MOST
POLICY INITIATIVE

CRNA Scope of Practice

What is the effect of increasing CRNA practice authority?

States can opt out of CRNA supervision requirements.

CRNAs are advanced practice registered nurses (APRN) certified as a nurse anesthetist by any certifying body allowed by the Board of Nursing (RSMo 335.016). See our Science Note on APRN Scope of Practice for the practice limitations on all APRNs and healthcare shortages in MO. While APRNs are required to work collaboratively with physicians, CRNAs can provide anesthesia services without collaborative practice arrangements if they are supervised by an anesthesiologist, physician, dentist, or podiatrist (RSMo 334.104).

Originally, to participate in Medicare hospitals and surgery centers were required to have physician supervision of CRNAs, but the decision on this requirement was left to the states in 2001 (Missouri Association of Nurse Anesthetists 2014).

- States can opt-out of this supervision requirement if the Governor consults with state boards of medicine and nursing regarding the access and quality of anesthesia services, opting-out is in the best interest of citizens, and it is consistent with state law
- Twenty-four states have partially or fully opted out of the supervision requirement.
- MO has not opted-out of the supervision requirement.

Research Highlights

Missouri requires **Certified Registered Nurse Anesthetists (CRNAs)** to work collaboratively or with supervision by a physician.

CRNA and anesthesiologist services have similar clinical outcomes.

The impact of expanding CRNA scope of practice on healthcare access and costs is unclear.

One survey found that CRNAs have unfavorable attitudes towards collaboration (Jones & Fitzpatrick 2009). Role conflict, unclear expectations, and limited scope of practice can affect CRNA job satisfaction and stress. CRNAs that practice independently are more likely to be satisfied with their job.

CRNAs provide similar quality of care with and without supervision.

Nationally, there is no difference in the rate of anesthesia complications or mortality between CRNAs and anesthesiologists (Hogan et al. 2010, Negrusa et al. 2016). States that have opted-out of the CRNA supervision requirement show no difference in mortality rates to those that have not opted-out (Dulisse & Cromwell 2010).

In states that opt-out of supervision requirements (Baird et al. 2020):

- Anesthesiologists spend more time in the operating room and less time monitoring

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Table 1. The costs and benefits of different strategies to increase rural healthcare access. This table details how much and where funding would be needed for each policy option and the effects for healthcare users, CRNAs, and physicians. Table adapted from Figueroa et al. 2013.

Policy Options	Costs	Benefits
Increasing funding in rural areas	• $3 billion from Medicare nationally to pay physicians • $6.5 billion from Medicare to hospitals to train residents	• if effective, greater rural access to providers • does not increase non-physician providers
Expand CRNA scope of practice	• cost of legislation changes	• immediate increase in healthcare access • ease in restrictions benefits CRNAs • no displacement of physicians
Research to determine the best combination of physicians and nurses	• government costs of funding research	• benefits rural populations in the future • no short-term benefit

anesthesia care.

- There is no change in work hours for anesthesiologists nor in earnings.
- Anesthesiologists spend the same amount of time supervising CRNAs, but increased the time spent supervising residents.

Independent CRNA practice has mixed effects on access and cost.

CRNAs are more common in the Midwest and South while anesthesiologists are more common on the West and East Coasts (Liao et al. 2015, Cohen et al. 2020). CRNAs are more likely to serve low income, unemployed, Medicaid eligible, rural, and uninsured populations than anesthesiologists (Liao et al. 2015). Staffing models that had predominantly CRNAs were not associated with whether a state opted-out of supervision requirements (Coomer et al. 2019). Small hospitals and rural ambulatory surgical centers were more likely to staff predominantly CRNAs (Coomer et al. 2019).

Nationally, less restrictive scope of practice is correlated to greater access of CRNAs, especially in rural areas (Martsolf et al. 2019). However, one study found that opt-out states did not see a change in the percentage of patients that traveled out of their home zip code, nor the distance traveled for a surgery (Sun et al. 2017). From 2012 to 2019, CRNA employment increased by 25%, but this was not correlated with states that opted-out of supervision requirements (Wilson et al. 2020).

Among three options to increase access to healthcare in rural areas, expanding the scope of practices for CRNAs is the most cost-effective option (**Table 1**). Other analyses of anesthesia models found that independent CRNA practice has the lowest cost and the greatest revenue for hospitals (Hogan et al. 2010, Lewin Group 2016). Intensive anesthesiologist care is less cost efficient and more likely to need hospital subsidization (Hogan et al. 2010). For common tumor surgeries, personnel are the greatest cost (79% of the total cost) and switching from anesthesiologists to CRNAs can lead to a 13-28% decrease in total costs (French et al. 2016). However, some models also showed that in states that opted out of supervision requirements had higher per patient costs for hospitals and fewer procedures at freestanding outpatient facilities (Schneider et al. 2017).

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