

Education, support, and outreach for unserved communities

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Learning Objectives

- Learn how diversity, equity, and inclusion efforts can influence interest in pursuing a career in anesthesiology and medicine.
- Analyze the demographics of the current Anesthesiologist Assistant Profession
- Assess how outreach programs increase diversity of applicants and if correlation can be drawn
- Create programs and opportunities to increase diversity in the Anesthesiology Assistant profession.

Background

Underrepresented minorities (URM) are “those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population.” These groups consist of Black Americans, Mexican Americans, Native Americans, and mainland Puerto Ricans. The increase of URM in medicine has numerous implications. Patients are more likely to see care, share sensitive health information and be given culturally sensitive care when a provider is representative of the patients’ gender and/or ethnicity [5,7]. The subspecialty of anesthesiology is no exception.

According to 2018 data from the Association of American Medical Colleges (AAMC) the subspecialty of anesthesia is not representative of the general population. Based on this data, 95% of males in anesthesia were white and 56% of females white. Females made up a total of 49% of the anesthesia subspecialty in 2018. For the anesthesiologist assistant profession, 70% are white, 4% are black, 12% are Asian, and 3% are Hispanic.

Various approaches to address the underrepresentation of URM in the medical field have been attempted. Middle and high school pipeline programs that provide educational activities, career counseling, and college tours show promise for increasing URM entrance into college [9]. Retention focused strategies may implement mentorship, service learning, and academic support [4]. This project aims to address the aspects of career counseling, provide cultural experiences, provide service-learning opportunities, and focus on retention of underrepresented minorities through the below methods.

Methods

Data was gathered from the Anesthesiologist Assistant program from 2016 to 2022 and included the demographic of the matriculates.

Outreach events for high school students have been held to educate individuals that belong to underrepresented minorities about medicine and the specialty of anesthesiology. The events included a presentation, airway workshop and anonymous survey. The survey was administered at the end of each event to gain insight into the impact the session has on the interest of high school students in a career in the medical field and anesthesia. When outreach stretches to international communities, we do similar educational workshops but geared toward more advanced existing knowledge. These workshops would include skill-based labs as well as data collection for needed resources in the area. This information will be used to drive fundraisers.

Results

The demographics of the students in attendance of the presentations were not evaluated. However, 50% of the students had at least one parent that attended college and 20% of students had one parent with a career in the medical field. Only 5% of the students had a family member with a career in anesthesia. With the question “did you have an interest in the medical field before this presentation,” 65% of students strongly agreed, 30% agreed and 5% did “not really” agree.

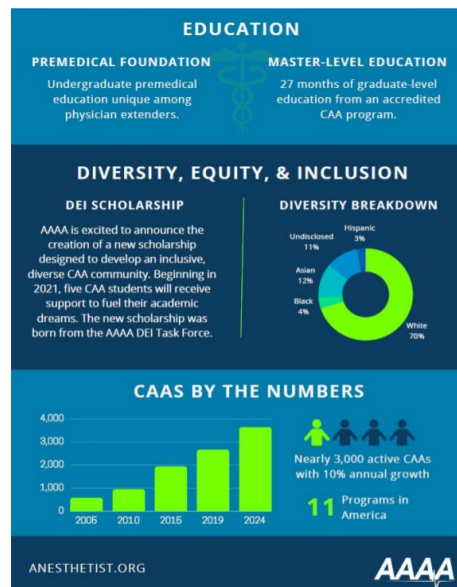


Figure 1. Infographic displaying current demographics within the CAA community.

Interest in an anesthesia career after the presentation

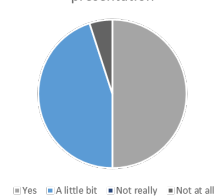


Figure 2. Relative percentage of survey respondents who became interested in anesthesia after the presentation.

Interest in becoming an Anesthesiologist Assistant after the presentation

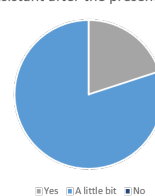


Figure 3. Relative percentage of survey respondents who became interested in anesthesia after the presentation.

Results continued

After the presentation 20% of student were interested in a career as an anesthesiologist assistant while 80% where “a little bit” interested. Prior to the presentation only 20% of surveyed students have not heard of the anesthesiologist assistant profession. An overall increase in exposure of the anesthesiologist assistant profession was observed in students that would not have otherwise been aware of it.

Future Goals

For the continuation of this project, improvement consists of revision of survey questions to have more consistent language and include questions about student demographics. There will also be a pre-event and post-event survey to better evaluate the impact of the presentation on the opinions and desires of the students. Additionally, more presentations will be provided to increase the sample size. To further engage individuals of underrepresented groups, the goal is to create opportunities to shadow or intern with established anesthesia providers.

To increase global outreach, a one-month rotation for an anesthesiologist assistant in Uganda will be implemented. This aspect of the project will include supplemental education for the anesthesia officers, evaluation of the community’s needs, and provision of various resources for the practice of anesthesia. Potential changes in the demographics of applicants and matriculants to the CU AA Program relative to the inception of the Diversity Scholarship will be documented.

Conclusion

Through knowledge gained from this project a diversity scholarship for incoming AA students was established with the AAAA. This will need to be evaluated to determine if it contributed to potential changes in the demographics of the AA profession. The Diversity Scholarship at the University of Colorado will be evaluated for its efficacy in attracting URM students. Established relationships with multiple educational programs will be maintained and expanded to increase the interest of URM in anesthesia. Finally, the Uganda rotation meets the criteria as a service-learning project, mentorship, cultural experience, and research opportunities to encourage future retention of diverse students.

The Anesthesiologist Assistant profession needs to continue their efforts to increase diversity, inclusion, and equity. Clinicals and current students should continue to voice the scholarship opportunity, participate in outreach and retention efforts for underrepresented minorities.

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