



GUEST EDITORIAL

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Studies Support Removing CRNA Supervision Rule to Maximize Anesthesia Workforce and Ensure Patient Access to Care

Recent research reaffirms that Certified Registered Nurse Anesthetists (CRNAs) are critical to the delivery of anesthesia in the United States and argues persuasively for the removal of barriers—including supervision requirements—that prevent CRNAs and other advanced practice registered nurses (APRNs) from practicing to the full extent of their education and training.

As we as a nation strive to make healthcare accessi-

ble, ever safer, and affordable, the health system must use anesthesia professionals as efficiently as possible. Repealing the federal Medicare physician supervision requirement for nurse anesthetists is an important step toward achieving this goal.

Keywords: Access to care, anesthesia, Certified Registered Nurse Anesthetists, Medicare, quality of care.

Anesthesia professionals play a critical role in the healthcare system. Surgery, labor and delivery, trauma stabilization, and pain management all require anesthesia professionals such as Certified Registered Nurse Anesthetists (CRNAs) or physician anesthesiologists. With an aging population and the potential influx of millions of previously uninsured Americans into the healthcare system as a result of health reform, the need for anesthesia services will continue to grow.

Yet a recent study by the RAND Corporation^{1,2} finds that as of 2007 the United States was experiencing a shortage of CRNAs and anesthesiologists. According to RAND's econometric analysis, there was variation in the anesthesia labor markets across states. As Figure 1 shows, 17 states were experiencing a shortage of both anesthesiologists and CRNAs. Another 17 were experiencing a shortage of either anesthesiologists or CRNAs. Only 14 states had no shortage of anesthesia

professionals. Alaska and Wyoming did not have enough data to demonstrate a shortage or surplus of either provider.

In addition to the econometric analysis, RAND directly asked CRNAs, anesthesiologists, and directors of anesthesiology about labor supply and demand. These survey results provide further evidence of shortages. The majority of CRNAs (79%) believe their employer needs more CRNAs, and a third of CRNAs (33%) see a need for more anesthesiologists. Among anesthesiologists, substantial numbers believe their employer needs more CRNAs (36%) and anesthesiologists (47%). In the anesthesiology and directors of anesthesiology survey, 30% say they need more CRNAs and 22% need more anesthesiologists.

The RAND researchers also estimated future trends in anesthesiology labor markets using a variety of scenarios for changes in supply and demand. Their analysis suggests that shortages will likely persist for

the next several years. Baseline scenarios show a projected shortage of anesthesiologists and a surplus of CRNAs by 2020. Under other scenarios, the situations are reversed for each group, that is, slight changes in the prediction model result in a projected surplus of anesthesiologists and a shortage of CRNAs.

The scenarios by which the authors made these projections assumed that current trends would continue. The projections do not take into account the sharp increases in demand for anesthesia services that will likely occur as health reform brings millions of newly insured patients into the system.

Figure 2 shows the estimated number of currently uninsured people in each state who are likely to become insured as a result of health reform enacted (as in the Patient Protection and Affordable Care Act of 2010).³ These data are superimposed on the graphic of states and their current shortages of anesthesia professionals. The graphic suggests

the probability of a large influx of new patients, many of whom will likely need anesthesia at some point. Of particular note is the fact that the 5 states with the largest poten-

tial influx of patients—California, Texas, Florida, New York, and Georgia, which together potentially account for more than 10 million newly insured patients—currently

have shortages of both types of anesthesia professionals.

Access is and will likely continue to be an especially pressing problem in rural areas, which generally have an older population than urban and suburban areas. In 2007, the Government Accountability Office conducted a study to examine the difference in anesthesia reimbursement of Medicare and private payment related to the supply and locale of anesthesia practitioners.⁴ The Government Accountability Office reported that CRNAs are the predominant anesthesia professionals in areas where there are more Medicare beneficiaries and where the gap between Medicare and private pay is less. Anesthesiologists are more likely to predominate where there are relatively fewer Medicare patients, and where private payment for anesthesia services is relatively high. A 2004 analysis of the distribution of anesthesia professionals in the United States similarly showed that CRNAs are more likely to reside in nonmetropolitan areas than anesthesiologists.⁵

The Institute of Medicine's (IOM)⁶ recent report on nursing, *The Future of Nursing: Leading Change, Advancing Health*, supports the argument that nurses must play a pivotal role if the United States is to transform its healthcare system to provide accessible, affordable, quality care that leads to improved health outcomes. The IOM contends that to transform the system, nurses—and advanced practice registered nurses such as CRNAs in particular—must be allowed to practice to the full extent of their education and training. The IOM recommends removing the regulatory and policy barriers, such as supervision requirements, that limit nurses' ability to care for patients and that, in the IOM's words, "[limit] nurses' ability to generate widespread transformation [in the healthcare system]." The critical role that nurses play in the healthcare

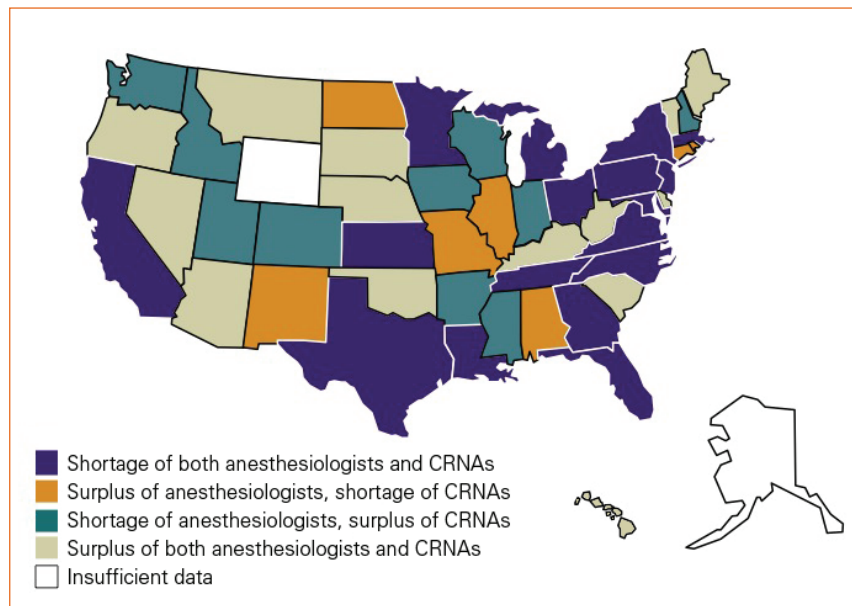
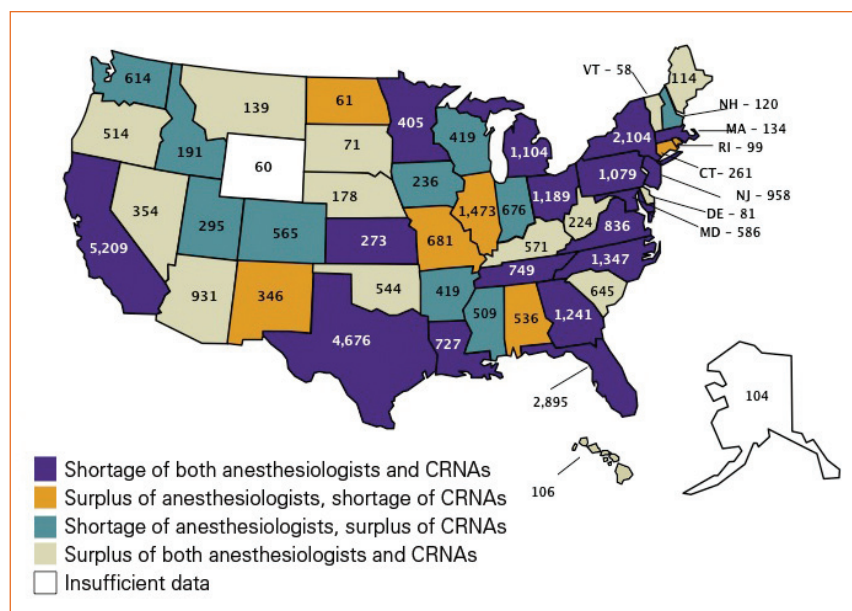


Figure 1. Availability of Anesthesia Professionals by State (as of 2007)

Map is based on RAND Corporation's econometric analysis. Anticipated number of uninsured are based on the 2010 Urban Institute report.³ CRNAs indicates Certified Registered Nurse Anesthetists.



delivery system is summarized in this quote from the key messages in the IOM report.⁶

Nurses have the opportunity to play a central role in transforming the health care system to create a more accessible, high-quality, and value-driven environment for patients. If the system is to capitalize on this opportunity, however, the constraints of outdated policies, regulations, and cultural barriers, including those related to scope of practice, will have to be lifted, most notably for advanced practice registered nurses.

Repealing the federal Medicare physician supervision requirement for nurse anesthetists and allowing healthcare facilities nationwide to make their own decisions about how best to staff their anesthesia departments based on state laws and patients' needs will help address current and future access issues. Moreover, it will help create the kind of transformational change in the healthcare system called for in the IOM report.

Quality: CRNAs Provide Safe, Quality Care with or without Supervision

In 2001, the Centers for Medicare & Medicaid Services (CMS) allowed states to opt out of the physician supervision requirement for nurse anesthetists. As of September 2010, 16 states had done so. A recent study conducted by Research Triangle Institute (RTI) and published in *Health Affairs* compared patient outcomes in states where the supervision rule is in place with patient outcomes in the 14 states that opted out of the requirement between 2001 and 2005. The study "finds no evidence that opting out of the oversight requirement resulted in increased inpatient deaths or complications." Moreover, the authors recommend that "CMS allow certified registered nurse anesthetists in every state to work without the supervision of a surgeon or anesthesiologist."⁷

The RTI study also compared patient outcomes (mortality and

complication) by type of anesthesia professional and found that there are no differences in patient outcomes based on anesthesia services delivered by solo CRNAs, by solo anesthesiologists, or by CRNAs supervised by anesthesiologists.

The RTI study was just the most recent of numerous studies showing that there are no measurable differences in quality or safety of anesthesia services delivered by CRNAs and by anesthesiologists. Additional studies by Needleman and Minnick,⁸ Simonson et al,⁹ and Pine et al¹⁰ further support that there is no difference in quality or safety based on the anesthesia professional. And, as RAND notes, "there are few differences in the types of patients seen by [Anesthesiologists] and CRNAs."^{2(p33)}

Affordability: Use of CRNAs Helps Bend the Cost Curve

A recent study conducted by Paul Hogan et al¹¹ of the Lewin Group, Falls Church, Virginia, and published in *Nursing Economics* compared the cost-effectiveness of anesthesia delivery models. The study shows a CRNA acting as the sole anesthesia professional is the most cost-effective model. CRNAs acting independently provide anesthesia services at 25% less than the second lowest cost model in which an anesthesiologist supervises 6 CRNAs.¹⁰

Conclusion

To be more cost-effective and meet the growing demands for care, all healthcare professionals need to be able to practice to the fullest extent of their preparation, qualifications, and licensure. Scientific evidence from the following studies demonstrate the important role that CRNAs play ensuring patient access to safe, cost-effective anesthesia care:

- The IOM report on the future of nursing argues that nurses are critical to transforming the US

healthcare system, and for nurses to do so regulations and policies that limit their ability to practice must be removed.⁶

- A recent RAND study found that the United States is experiencing a shortage of anesthesia professionals and that this shortage will persist through 2020 and perhaps beyond.¹

- An RTI study published in *Health Affairs* showed that there are no differences in patient outcomes of anesthesia services delivered by solo CRNAs, by solo anesthesiologists, or by CRNAs supervised by anesthesiologists, and that removal of the physician supervision requirement does not have a negative impact on patient outcomes.⁷

- A study by Hogan et al¹¹ in *Nursing Economics* shows that a CRNA acting as the sole anesthesia professional is the most cost-effective model of anesthesia delivery.

Artificial barriers that prevent fully qualified healthcare professionals, such as CRNAs, from serving as many patients as possible do not optimize the healthcare delivery system. Licensure laws should be amended to allow unrestricted safe scope of practice.

Repealing the federal Medicare physician supervision requirement for nurse anesthetists and allowing healthcare facilities nationwide to make their own decisions about how best to staff their anesthesia departments based on state laws and patients' needs will help address current and future access issues. It could also help control escalating costs in the healthcare system. Perhaps most importantly, the data show that removing this rule does not have a negative impact on patient safety.

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