



Exploring Careers in Healthcare & Onward (ECHO): A community outreach program to promote healthcare career interest in K-8 students surrounding the CU Anschutz medical campus



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Background

- Early exploration can strongly influence children’s career development. Past research suggests that children from low socioeconomic backgrounds have a relative lack of exposure to the healthcare environment, which has been adversely associated with healthcare career interest.¹
- Numerous studies emphasize the value of cultivating early interest in healthcare careers as a proactive approach to addressing the shortage of healthcare professionals in low socioeconomic communities.¹
- Although previous research has largely focused on career interventions for teenage adolescents, there remains a significant gap in initiatives targeting elementary and middle school students.

Objectives

- Our community outreach program Exploring Careers in Healthcare & Onward (ECHO) is designed to allow elementary- and middle-aged students explore careers in healthcare and learn about basic physiological concepts through interactive and engaging hands-on experiments.
- The main objective is to increase exposure and interest in healthcare careers in elementary- and middle-aged students within the community surrounding the CU Anschutz medical campus and ultimately strengthen the pipeline for diversity of the medical workforce.

Methods

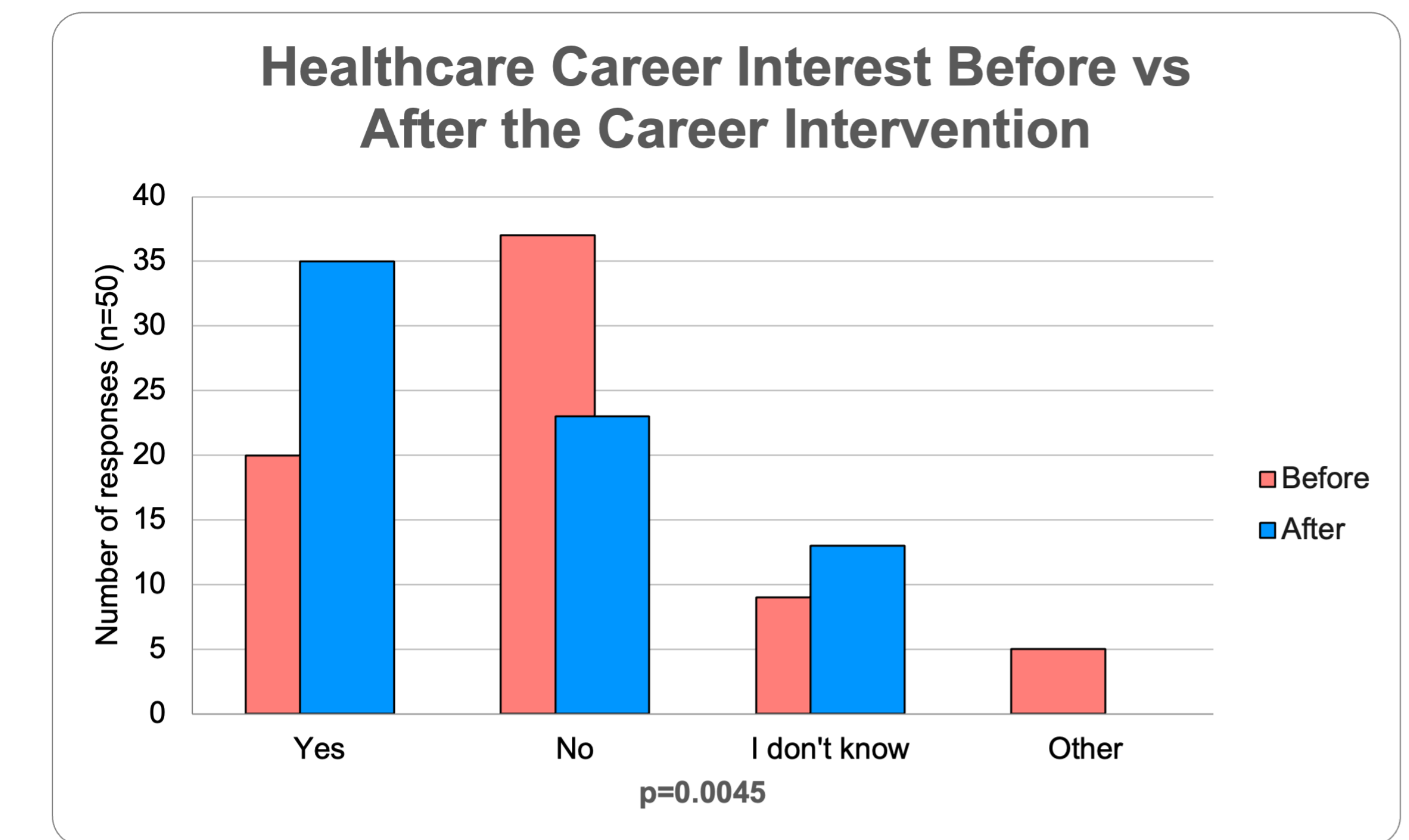
- From December 2024 to September 2025, ECHO offered three career fairs at local libraries and elementary schools in Aurora County.
- Participants were recruited through advertising at partnering schools and libraries in Aurora, CO neighborhoods surrounding the medical campus, most of which have a large population of students who qualify for free or reduced-price lunches.
- The events offered **four activities** centered on various body systems and medical specialties. Activities were developed with the intention of introducing **basic concepts of human physiology** by rooting the curriculum in concrete body systems that children could easily identify (ex: the lungs). Activities are as follows:
 - 1. Build Your Own Stethoscope (**Cardiology**)
 - 2. Learn About Lungs (**Pulmonology**)
 - 3. Make a Surgeon’s Bracelet (**Surgery**)
 - 4. All About Reflexes (**Neurology**)



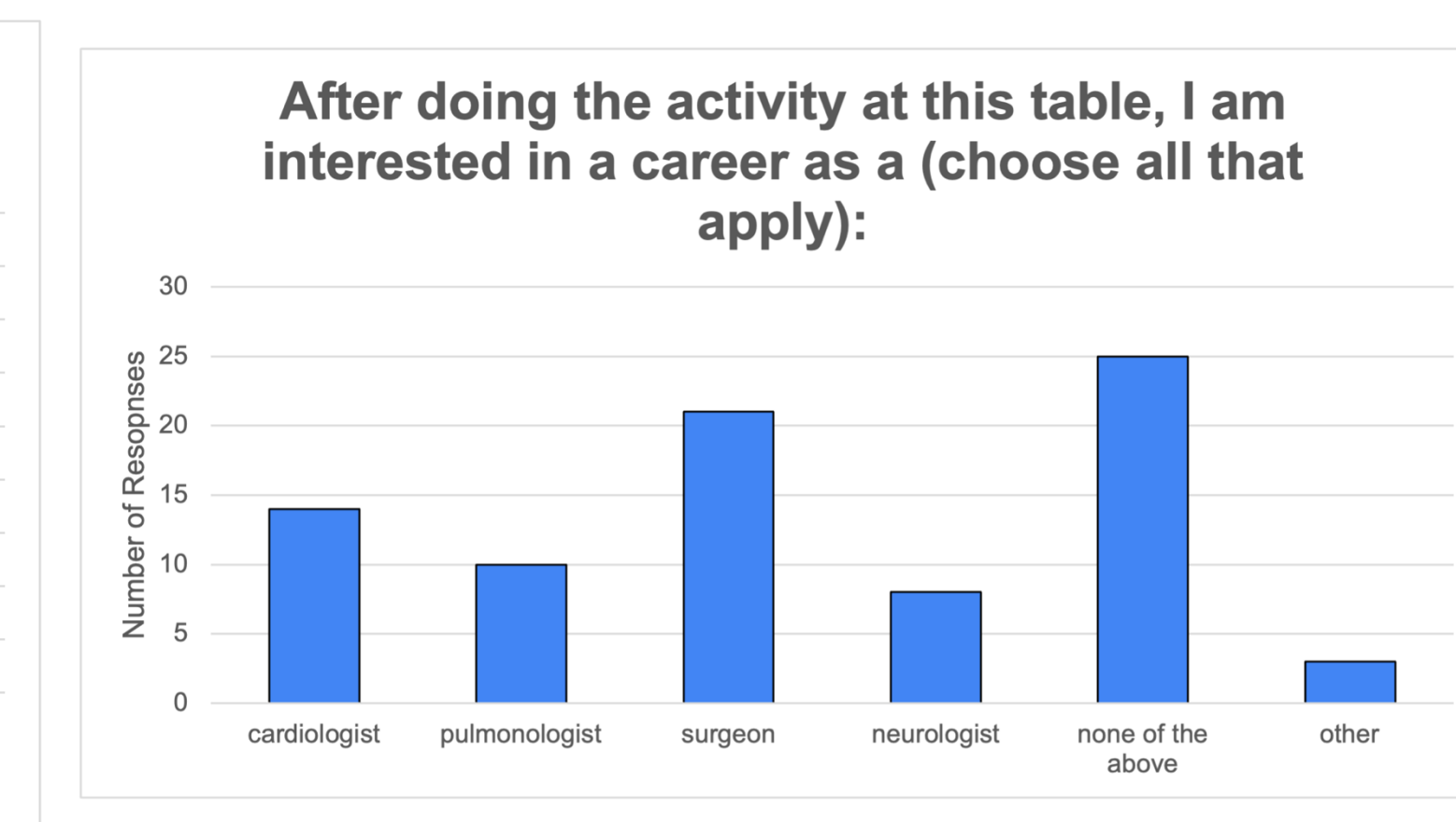
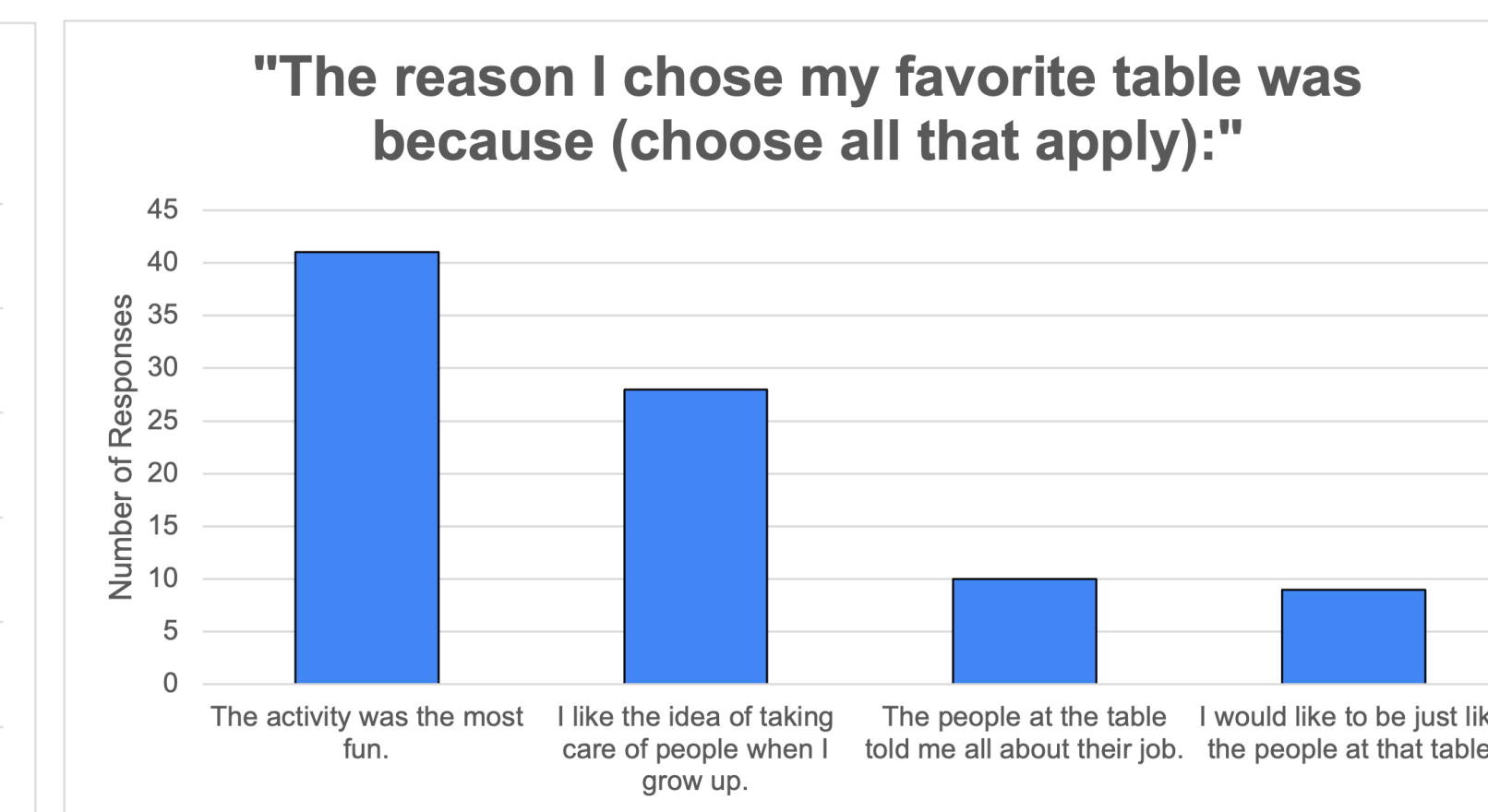
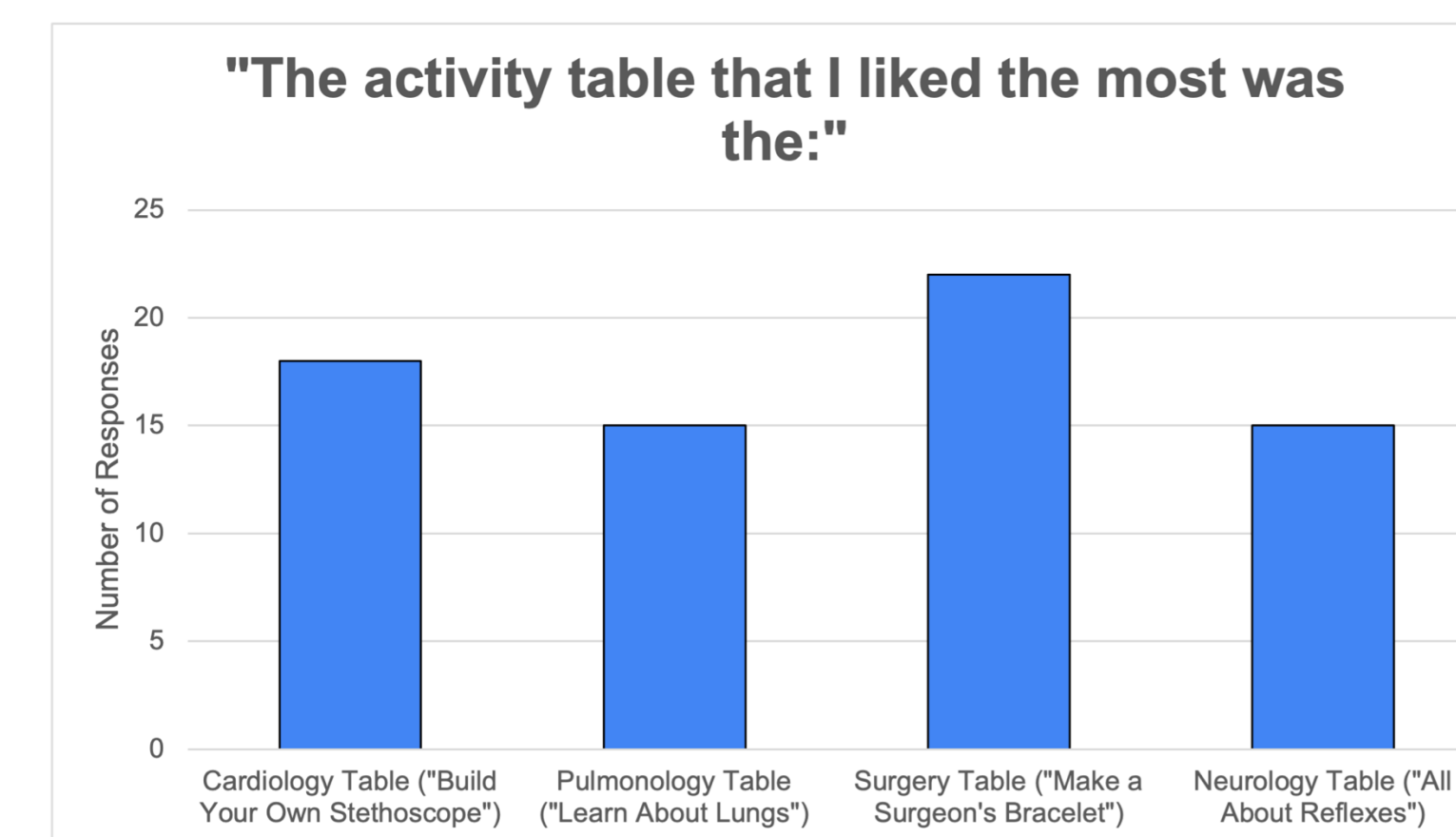
- Each activity was led by 2-4 volunteer medical students or training physicians from the University of Colorado Anschutz Medical Campus.
- Following completion of all 4 activities with the fair, participants completed brief anonymous post-event surveys that evaluated interest in the activities offered and medical professions before and after the career fair. Responses were measured on a scale of three points (1 = No, 2 = I don’t know, 3 = Yes).

Results

- Over the three events hosted between December 2024 and September 2025, **71 elementary and middle school students** participated in the ECHO career fair and completed post-event surveys.
- Of those surveyed, there was a **175% increase in “Yes” responses** to the question “I am interested in a career where I grow up to be a doctor” following completion of activities. This increase in reported healthcare career interest is **statistically significant** (p=0.0045).



- Relative popularity of activities followed the same pattern as reported interest in specific careers in medicine, with the surgery activity and profession being the most popular activity table and career, followed by cardiology, neurology, and pulmonology. The most frequently cited reason for why a favorite activity was chosen was “The activity was the most fun.”



Discussion and Future Directions

- Our post-survey results demonstrate a **significant increase in healthcare career interest following completion of the ECHO career fair curriculum**. This demonstrates the ability of a one-time career-based intervention to directly impact vocational aspirations in elementary and middle school students. Factors such as fun and level of engagement are valued most heavily by participating students.
- In our efforts to make the ECHO curriculum more accessible, we uploaded the ECHO lesson plan and materials in July 2025 to **CU Digital Collections** and **MERLOT** in the hopes that others can host their own ECHO events in the future.
- Ultimately, our hope is that by creating opportunities for children surrounding the CU Anschutz medical campus to engage in hands-on medical learning experiences, **ECHO can foster the curiosity of youth towards the pursuit of healthcare careers in their professional futures.**

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ECHO curriculum

