

Testimony regarding HB 2295  
Presented by Dr. Annette Teijerio, Anesthesiologist  
House Health and Human Services Committee  
February 18, 2019

Madame Chairman Landwehr, and members of the Health Committee,

Extensive review of education and experience prior to anesthesia training is the important feature of healthcare professionals. This is why training programs across our country require experienced faculty, adequate patient exposure, proper equipment training, evaluation of progress, and case logs with minimum requirements. The goal is to prepare a healthcare professional to function at the best level of care for our patients. Proper experience makes us prioritize the importance of critical information, recognizing patterns and the options to implement interventions or call for assistance. Understanding the limitations and proper use of professionals in our state is how we protect vulnerable patients.

As previously discussed physicians and registered nurses encounter hands-on patient experience before finishing their educational training and then further expand their experience during anesthesia training. Kansas annually graduates approximately 66 anesthesia professionals a year. Kansas annually provides 13 to 14 newly trained anesthesiologists (about 1% of our American trained anesthesiologists) of which half are Kansas natives. Kansas also annually graduates about 53 CRNAs (about 2% of our nation's CRNAs). Kansas population growth was 0.4% during 2017 and it is expected to stay at that annual rate for the next 5 decades with shifts from rural to more urban areas. Nationwide increase in demand for anesthesiologists and CRNAs is about 16% for the next decade but with a projected increase in state population of less than 12,000/year, Kansas is oversupplied for this growth. Kansas per capita anesthesiologists to population ratios (1:13,872) are lower than national average (1:10,648) and CRNAs to population ratios (1: 7,470) are slightly higher than national averages (1: 7,642), so it is reasonable to conclude that if Kansas keeps half of your Kansas trained anesthesiologists and one-quarter of your Kansas trained CRNAs, your anesthesia professionals will meet projected population growth for decades.

With two major metropolitan areas poised to grow, Wichita and Kansas City, it is reassuring that Kansas higher education has properly provided for an abundant pool of anesthesia professionals for Kansas perioperative care needs. Patients undergoing procedures are very dependent on the highest trained professionals because the unconscious and/or compromised patient benefits from prepared and broader patient care experienced professionals in this state. Locally training professionals are more likely to stay long term, and be familiar with state and local requirements; this prevents access to care shortages.

Adding a physician extender in a non-shortage state can decrease the level of care. **The scenario for Kansas is very concerning on multiple levels.** Since half of the anesthesiology residents are homegrown Kansas graduates adding other non-physician anesthesia professionals would decrease the potential for Kansas anesthesiologist and CRNA natives to stay in the state. Operating rooms would change from staffed by anesthesiologists one-on-one with patients to assistants with proportionally fewer anesthesiologists and CRNAs. Hence the addition of Anesthesiologist assistants would reduce anesthesiologists and CRNAs in Kansas. Kansas taxpayers would observe a lower return on investment of their established higher education investment as anesthesiologists and CRNAs are forced to find jobs out of state.

Economic impact on state revenues and expenditures would be affected as Kansas exports highly trained professionals rather than keeping them and imports outside trained anesthesiologist assistants. For licensing boards that pass operational costs to licensees without general fund subsidies, the change to lower cost licensed professionals can increase licensing body workload over time while simultaneously decreasing licensing fee revenues. This happens as the per capita anesthesia needs stay as projected, anesthesia locations do not change whether an operating room has an anesthesiologist,

CRNA or anesthesiologist assistant, but per capita licensing fees decrease for physician extenders such as anesthesiologist assistants.

Most allied healthcare professionals work in doctor's offices, clinics, and other locations and their work includes diagnosing illnesses, writing prescriptions and counseling patients on preventive care. The care team model of most allied healthcare professionals are predominantly chronic sub acute settings where interventions happen non-emergently, again not acute or critical care settings. In sub acute settings there is therefore extensive time to make changes or evaluations that enhance patient care. For those that work in more acute care settings there are more strict requirements, established protocols and limitations to their scope of practice in direct proportion to the patient's severity.

With the above in mind, medical licensing boards throughout the United States will not allow physician assistants to make independent medical judgment regarding such decisions as the drug of choice for an individual patient or invasive procedures. For example, physician assistants are not qualified to independently perform endoscopies, bronchoscopies, cardiac catheterizations, transesophageal echocardiographies, implement surgical interventions, make ventilator changes, administer neuromuscular blocking agents, or administer resuscitative drugs, etc. These types of more acute invasive and complex treatments are under the direct scope of practice of procedural physicians.

The nature of anesthesia practice, with the complex physiological, pharmacological and complete control of unconscious patients during surgical care, is not comparable to sub acute settings. Many medications are unique to anesthesia. Although some other specialists may use these powerful medications, that use is limited and sometimes discouraged by drug companies because of risk to patients. Propofol was the most publicized anesthetic agent because of Michael Jackson's death. In that case, a non-anesthesiologist physician, a cardiologist administered a lethal dose of this anesthetic agent. Propofol has no immediate reversal agent and can be fatal in inexperienced hands. This very public example shows why the mastery of anesthesia requires years of patient healthcare experience and additional years of specialized training.

Anesthesiologist assistance cannot be licensed as Physician Assistants. Anesthesiologist assistants do not have the necessary coursework or hours to qualify for the Physician Assistant certification exam. According to the certification body for Physician Assistants, they must have 100 CME hours completed every two years. Anesthesiologist assistants are only required to have 40 CME hours completed every two years. Although Physician Assistants are trained in general medical care, they can work with any licensed physician and assist in patient care. Anesthesiologist assistants can only work under anesthesiologists. These two physician extenders are not comparable or interchangeable.

Of note, Kentucky requires an Anesthesiologist assistant in their state to be a certified Physician Assistant.

Areas of life threatening concern are a distinct risk of anesthesiologist assistants. First, their entire training is extremely short for the critical care specialty that these assistants will encounter. Anesthesiologist assistants do not fulfill the required number of hours to be licensed as Physician Assistants. Anesthesiologist assistants have their required course material truncated toward anesthesia at the expense of gaining general medical knowledge and fully depend on the specialized extensive training of anesthesiologist for coordinating and managing the care of patients which makes them more comparable to an office Medical Assistant than a Physician Assistant.

Anesthesiologist assistants are only present in limited areas of the United States but nowhere else in the world. After a few decades of existence, anesthesiologist assistants are present in a few states with varying policies, and mostly in urban areas or academic settings, however their true risk ratio is still unknown.

Anesthesia is a critical care specialty that involves highly invasive and acutely impactful lifesaving interventions; it is of great concern that an assistant would be given free access to unconscious patients for extended periods of time. Anesthesiologists are not present throughout the entire surgical timeframe. For TEFRA requirements, anesthesiologists must be present during the beginning and end of an

anesthetic but the nature of anesthesia and invasive surgery can create life threatening emergencies at any time. Human beings cannot be in two places at one time, it is impossible for anesthesiologists to be available within a few seconds to less than 4 minutes in cases of cardiopulmonary arrest when timely experience counts. Permanent neurological and vascular harm can occur in minutes.

Because of previous Intensive Care Unit training anesthesiologists and CRNAs have both experienced nonsurgical cardiopulmonary arrests patients prior to their respective anesthesia training. Beyond the nonsurgical cardiopulmonary arrest, an anesthesiology resident and CRNA will also understand the difference of preoperative cardiopulmonary changes. Anesthesiologist assistants are not required or expected to have this experience prior to their training program.

Example timelines of an elective healthy (ASA1) total abdominal hysterectomy for large uterine fibroid:

**Anesthesiologist** with extensive anatomy, physiology, pharmacology and surgical management experience encounters rapid onset asystole (the heart stops). First, the physician understands the surgical etiology and immediate pharmacological and physiological interventions needed to normalize this life threatening emergency. Response time is within 60 seconds with no adverse patient impact so oxygen saturation stays at baseline (usually 98-100%) during the entire episode.

**CRNA** with intensive care experience recognizes rapid onset asystole. CRNA recognizes the life threatening nature and will likely inform the surgical team while implementing pharmacological intervention to normalize this life threatening emergency. CRNAs do not have a surgical residency component to their training and may not stop the surgical etiology by directly addressing it with the surgeon as quickly. Response is slightly delayed but should have no adverse impact on patient baseline (less than 4 minutes).

**Anesthesiologist assistant** may have not encountered asystole in this setting. Time may be wasted in confirming if this is a monitor malfunction or asystole even with a prompt call for anesthesiologist to return to the room. The anesthesiologist assistant is not required to have any intensive care or surgical patient management background experience to guide the more rapid actions implemented by the above two healthcare professionals. The anesthesiologist assistant may implement pharmacological protocols but is less likely to understand the whole process. Response time will vary depending on arrival of the anesthesiologist and the rest of the surgical team. If more experienced personnel does not arrive in a few minutes, there may be more serious adverse impact on the patient.

Thank you,

Dr. Annette Tajerio, MD, Anesthesiologist