

Suturing the Gap

The benefit of an advanced surgical workshop for PA students interested in surgery

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Students trained to operate during live animal surgery

Purpose

While there are over 38,000 PAs currently working in a surgical specialty or subspecialty^{1,2}, there are few accredited PA programs in the United States that offer a comprehensive study of the field of surgery^{3,4} creating a high demand for trained surgical PA's.

The Advanced Surgical PA Workshop (ASPAW), at the University of Alabama at Birmingham, was created to help bridge this gap in PA education. The workshop exposes PA students to a wide, representative array of surgical skills coupled with relevant surgical knowledge in a format that is engaging, innovative and enhances understanding of the purpose and retention of the skills being addressed.



Excising implanted tumors from repurposed pig flanks

Methods

Each year, 18 PA students from across the country converge on the UAB campus to be immersed in all matters of surgical technique. Admission into this fully funded educational experience is competitive. For the class of 2023, 75 students from 25 PA programs applied. Both didactic and clinical year students are encouraged to apply. The selection process is based on interest in surgery, academic standing, and a nomination from their individual PA program. UAB has one of the few PA programs in the country with a robust surgical emphasis that augments their core curriculum, making it an ideal location for this specialized training. During the intense 5-day workshop, ASPAW makes every effort to ensure each skill is offered using authentic surgical methods including live animal surgical assisting, use of harvest animal flanks, and performing all skills "to completion", creating a more realistic educational experience. Students also work within laparoscopic task kit trainers several times a day to develop the dexterity, haptic feedback and hand-eye coordination necessary to be effective surgical operators.

Discussion

Surgical training opportunities while still in PA school are limited due to lack of availability and appropriate resources. Training programs such as ASPAW provide a comprehensive approach to learning surgical skills that gives the student a more realistic learning experience to improve mastery and confidence that can translate to overall better patient care, clinical outcomes and job satisfaction.



Laparoscopic dexterity training units (task trainers)

Results

- Combining data from both cohorts, pre-test and post-test analysis of general surgical knowledge revealed an impressive 179% average improvement in knowledge after the completion of the 5-day program.
- Participant overall satisfaction was measured using a 3-phase exit survey that gauged participant satisfaction and program benefit on the last day of the program, at 6-month and 2-year intervals. Initial qualitative feedback has revealed an extremely high level of satisfaction among all participants. 100% of the program participants would recommend the program to others.
- Students report they felt more confident and prepared for clinical rotations and felt the program helped them stand out to preceptors and potential employers. One participant stated, "My school does not prepare me for the majority of the procedures and methods that we learned during this week, so I couldn't be more thankful for this experience."



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References:
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3. Cook A. Increasing Surgical Training in PA Programs Nationwide. Future Educator Forum Presentation at PA Education Association Annual Meeting; October 11, 2023; New Orleans, LA.
4. Accreditation Review Commission on Education for PA's. Accessed August 8, 2021. <http://www.arc-pa.org/accreditation/accredited-programs/>