

## Developing an Advocacy Campaign to Minimize Barriers to SRNA Political Awareness

### **Introduction**

The US population's continuous growth has increased the demand for anesthesia services. As a result, the healthcare system has been considering alternative care models to be more accessible and minimize expenditure. Non-physician providers are an example of an affordable and safe model in the anesthesia setting (Sun et al., 2018).

“CRNAs are anesthesia professionals who safely administer more than 50 million anesthetics to patients each year in the United States” (American Association of Nurse Anesthetists, 2021). In rural communities, 80% of the anesthesia providers are certified registered nurse anesthetists (CRNAs). CRNAs provide safe and cost-effective anesthesia services that rural counties can afford (American Association of Nurse Anesthetists, 2021). Not only do CRNAs provide safe and effective care, but they are also strong advocates for patient care. CRNAs offer their skills and knowledge to provide indigent and underserved patients anesthesia care. Additionally, CRNAs advocate for these underprivileged communities' healthcare resource allocation needs (Hanks et al., 2018).

About 89% of the counties in Illinois have CRNAs participating as the primary anesthesia providers. Thirty-one out of the 102 counties in Illinois have no anesthesia provider registered, and 74% of these counties are surrounded by counties predominantly covered by CRNAs for access to anesthesia care. In addition, CRNAs are the only anesthesia providers in 29% of counties in Illinois (Illinois Association of Nurse Anesthetists, 2021).

The role of the CRNA has evolved over the years. In 1956, the political involvement of CRNAs resulted in the official recognition of the nurse anesthesia profession (Poole et al., 2019). Years later, the continuous advocacy movement ensued in direct reimbursement for the

anesthesia care provided by CRNAs (Poole et al., 2019). Political participation has also secured better work conditions for current and future CRNAs. This effort has been translated into better patient care. CRNAs provide anesthesia services in any possible location and setting, and they are trained to perform every type of anesthetic for every procedure (Karcher, 2021). Thus, allowing CRNAs to practice independently allow patients to benefit from safe and accessible anesthesia care.

Improving the knowledge of student nurse anesthetists (SRNAs) in the value of political action will encourage involvement in advocacy and continue the journey to protect CRNAs scope of practice and improve patient care. In addition, SRNAs must learn how to assess current political issues, problem-solve, communicate effectively, and plan strategically (Primomo & Bjorling, 2012). The knowledge in political advocacy for SRNAs can provide the tools to establish relationships with legislators to influence change for the future of the CRNA profession and benefit patient care.

## **Background**

The progression of a bill through Congress to become a law is complex. Therefore, the bill's supporters must develop strategies to help progress it through congressional requirements and rulings. Because legislative advocacy influences how members of Congress vote on a specific bill, the most common way to advocate for a bill is via direct lobbying or contacting legislators to share ideas about a specific issue and convince them to vote in favor or against an issue (The University of Kansas, 2021).

Student registered nurse anesthetists can be an excellent tool for the advancement of the CRNA profession through advocacy. A student registered nurse anesthetist can influence political issues that affect CRNA practice by voting, campaigning, attending rallies, contacting

legislators, and becoming members of their state and federal professional organizations (Primomo & Bjorling, 2012). Leadership and empowerment in the CRNA profession are strengthened by creating advocates with political competence.

### **Problem Statement**

The shortage of political advocacy mentors and the lack of exposure to political events and encounters will hinder SRNAs' political wisdom. Leadership and policy curriculum is currently being imparted in several nurse anesthesia programs. However, engaging students in political involvement is futile if the nurse anesthesia program does not provide mentoring opportunities (Mund, 2018). Administrators can act as mentors and role models, and if they cannot implement political advocacy, state nurse anesthesia associations can be great collaborators. The partnership between SRNAs, state nurse anesthesia associations, and experienced CRNAs can allow the students to build relationships with policymakers and leaders (Mund, 2018). Thus, an educational campaign is needed to inform SRNAs on how to effectively advocate for the nurse anesthesia profession and the care of the patients.

### **Aim**

This project aims to launch an advocacy awareness campaign targeting SRNAs enrolled in a nurse anesthesia program in Illinois. The project aims to create awareness of the value of advocacy and increase SRNA political literacy. In addition, this campaign will help SRNAs understand how to exert influence on proposed legislation concerning nurse anesthesia practice through grassroots efforts with policymakers. Finally, increased SRNA political literacy may encourage future leadership roles at the state and federal levels.

### **Search Strategy**

The search strategy included a librarian search in several electronic databases such as Academic Search Complete, Cochrane Collection Plus, Cochrane Database of Systematic Reviews, CINAHL Plus, PubMed Central, Medline Plus, Elsevier Science Direct, Springer Link, Sage Journal, and ProQuest. In addition, when researching for articles, multiple combinations of the following Boolean terms were used: CRNA, nurse anesthetist, political advocacy, leadership, SRNA, anesthesia, independent, practice, the scope of practice, student, political activism, policymaking, Congress, bill, rural, access, and care.

To refine the results, excluding criteria were applied. Studies performed in countries other than the United States and articles published before 2010 were excluded. Accepted articles also included studies performed among registered nurses and other advanced practice nurse specializations.

Twelve articles were appropriate for the topic, including systematic reviews and observational studies. The databases provided full-text articles for eleven of the studies, only one had to be requested from ILLIAD interlibrary loan. CINAHL Plus provided the most user-friendly search by defining criteria such as peer-reviewed articles, publishing date, and publication type.

## **Results**

### **Patient Outcomes**

The practice of anesthesia in the United States is mainly performed by two different providers: anesthesiologists and CRNAs (Hoyem et al., 2019). A study by Needleman & Minnick (2009), found no difference in anesthesia care outcomes in obstetrics provided by anesthesiologists and CRNAs. Needleman and Minnick (2019) examined the impact of each anesthesia model on deaths and anesthesia complications in obstetrical care. Obstetric death rates

were higher in hospitals where anesthesiologists provided anesthesia alone. However, statistically, the differences were not significant (p-value 0.070). Obstetric complication rates related to anesthesia in the anesthesiologist-only model were 0.27 percent, compared with 0.23 percent in CRNA-only practice (Needleman & Minnick, 2009). This obstetric study concluded that there was no evidence that CRNA-only practice has higher rates of anesthesia-related complications or deaths in comparison to the anesthesiologist-only model (Needleman & Minnick, 2009).

Negrusa and his team (2016) did not find a difference in anesthesia care safety outcomes between these two groups of anesthesia providers either. Logistic regression was used to determine the impact of the scope of practice on anesthesia-related complications (Negrusa et al., 2016). The odd ratios in the anesthesiologist-only and supervision-model were  $<1.0$  compared to the no-supervision models. Results did not indicate statistical significance in any setting for the supervision model (odd ratio in inpatient = 1.046, odd ratio in outpatient = 0.864) and direction/collaboration model (odd ratio in inpatient = 0.972, odd ratio in outpatient = 0.753) (Negrusa et al., 2016). In addition, the P-values of the joint hypothesis that anesthesia-related complications do not vary by the delivery model was very high (0.700 in inpatient procedures, 0.472 in outpatient procedures). These results fail to reject the hypothesis that anesthesia-related complications are unrelated to the scope of practice or anesthesia delivery model (Negrusa et al., 2016).

An analysis of Medicare data for 1999-2005 found no evidence that “opting out” of the medical oversight in the provision of anesthesia resulted in increased patient deaths or complications (Dulise & Cromwell, 2010). In opt-out states, complication rates for the CRNA-only model were essentially identical to those for the anesthesiologist working alone. In addition,

mortality rates occurred with lower incidence with nurse anesthesia-independent care (odd ratio = 0.899,  $p = 0.05$ ) than with anesthesiologist-only care (Dulise & Cromwell, 2010).

Despite the results found in these studies, other professional societies and policymakers continue to claim anesthesia care is safer when anesthesiologists supervise CRNAs (Hoyem et al., 2019). Numerous efforts have been made to remove the medical supervision of CRNAs; however, only 19 states have opted out of the federal physician supervision requirement (American Association of Nurse Anesthetists, 2021). However, hospitals, health insurance, and surgeons may impose restrictions to limit this independence (Sun et al., 2018).

### **Anesthesiologists**

Anesthesiologists are physicians trained in anesthesiology (Sun et al., 2018). This group of physicians has completed four years of medical school leading to a degree in medicine or osteopathy, a clinical base year residency, and three years of an anesthesia residency program. In addition, to obtain board certification, an anesthesiologist requires four years of residency in anesthesiology and passing the American Board of Anesthesiology exam (Hogan et al., 2010). Hogan et al. (2010) calculated the total estimated costs of education and clinical experience before entry into an anesthesia program plus the costs of the anesthesia graduate education of the physician path. This estimate summed up to \$1,083,795 for three years of anesthesia residency (Hogan et al., 2010).

The Texas Society of Anesthesiologists (2014) states that anesthesiologists are the most qualified practitioners to make anesthesia-related perioperative decisions. They are primarily responsible for providing general anesthesia, regional anesthesia, and administering sedation to control pain or anxiety (Texas Society of Anesthesiologists, 2014).

### **Nurse Anesthetists**

Nurse anesthetists are nurses who received additional training in anesthesiology by enrolling in a graduate program specialized in anesthesia. Thus, nurse anesthetist programs require that applicants possess a bachelor's degree of science in nursing, years of nursing practice, and a nursing license before enrolling in a nurse anesthesia program (Sun et al., 2018). These graduate programs have a duration of 28 months to 36 months (Hogan et al., 2010).

Nurse anesthesia programs require complex didactic coursework, including a theoretical focus in obstetric anesthesia, pediatric anesthesia, trauma anesthesia, and all aspects of anesthesia care. In addition, a minimum of 2,000 hours of clinical training and the implementation of a meaningful scholarly project to fulfill the doctoral requirement (Burns et al., 2021).

The estimated education cost of a nurse anesthetist education is \$161,809. This estimate also includes education and training before entering the anesthesia program and the costs of the graduate anesthesia program (Hogan et al., 2010). The difference in education costs between the nurse anesthesia path and the anesthesiologist path can prove that nurse anesthetists are less expensive to train than anesthesiologists and can perform in the same setting and procedures as anesthesiologists. Thus, providing the same quality of care at lower costs can benefit the taxpayer's wallet.

Another difference between these anesthesia providers is where they can practice. Currently, nurse anesthetists are allowed to practice in all 50 states. Supervision of nurse anesthetists is complex and varies between every state. Some states have chosen to "opt-out" of federal regulations requiring physician supervision. Thus, nurse anesthetists are required to practice under the supervision of a physician (Sun et al., 2018). As of 2013, 17 states have opt-out of this federal regulation, and nurse anesthetists can practice independently. As stated

previously, hospitals, health insurance, and surgeons may impose restrictions to limit this independence (Sun et al., 2018).

In addition, licensing and certification of nurse anesthetists are obtained by the state nursing board (Sun et al., 2018). Finally, it should be highlighted that except for the anesthesiologists' training in medical school and residency in other specialties, both CRNAs and anesthesiologists undergo similar didactic and clinical training in anesthesia care (Dulise & Cromwell, 2010).

### **Scope of Practice**

The scope of practice defines the legal boundaries that a healthcare provider must abide by while practicing (Greenwood & Biddle, 2015). The legal authorization to practice and the scope of practice can be found in each state nursing board and Nursing Practice Act. However, the extent to which a CRNA can independently practice depends on Medicare and Medicaid policies, and hospitals and insurance regulations (Greenwood & Biddle, 2015). According to Greenwood and Biddle, the scope of practice is difficult to be measured just by simply looking at the CRNAs license or the anesthesia practice model. Instead, the scope of practice is delineated by the federal and state regulations, supervision, or collaborative requirements, and the CRNA's knowledge, skills, and patient care expertise.

A survey was performed to investigate the impact of the opt-out legislation and the state where CRNAs practice on the scope of practice (Greenwood & Biddle, 2015). Ten thousand nurse anesthetists completed a survey to measure the extent of their scope of practice. CRNAs in opt-out states showed a difference in their scope of practice with a mean of 79.75 compared with 69.66 for CRNAs that practice a state that had not opted out (Greenwood & Biddle, 2015). This



study revealed that CRNAs who practice in opt-out states see changes in policies leading to a broader scope of practice (Greenwood & Biddle, 2015).

### **Anesthesia Practice Models**

Nurse anesthetists and anesthesiologists provide anesthesia services and care in different practice models. These practice models vary based on the degree of independence and autonomy in nurse anesthetists' practice and the delivery of anesthesia care (Hogan et al., 2010). These models can also vary depending on the practice setting, the preferences of the hospital or clinic, and the specific state and federal laws that regulate the delivery and billing of services (Hogan et al., 2010).

Independent practice includes nurse anesthetists who provide anesthesia without an anesthesiologist's supervision or medical direction (Hogan et al., 2010). Medicare reimbursement for anesthesia allows nurse anesthetists to practice independently or autonomously and bill for those services. However, hospitals must also comply with "Medicare Part A Conditions of Participation" to collect Medicare reimbursement for the facility. Physician supervision of nurse anesthetists is one of these requirements. CRNAs providing anesthesia services under the oversight of an anesthesiologist are either medically directed or supervised (Cintina et al., 2018). In some anesthesia practice models, the physician supervising does not have to be an anesthesiologist (Hoyem et al., 2019).

For an anesthesiologist to bill Medicare for the medical direction of anesthesia, they must meet the following requirements; perform a pre-operative evaluation, prescribe an anesthesia plan, participate in the most demanding procedures (induction and emergence), ensure that anesthesia procedures, if not personally performed, are performed by a qualified anesthetist,

monitor at frequent intervals, remain physically present and available in case of emergencies, and provide post-anesthesia care (Hoyem et al., 2019).

In the medical direction model, the anesthesiologist directs up to four nurse anesthetists and must be present during induction and emergence (Cintina et al., 2018). In the medical supervision model, the anesthesiologist supervises more than four CRNAs. In addition, they are not required to be present during specific parts of the administration of anesthesia (Cintina et al., 2018). The crucial difference between the medical direction practice and the medical supervision practice is that there are more prescriptive requirements for the anesthesiologists to be present in the procedure in the medical direction practice than in the medical supervision (Hogan et al., 2010).

### **Anesthesia Billing**

The Office of Workers' Compensation Programs (OWCP) reimburses anesthesia services provided by qualified anesthesiologists, physicians, CRNAs, or anesthesiologist assistants (Office of Workers' Compensation Programs, n.d.). According to the U. S. Department of Labor and Office of Workers' Compensation Programs (OWCP) (n. d), every anesthesia bill must include one of the anesthesia modifiers codes. Modifier codes are two digits that indicate a modification in the payment of a procedure due to the type of provider that performed or assisted during the procedure. These modifiers include AA-anesthesia personally performed by an anesthesiologist, QY-medical direction of one CRNA by an anesthesiologist, QK-medical direction of 2-4 anesthesia procedures with qualified providers, AD-medical supervision by a physician of more than four procedures, QX- CRNA service with medical direction by a physician, and QZ-CRNA service without medical direction by a physician (Office of Workers' Compensation Programs, n.d.).

## **CRNAs Salaries in Comparison to Physician Anesthesiologists**

According to the Lewin Group (2018), the annual average cost paid to physician anesthesiologists was \$350,000 compared to \$170,000 paid to CRNAs. According to the Bureau of Labor Statistics (2018), a CRNA can expect to earn a yearly salary between \$116,820 and \$208,000. CRNAs working in more rural states or areas experience more practice autonomy and are part of the higher salaries range (U. S. Bureau of Labor Statistics, 2018).

Data from a 2019 survey, reported that anesthesiologists are above the median earnings of all physician specialties. In addition, the 2019 salary of the anesthesiologist showed an average annual salary of \$386,000 (Kane, 2019).

### **Cost-Effectiveness**

When comparing the models of anesthesia practice, the most cost-effective method is the one that will produce the service at the lowest cost, while keeping high service quality (Hogan et al., 2010). This comparison means that the most cost-effective model is the one that provides profits that are much greater than the costs and expenditures.

An analysis performed by The Lewis Group (2016) found that the CRNA solo practice model is the least costly per procedure and the one that produces the highest net revenue. This model produced total revenue of \$428.67 per procedure, while the medical direction model (1:4) and supervisory model (1:6) produced \$378.12 and \$218.52 respectively (The Lewin Group, 2016). In addition, this report suggested that the best strategies for potential cost-saving involved an increment in the number of procedures performed by CRNAs alone or increasing the number of procedures under the supervisory model (The Lewin Group, 2016).

A recent study provided an updated version of a simulation model to estimate the costs of the different anesthesia practice models (Cintina et al., 2018). Medicare claims data for 2011 and

2012 were used, and 30 simulations for each practice model were performed. The simulation results showed potential savings if changes were made in the anesthesia delivery model. For example, substituting any model with the CRNA-independent practice model will decrease Medicare costs from \$7.4 billion to \$4.5 billion, this equals a total savings of \$2.9 million (Cintina et al., 2018). However, Cintina and her team (2018) believe that several states will require a change in the scope of practice laws, and how hospitals and surgery centers run their business.

### **The process of Legislation**

The legislative process is not a linear task. Instead, it is a process where different interests and parties try to influence policymaking by “creating bargains, trading votes, and using rhetoric” to persuade legislators that their agenda is the most suitable and the best (Zaccagnini & White, 2017). CRNAs can educate legislators during this process while the legislation moves through becoming a bill. During the legislature drafting, it is more common for CRNAs to partner with a supportive legislator at the state or federal House of Representatives or the Senate (Zaccagnini & White, 2017). Therefore, it is essential that all nursing groups involved in the drafting process review the language and discuss and fix any discrepancies before the hearing phase (Zaccagnini & White, 2017).

After the drafting phase, the representative introduces the legislation to the chamber, and then the legislation is referred to the appropriate committee. While the legislation is in committee, interested parties can be invited to submit testimony to support or oppose the legislation. The legislation then enters “markup”, where the committee debates the legislation (Zaccagnini & White, 2017). The markup is where interested CRNAs should be prepared to serve as content experts while advocating for the profession and patients. Therefore, when

preparing to provide oral testimony, it is imperative to introduce the issue in detail, know the influential legislators, and include the potential impact on patient care (Zaccagnini & White, 2017).

If the committee agrees on the content and language of the bill, it is moved to the Senate or House of Representatives to be voted on (Zaccagnini & White, 2017). When a bill is approved by one chamber, this promotes the passage of the legislation in the other chamber. Once both chambers pass the bill, the bill is moved to a conference committee to fix any differences. If the bill is not moved to the executive branch before the end of the legislative session, the bill is dead. Therefore, if the bill is not moved into the executive branch, the bill needs to be reintroduced during the following session (Zaccagnini & White, 2017).

It is imperative to understand that political decisions are not made when the bill is voted in the chambers. Instead, political decisions are made during the legislative process by pressure exerted by other policymakers, friends, and professional organizations (Zaccagnini & White, 2017). One exceptional approach to influence policy is to become part of the election campaign of an individual running for public office (Zaccagnini & White, 2017). The rationale for this approach is that when elected, the legislator will remember the individuals participating during the election campaign.

### **Lobbying**

Lobbyists are registered educated experts hired by professional organizations to influence policymakers. Lobbyists can be continuously available during the legislative to ensure that legislators are well informed about the topic covered by the bill (Zaccagnini & White, 2017). However, the lobbyists are not in charge of creating the information. In this case, CRNAs will

create the message, and then the lobbyists will deliver the information to the appropriate person in the correct manner (Zaccagnini & White, 2017).

### **Political Advocacy among Nurse Anesthesia Students**

There is minimal research on nurse anesthesia students and political advocacy. However, studies have shown that nursing students who receive advocacy education are more likely to have strong political skills (Primomo & Björling, 2013). In addition, students who participated in political events, such as legislative day, demonstrated an increased level of political knowledge and were more likely to participate in the policy process as nursing professionals (Primomo & Björling, 2013). The Washington State Nurses Association holds an annual Nurse Legislative day (Washington State Nurses Association, 2012). In 2012, the agenda included presentations from gubernatorial candidates, sessions addressing the legislative process, public health funding, public health nursing, advanced practice issues, and running for office (Washington State Nurses Association, 2012). Nursing students were able to attend public hearings and meet elected officials. In addition, 150 nursing students participated in an online survey before and after attending 2012 Legislative Day (Primomo & Björling, 2013). Twenty-five percent of the participants were unaware politically before attending the legislative day. However, less than 6% of the nursing students remained politically unaware (Primomo & Björling, 2013). Therefore, this study concluded that exposing nursing students to the political arena was effective in increasing their political astuteness (Primomo & Björling, 2013).

Zaccagnini and White (2017) encourage nursing educators to become mentors and role models for political activism and health policy advocacy. However, they specify that rather than encouraging students to be politically involved. Instead, they should train students with the knowledge and skills to feel confident in their ability to influence legislators (Zaccagnini &

White, 2017). They also emphasize how imperative it is that doctoral students become actively involved by lobbying on Capitol Hill and serving as student representatives in professional organizations. But more importantly, doctoral students should be able to successfully articulate the legislative process (Zaccagnini & White, 2017).

A study performed by De Cordova and colleagues (2019) demonstrated that health policy content is currently being included in graduate nursing curricula, however, these graduate courses did not incorporate student involvement in health policy activities. Instead, graduate students were mainly assigned to perform didactic coursework such as policy analysis and assessment of health-related issues (De Cordova et al., 2019). This study also indicated low student involvement in health policy; 85% of DNP students, and 82% of Ph.D. students reported not being engaged in legislative advocacy efforts (De Cordova et al., 2019).

Some studies have suggested that faculty perspective on integrating health policy content in the curriculum depends tremendously on how the faculty is involved in health policy advocacy (Staebler et al., 2017). Staebler and colleagues sent an anonymous online survey targeting nursing faculty who teach health policy courses. Five hundred fourteen faculty members responded to this survey, and only 44.3% of the participants were currently participating in legislative advocacy efforts (Staebler et al., 2017). However, faculty were also asked about barriers they encounter to achieving political expertise. Half of the respondents mentioned a lack of desire while 49.1% reported a lack of opportunity. In addition, 37.4% mentioned lack of financial support and 22.1% reported a lack of administrative support (dean/school) (Staebler et al., 2017). Thus, nursing programs must hire faculty who voice and demonstrate passion, interest, and expertise in health policy for such content delivery (Staebler et al., 2017).

Nursing professors are viewed by their students as role models and mentors. Thus, it is expected that faculty should be members of the nursing professional organization and participate as active advocates for their students, patients, and the nursing profession (Hahn, 2010). Hahn (2010) recommends that health policy update discussions happen during faculty meetings. These discussions should be conducted and led by faculty involved in leadership roles within nursing professional organizations. But more importantly, faculty should facilitate opportunities for nursing students at the doctoral level to become more politically involved. These activities can include internships with nurse policy leaders or executive directors at professional organizations and joint projects with professional organizations and legislators translating nursing research into policies (Hahn, 2010).

## **Discussion**

Studies have shown no difference in patient outcomes within any anesthesia provider involved in the care. Independent practice improves access to anesthesia services in rural and underserved areas of the US while maintaining reduced healthcare costs and improving patient care. Decisions made at the national or state level will continue to impact the professional careers of CRNAs. Thus, political advocacy is necessary to safeguard the profession and expand independent practice. Other groups cannot design healthcare policies and nurse anesthesia practice. Instead, it should be shaped by the CRNAs' clinical experience, knowledge, and understanding of patient care.

Political participation has also secured better work conditions for current and future CRNAs. This effort has been translated into better patient care. CRNAs provide anesthesia services in any possible location and setting and are trained to perform every type of anesthetic for every procedure. CRNAs provide safe and cost-effective anesthesia services that rural



counties can afford. Thus, allowing CRNAs to practice independently allow patients to benefit from safe and accessible anesthesia care.

The amount of research about nurse anesthesia students and political advocacy is almost null. Besides, previous studies have shown that nursing students who receive advocacy education and participated in political events are more likely to have strong political skills and knowledge and will be more likely to participate in politics as nursing professionals.

Thus, improving the knowledge of student nurse anesthetists (SRNAs) in the value of political action will encourage involvement in advocacy and continue the journey to protect CRNAs scope of practice and improve patient care. SRNAs must learn how to participate in the political process to help and guide lawmakers to expand the independence of nurse anesthetists and magnify the areas where CRNAs can practice with full authority. Consequently, SRNAs professional advocacy can help alleviate the lack of anesthesia services in rural and poor areas of the US, while maintaining reduced costs and improving care for these individuals.

Advocating for the expansion of CRNAs' full practice authority will ensure the availability of adequate anesthesia services for those who need it, will provide better access to anesthesia services to patients living in rural and underserved areas, and will reduce costs by decreasing the need for multiple health care providers specialized in anesthesia.

## **Conclusion**

CRNA advocacy can help to safeguard the profession, expand nurse anesthesia independent practice, reduce healthcare costs, and improve patient care. This literature review reveals the necessity for more research on CRNA advocacy among nurse anesthesia students. Additionally, more efforts need to be made to actively bring nurse anesthesia students closer to policymaking to improve patient outcomes.

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