



# The Impact of a Healthcare Education Outreach Program on High School Students' Career Interests

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## ABSTRACT

### BACKGROUND

Otolaryngology has historically exhibited markedly low representation of underrepresented-in-medicine (URiM) physicians. Providing healthcare-oriented activities for URiM students has been shown, in certain settings, to foster recruitment into healthcare professions.

### OBJECTIVE

To assess the impact of a single otolaryngology department's participation in a healthcare education outreach program.

### METHODS

Under the Health Career Collaborative, staff from an academic otolaryngology department visited two classes of high school students in a Northeast Florida high school monthly for hour-long interactive presentations on their career paths. A six-item survey was distributed at the start, midpoint, and end of the academic year to assess changes in confidence, career planning, and healthcare interest.

### RESULTS

Following 17 staff visits, 31 students, most of whom were Black juniors and seniors, completed pre- and post-program surveys. Students reported increases in healthcare knowledge and career planning confidence. The proportion reporting high mentor support increased, while interest in healthcare careers remained relatively stable.

### CONCLUSION

A healthcare education intervention may improve students' perceptions of support and healthcare career knowledge, demonstrating its potential to enhance career preparedness. Further efforts are needed to identify potential obstacles that may influence long-term career decisions or contribute to reluctance in pursuing such careers.

## BACKGROUND/OBJECTIVE

Otolaryngology remains one of the least diverse medical specialties, with persistent underrepresentation of Black, Latino, and female physicians across training positions and leadership roles.<sup>1,2</sup>

Increasing healthcare exposure and mentorship during high school has been shown to positively influence career interest among underrepresented-in-medicine (URiM) students.<sup>3,4</sup>

In response, an academic otolaryngology department partnered with a local high school to deliver monthly career-focused sessions and assess the impact of the program on participating junior and senior students.

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## METHODS

Otolaryngology staff visited junior and senior students at a Northeast Florida high school.

Sessions featured interactive presentations on staff career paths and personal journeys into healthcare.

A six-item survey, adapted from a Health Career Collaborative pre/post-assessment tool,<sup>5</sup> using a 5-point Likert scale, was distributed at the start, midpoint, and end of the academic year.

Only students who completed all baseline questions plus ≥1 follow-up (midpoint and/or final) were included in the analysis.

Survey domains included confidence, career planning, and interest in healthcare.

## RESULTS

### Demographics

- Thirty-one students participated (16 juniors [51.6%], 15 seniors [48.4%]).
- The mean age was 16.6 years (median 17; range 16–18).
- The cohort included eight males (25.8%) and 23 females (74.2%).
- Most students identified as Black (n = 30, 96.8%), with one identifying as White (3.2%).

### Program Activities

- Students participated in 17 monthly sessions with facilitators representing physicians, nursing, allied health, administration, and trainees.
- Students completed a Mayo Simulation Center field trip (Figures 1C and 1D) with stations in anatomy, cardiopulmonary resuscitation, surgical and intubation skills, otologic techniques, and medical simulation design.

### Survey Outcomes

- **Healthcare knowledge:**
  - At baseline, 42% rated themselves as “Very” or “Extremely knowledgeable.”
  - At the final survey, 100% reported increased knowledge, including 59% who reported “Much more.”
- **Mentor support:** 77% rated themselves as “Very” or “Extremely supported” at both midpoint and final surveys.

## RESULTS

- **College confidence:**
  - At baseline, 68% reported being “Very” or “Extremely confident.”
  - By the final survey, 77% reported increased confidence.
- **Career planning:**
  - At baseline, 55% described their career plans as “Very” or “Extremely detailed.”
  - At the final survey, this increased to 82%.
- **Healthcare career interest:** At baseline, 55% reported thinking about a healthcare career “Often” or “Very often,” compared with 53% at the final survey (Figure 2).

Figure 1. Classroom visits and simulation center field trip.

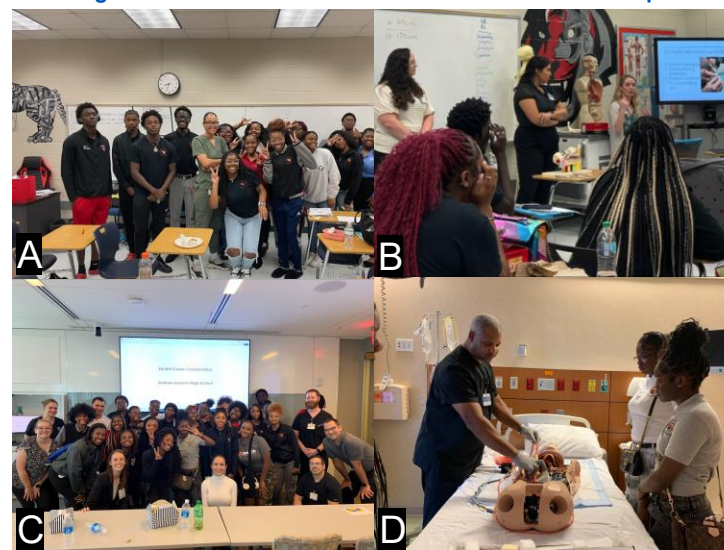
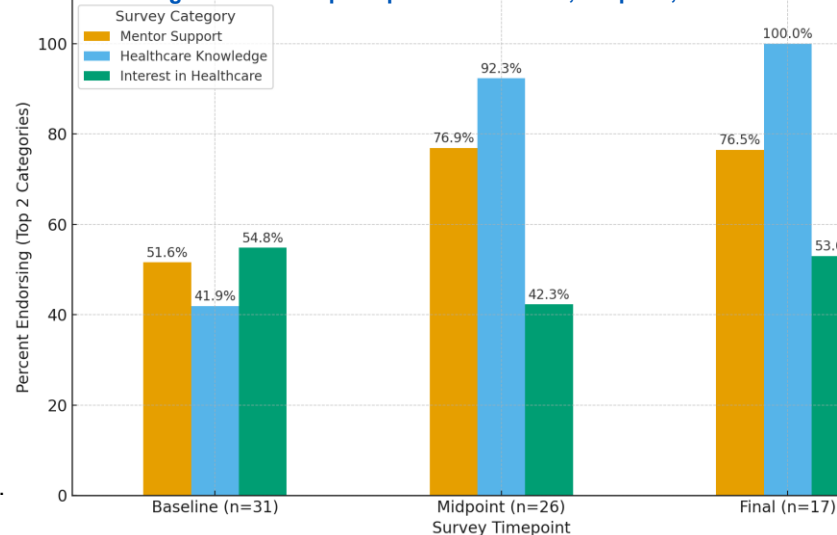


Figure 1. (A) Group photo after the second classroom visit led by an otolaryngology scheduler. (B) Audiology team presentation. (C) Group photo from the Simulation Center visit. (D) Gastrointestinal bleeding simulation demonstration.

Figure 2. Student perceptions at baseline, midpoint, and final.



## DISCUSSION

- Facilitators included professionals from varied backgrounds and roles, fostering inclusive mentorship and highlighting a broader range of accessible career paths.
- The program provided structured exposure to healthcare careers through classroom visits and hands-on simulation experiences, offering students early engagement with real-world clinical skills.
- High school-level pipeline initiatives remain uncommon, particularly within surgical specialties such as otolaryngology.
- Program feasibility was supported by integration into class schedules, collaboration with school administrators, and diverse faculty participation.
- Results demonstrated improvements in perceived mentor support and healthcare knowledge, suggesting the program's potential to enhance early career preparedness among high school students.
- Interest in healthcare careers declined at midpoint before stabilizing by the final survey. This may reflect early misconceptions being clarified, followed by renewed interest as students were exposed to a broader range of professions.

## CONCLUSION

- This pipeline program provided high school students with early exposure to diverse healthcare careers through mentorship, simulation, and classroom engagement.
- Early outreach initiatives may strengthen students' sense of support and healthcare knowledge, equipping them with the tools to pursue future careers in healthcare.
- Continued investment in community engagement, mentorship, and longitudinal tracking is needed to address persistent disparities in the otolaryngology pipeline.

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