

SURVEY OF THE ANESTHESIA ASSISTANT PROFESSION IN CANADIAN TEACHING HOSPITALS: 2007 TO 2019



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The role of the Anesthesia Assistant (AA) varies widely across Canada, both in level of education and clinical responsibility.

1. INTRODUCTION

Anesthesia Assistants (AAs) are non-physician members of the anesthesia team, working under the direct supervision of anesthesiologists. The Canadian Society of Respiratory Therapists (CSRT)¹ and the Canadian Anesthesiologists' Society (CAS)² both acknowledge there may be different health professionals fulfilling the AA duties, with varying education and training. The Certified Clinical Anesthesia Assistant (CCAA) designation was created through the CSRT, to help regulate AA education programs and standardize the skillset of AA graduates. Few attempts have been made to look at exactly how the AA profession has evolved in Canada. A survey was completed in 2007 that examined the role of AAs at Canadian University Departments of Anesthesia (ACUDA) hospitals across Canada.³ With more efforts towards standardization of the profession, it is timely to gain an understanding of how the AA role has evolved over the last 12 years. We hypothesized that the most common clinical and technical duties would still be important in the AA role in 2019, but expected that the role would have expanded significantly. Specifically, we expected more AAs to be working in new clinical care areas outside of the operating room (OR) over the 12 years, since the last survey was completed.

2. METHODS

Institutional ethics approval was obtained. A non-interventional survey of ACUDA hospitals was completed between October, 2019 and January, 2020. Hospital managers, or clinical leaders were contacted and asked to complete a standardized, telephone-based survey. Data regarding AA education, clinical tasks, and scope of practice was collected, analyzed and compared to results of the same ACUDA hospitals as in 2007. Chi-squared testing was performed with a significance level of $p < 0.05$.

3. RESULTS

A total of 15/17 ACUDA hospitals were available for participation, with 100% having some level of assistance for anesthesia. There were approximately 21 AAs per hospital. Eight hospitals (53%) had AAs with formal certification. AAs spent 25% of their time working in areas outside of the main ORs, and 7/15 of sites (47%) had 24-hour, on-site AA coverage. The most common technical responsibilities of AAs included bronchoscopy assisting/cleaning, epidural/spinal anesthesia assist, line set up, and machine checks/set up (14/15 respectively). The most common clinical duties included monitoring general anesthesia/OR room relief (15/15; 14/15), intravenous insertion (15/15), and delivery of vasoactive, maintenance and induction medications (15/15). There were 8/17 clinical tasks with significant increases in frequency from 2007 to 2019 (figure 1).

Significant increases were seen in proportion of hospitals with AAs performing 8/17 clinical tasks.

AAs are increasingly working outside of the operating room, and the role is shifting towards more clinically-based responsibilities.

4. CONCLUSION

Currently, AAs are predominantly trained as respiratory therapists, but variability in educational background of AAs remains. The majority of ACUDA departments have AAs on staff that have not completed a formal AA certification program. Compared to 2007, AAs are present more outside of ORs. The AA role has demonstrated a shift towards more clinically-based skills and responsibilities; away from technical tasks.

5. REFERENCES

1. CSRT. (2016). https://www.csrt.com/wp-content/uploads/AA_Education_and_Certification_2016.pdf
2. CAS. (2018). http://www.cas.ca/English/Page/Files/97_Appendix%205.pdf
3. Brousseau, P, et al. (2007). *Canadian Journal of Anesthesia*, 54, 44264-44264

Figure 1. AA Clinical Duties: Type and Percentage

