

Innovative Solution to a Chronic Anesthesia Technician Shortage Riverside University Health System

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Background & Issue

Anesthesia Technician (ATs) positions were difficult to recruit for, both pre and during the COVID pandemic. No local program existed for us to use as a "pipeline" for recruitment to AT positions.

Perioperative management and Anesthesia Providers elected to recruit candidates internally and deliver education to create competent practitioners.

Team Members

Perioperative Educator

OR Director

Senior Anesthesia Leadership

Current Anesthesia Technician team members

Goal of Education

Create Anesthesia Technicians able to practice independently and competently.

Implementation

Position description was broadened to increase the range of eligible classifications and backgrounds to assist with recruitment.

Curriculum was created that included theory and practicum utilizing a variety of sources included text, articles, vendor and anesthesia provider presentations.

The new AT s were supported by the current AT team members and anesthesia providers

Program was administered over a nine-month period Students were evaluated using written assessments, skills demonstration, and a written/practical final exam.

Current AT s were also included in the education program.

Anesthesia Technician Education

Purpose of the Course

The purpose of this education is to provide knowledge on the role an responsibilities of the anesthesia technician and its relations to assisting the anesthesia provider.

Specific Objectives

- Demonstrate the ability to comprehend, apply and evaluate clinical information to effectively collaborate with the Anesthesia Care Team
- Demonstrate entry-level competency in cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains
- Demonstrate professional behaviors consistent with stakeholder expectation of an Anesthesia Technologist

Text

"The Anesthesia Technologist's Manual", 2nd ed, Guimareaes, E, et al, 2019.

Other articles, information provided during class

Schedule of Topics

Feb, 2022	Chapter 2,4,5,7,8
100, 2022	Quiz on readings
March/April, 2022	Chapter 3, 6, 9 Quiz on readings
May, 2022	Chapter 17, 19, 23, 33, 34 Hand out_ ASATT Scope of Practice. Using the handout, text, and any other resources desired write a one-page paper on key areas of practice for the Anesthesia Technician (AT). Due by June 1
June, 2022	Chapter 24, 25, 26, 27, 47 Possible workshop with GE Review of sterile technique, scrubbing, gowning, and gloving, Be prepared to demonstrate
July, 2022	Chapter 15, 16, 18, 20, 21, 22 "An Overview of Neuraxial Anesthesia: Read article, complete test, and turn in by July 31 "Perioperative Fluid Therapy" Read article, complete test, and turn in by July 31
August, 2022	Chapter 29, 31, 36, 39, 40 Skills Lab using Airway Devices "Pediatric Case Study: Difficult Airways" Read article, complete test, and turn in by August 31
Sept., 2022	Chapter 57, 58, 29, 60, 61, 62 Using the text, Moodle, and any other resourced desired, choose two different emergency situations form the assigned chapters (two different chapters) and write 1-2 paragraphs about each situation and key areas the Anesthesia Technician should be aware of a how they should/can assist the Anesth. Provider.
Oct., 2022	Chapter 50, 51, 52, 53, 54, 55 "Case Study: Pediatric Airway, Management Epiglottitis" Read article, complete test, and turn in by October 31 "Obstetric Emergencies" Anesthesiology Clinics of North America 21 (2003) 111-125 Quiz on OR Emergencies
Nov., 2022	Chapter 37, 38, 41, 42, 43, 44, 45, 46, 48, 49 "Should Intraoperative Cell Salvage be considered for Obstetric Hemorrhage?" Read article, complete test, and turn in by November 30 Using the text and any other resources desired prepare a 5–10-minute presentation on one chapter. Include use, AT support/assistance provided to Anes. Provider, safety concerns and cleaning. Choose your topic and sign up with Amy- First come, first served.





Outcome

We had an <u>80% retention rate</u>; four of the five candidates completed the program.

All the Current and new ATs completed the final exam process with a **100% pass rate**.

All graduates are practicing safely and competently within our own facility.

Prior ATs, being involved in the course, received new and current information to enhance own their practice as well as are aware of the education that the new team members received.

We are successfully recruiting for the new cohort of Anesthesia Technician team members; the new ATs are the best word of mouth publicity that we could hope for!

Conclusions

By recruiting and educating our own Ats, we were able to create valuable independently practicing team members. Having an increased number of competent ATs strengthened the different links of the perioperative chain decreasing over-utilization of scarce resources.

References

Guimaraes, E., Kirsh, J. R., Davis, M., & Woodworth, G. (2019). The anesthesia technologist's manual. Philadelphia: Wolters Kluwer Health. ISBN: 978-1-4511-7660-5.

Haas L. Anesthesia care team risk: considerations to standardize anesthesia technician training. AANA J. 2013 Apr;81(2):121-6. PMID: 23971231.