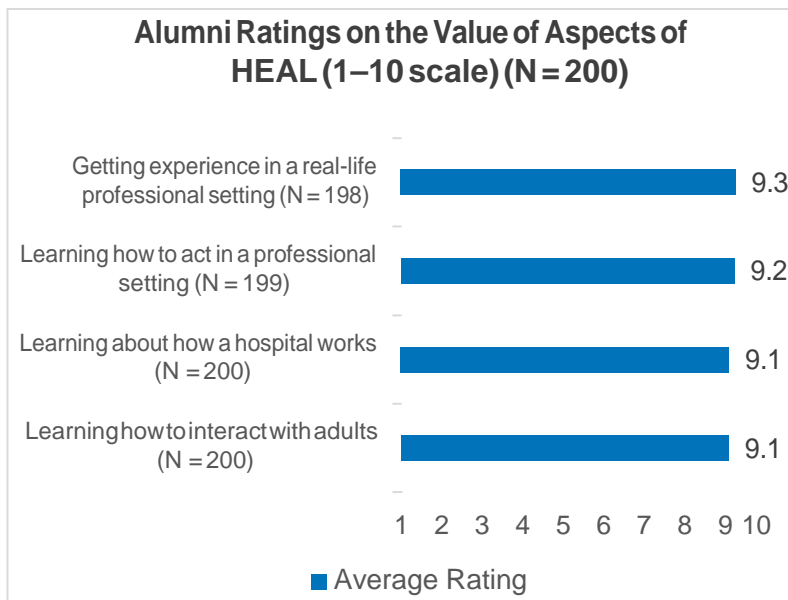
Discussions with current HEAL interns reflect the success of HEAL’s classroom sessions. In particular, young people value the soft skills, such as communication, “code-switching,” and self-advocacy, that they honed through both classroom sessions and departmental rotations. Current HEAL interns referenced the importance of communicating with their teachers, coaches, and HealthPATH staff regarding schedule conflicts, as well as advocating for their learning expectations to their mentors when rotating through hospital departments. Similarly, alumni often noted that HEAL encouraged them to move out of their “comfort zone” and improved their ability to communicate with adults and advocate for themselves. Current and former intern feedback demonstrates that HEAL is successfully

expanding intern’s knowledge with respect to HEAL’s four pillars, which are essential for one’s future success as a healthcare professional.

“I must say, my self-confidence was elevated. I gained a sense of independence and responsibility, cooperative skills, and trustworthiness, and I learned about my strengths and weaknesses.”

“With HEAL I learned that there are many other jobs in the health profession that do not deal directly with patients, and I think that I would prefer those types of jobs.”

“HEAL has helped me discover what specific pathway I wanted to take in healthcare. At first, I use to make general statements about what my dream career was, and now it’s very specific, which helps in knowing what classes I need to take and what people I need to talk to.”



CONCLUSION

Over the last five years, HEAL has provided immersive WBL opportunities to over 1,000 youth of color. During that time, HealthPATH staff shifted recruitment efforts to ensure broader recognition and impact of HEAL by shifting enrollment from middle school and high school to just high school; offering in-school, out-of-school, and summer cohorts; leveraging partnerships with school Health Pathway programs; and launching a YMOC cohort. Through its holistic approach to recruitment and enrollment, HEAL shrinks the advantage gap that exists between low-income and/or marginalized youth of color and youth from more privileged backgrounds by providing interns with exposure to a

variety of healthcare careers; increasing their social capital through networking with professionals; and developing their professional skills.

HEAL participation positively impacts youth educational and professional goals. Focus group data across multiple cohorts and survey data from both current HEAL interns and alumni consistently attest to the impact that HEAL has had on motivations to continue education beyond high school as well as interns' career aspirations. This includes 92% of interns reporting increased motivation to take their education seriously, 92% reporting increased motivation to graduate from high school, and 95% reporting increased motivation to go to college. These findings are even more distinct when compared across self-reported academic performance—with students reporting lower academic scores depicting the greatest shifts in motivation regarding their education and career aspirations. In addition, students who formerly felt like a healthcare career was not achievable expressed that they were inspired by being around adults who “looked like them” and by hearing AHS staff talk about their personal journeys into a healthcare profession.

The HEAL Impact Inquiry set out to assess the extent to which AHS's signature WBL program, HEAL, is meeting its goal to support the development of minority youth in Oakland through exposure to healthcare careers, professional skill and leadership development, and academic enrichment. This inquiry found that HEAL is successfully meeting this goal and is highly valued by its interns, and that its impact on minority youth's educational and career aspirations is sustained beyond the duration of the internship.

APPENDIX

2018–2019 HEAL Cohorts

	2018–2019 HEAL Cohorts	# of Interns Enrolled	Cohort Length	Department Rotation Location
In-School Cohorts	NAVIGATORS Yearlong (May–September)	21	9 months, 2–2.5 hours/day, 2x/week	Highland Hospital
	Pathfinders Spring Cohort	19	12–14 weeks, 2–2.5 hours/day, 2x/week	Highland Hospital
	Pathfinders Fall Cohort	22	12–14 weeks, 2–2.5 hours/day, 2x/week	Highland Hospital
	Investigators Fall Cohort	20	12–14 weeks, 2–2.5 hours/day, 2x/week	Highland Hospital
	Investigators Spring Cohort	22	12–14 weeks, 2–2.5 hours/day, 2x/week	Highland Hospital
	Simulation Cohort 1	18	12–14 weeks, 4 hours/day, 3x/week	Highland Hospital
	Simulation Cohort 2	22	12–14 weeks, 4 hours/day, 3x/week	Highland Hospital
	Simulation Cohort 3	23	12–14 weeks, 4 hours/day, 3x/week	Highland Hospital
After-School Cohorts	Career Explorers Fall Cohort	22	12–14 weeks, 2–2.5 hours/day, 2x/week	Highland Hospital
	Career Explorers Spring Cohort	23	12–14 weeks, 2–2.5 hours/day, 2x/week	Highland Hospital
	Eastmont Fall Cohort	6	12–14 weeks, 2–2.5 hours/day, 2x/week	Eastmont Wellness Center
	San Leandro Fall Cohort (Department Rotation Only)	9	12–14 weeks, 2–2.5 hours/day, 2x/week	San Leandro Hospital
Summer Cohorts	Intensive Cohort (11th-Graders only)	28	5 weeks, 7 hours/day, 5x/week	Highland Hospital
	Young Men of Color Cohort	15	9 months, 2–2.5 hours/day, 2x/week	Highland Hospital
	Total	264		