Statement for the Record
to the
House Committee on Energy and Commerce
Subcommittee on Health

MACRA and Alternative Payment Models:
Developing Options for Value-based Care

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Introduction

Chairman Burgess, Ranking Member Green, and Members of the Committee, thank you for the opportunity to offer this statement for the record. The American Association of Nurse Anesthetists (AANA) is the professional association for Certified Registered Nurse Anesthetists (CRNAs) and student registered nurse anesthetists, with membership that includes more than 52,000 CRNAs and student nurse anesthetists representing over 90 percent of the nurse anesthetists in the United States. CRNAs are advanced practice registered nurses (APRNs) who personally administer more than 43 million anesthetics to patients each year in the United States. CRNAs provide acute, chronic, and interventional pain management services. In some states, CRNAs are the sole anesthesia providers in nearly 100 percent of rural hospitals, affording these medical facilities obstetrical, surgical, trauma stabilization, and pain management capabilities.

The House Energy and Commerce Subcommittee on Health's hearing, entitled "MACRA and Alternative Payment Models: Developing Options for Value-based Care" comes at an important time. As you know, the Centers for Medicare & Medicaid Services' (CMS) Innovation Center is currently seeking feedback on a new direction to promote patient-centered care and test market-driven reforms that empower beneficiaries as consumers, provide price transparency, increase choices and competition to drive quality, reduce costs, and improve outcomes. Certainly, the Committee will be influential in providing guidance for this new direction.

Ensure Equal Treatment of CRNAs and APRNs in Models

The AANA urges the Committee to ensure that CRNAs and other APRNs are treated on par with physicians in models, including physician specialty models and advanced alternative payment models. These healthcare providers are core to improved access to high quality, cost-effective care. Furthermore, the National Academy of Medicine (NAM) recommends that government policy expand opportunities for nurses to lead collaborative healthcare improvement efforts, and prepare and enable nurses to lead changes that advance health.[1] Increasingly, the healthcare industry is recognizing APRNs for their leadership role in clinical, educational and academic, executive, board, legislative, and regulatory domains. In addition to their roles as expert healthcare professionals, APRNs are CEOs of hospitals and health systems, chief nursing officers, chairs of regulatory bodies and advisory committees, and have taken many other positions with wide spans of responsibility.

In particular, the AANA expects that CRNAs should automatically be included in models when anesthesiologists are mentioned. As CMS develops the new direction of the Innovation Center, we urge the Committee to ensure that CRNAs will not face professional discrimination based solely on licensure in these efforts.

Require the Strategic Use of Anesthesia Services

[1] NAM (National Academy of Medicine). The Future of Nursing: Leading Change, Advancing Health (Washington, DC:The National Academies Press, 2011), see Recommendation #2: Expand opportunities for nurses to lead and diffuse collaborative improvement efforts, p.11 and Recommendation #7: Prepare and enable nurses to lead change to advance health, p. 14.

Anesthesia professionals, such as CRNAs, can play an integral role in episodes of care that involve anesthesia as proper anesthesia services management can improve patient flow, advance patient safety, and ultimately yield cost savings.[2] Conversely, research shows that suboptimal care in the preoperative, intraoperative, or postoperative phases of surgery may compromise care, resulting in poor patient outcomes[3] that increase healthcare costs. The AANA urges the Committee to consider the role of anesthesia delivery that is safe and cost-efficient in itself and encourages the use of techniques such as Enhanced Recovery After Surgery (ERAS) programs,[4] which help reduce costs and improve patient outcomes. [5]

Furthermore, we recommend that the Committee promote cost-efficient anesthesia delivery models. All models of anesthesia delivery being equally safe according to extensive published research, the most cost-effective anesthesia care delivery model is the CRNA non-medically directed model, and we recommend that the Committee promote its use in this regard.

In demonstrating the costs of various modes of anesthesia delivery, suppose that there are four identical cases: (a) has anesthesia delivered by a non-medically directed CRNA; (b) has anesthesia delivered by an anesthesia care team where a CRNA medically directed at a 4:1 ratio by a physician overseeing four simultaneous cases and attesting fulfillment of the seven conditions of medical direction in each; (c) has anesthesia delivered by an anesthesia care team where CRNA medically directed at a 2:1 ratio; and (d) has anesthesia delivered by a physician personally performing the anesthesia service. (There are instances where more than one anesthesia professional is warranted; however, neither patient acuity nor case complexity is a part of the regulatory determination for medically directed services. The literature demonstrates that the quality of medically directed vs. non-medically directed CRNA services is indistinguishable in terms of patient outcomes, quality and safety.) Further suppose that the annual pay of the anesthesia professionals approximate national market conditions, $170,000 for the CRNA[6] and $540,314 for the anesthesiologist[7]. Under the Medicare program, practice modalities (a), (b), (c) and (d) are reimbursed the same. Moreover, the literature indicates the quality of medically directed vs. non-medically directed CRNA services is indistinguishable.

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[2] See for example Rice AN, Muckler VC, Miller WR, Vacchiano CA. Fast-tracking ambulatory surgery patients following anesthesia. J Perianesth Nurs. Apr 2015;30(2):124-133 and Kimbrough CW et al. Improved Operating Room Efficiency via Constraint Management: Experience of a Tertiary-Care Academic Medical Center. *Journal of the American College of Surgeons* 2015; 221: 154-162.

[3] Miller TE, Roche AM, Mythen M. Fluid Management and Goal-Directed Therapy as an Adjunct to Enhanced Recovery After Surgery (ERAS). *Canadian Journal of Anesthesia* 2015; 62 (2)" 158-168.

[4] American Association of Nurse Anesthetists, "Enhanced Recovery After Surgery: Considerations for Pathway Development and Implementation," July 2017, available at: http://www.aana.com/myaana/Advocacy/fedgovtaffairs/Documents/20160902-aana-comment-on-opioid-analgesic-prescriber-education-rfi-final.pdf.

[5] See for example Boulind CE, Yeo M, Burkill C, et al. Factors predicting deviation from an enhanced recovery programme and delayed discharge after laparoscopic colorectal surgery Colorectal Dis. 2011;14:103-110; Miller TE, Thacker JK, White WD, et al. Reduced length of hospital stay in colorectal surgery after implementation of an enhanced recovery protocol. Anesth Analg. May 2014;118(5):1052-1061; and Enhanced recovery care pathway. A better journey for patients seven days a week and better deal for the NHS. National Health Service2012-2013. http://www.nhsiq.nhs.uk/resourcesearch/publications/enhanced-recovery-care-pathwayreview.aspx. Accessed February 25, 2015.

[6] AANA member survey, 2014

[7] MGMA Physician Compensation and Production Survey, 2014. www.mgma.com

However, the annualized labor costs (excluding benefits) for each modality vary widely. The annualized cost of practice modality (a) equals $170,000 per year. For case (b), it is ($170,000 + (0.25 x $540,314) or $305,079 per year. For case (c) it is ($170,000 + (0.50 x $540,314) or $440,157 per year. Finally, for case (d), the annualized cost equals $540,314 per year.

Anesthesia Payment Model	FTEs / Case	Clinician costs per year / FTE
(a) CRNA Non-medically Directed	1.00	$170,000
(b) Medical Direction 1:4	1.25	$305,079
(c) Medical Direction 1:2	1.50	$440,157
(d) Anesthesiologist Only	1.00	$540,314
Anesthesiologist mean annual pay	*$540,314*	*MGMA, 2014*
CRNA mean annual pay	*$170,000*	*AANA, 2014*

Under the more costly anesthesia models, hospitals and other facilities – not to mention patients and employers paying for commercial health plan coverage – are bearing the additional costs. Therefore, we recommend that the Committee should consider direction incentives for high value care that include the use of cost-effective anesthesia care.

Promote Full Scope of Practice and Remove Barriers to Care

The AANA believes the Committee should spur models that support and encourage APRNs, including CRNAs, to practice to their full professional education, skills, and scope of practice. Our policy recommendation corresponds with a recommendation from the NAM's report titled *The Future of Nursing: Leading Change, Advancing Health*, which outlines several paths by which patient access to care may be expanded, quality preserved or improved, and costs controlled through greater use of APRNs, including CRNAs.[8] The NAM report specifically recommends that, "advanced practice registered nurses should be able to practice to the full extent of their education and training."[9] Moreover, the NAM states with regard to one type of APM, the accountable care organizations (ACOs), that "ACOs that use APRNs and other nurses to the full extent of their education and training in such roles as health coaching, chronic disease management, transitional care, prevention activities, and quality improvement will most likely benefit from providing high-value and more accessible care that patients will find to be in their best interest."[10]

We also recommend that the Committee encourage payment models that do not impose unnecessary physician supervision requirements.[11] Waiving unnecessary supervision requirements is consistent with Medicare policy reimbursing CRNA services in alignment with their state scope of practice,[12] and with the NAM's recommendation, "Advanced practice registered nurses should be able to practice to the full extent of their education and training."[13]

[8] IOM op. cit. p. 69.
[9] IOM op. cit. p. 7-8.
[10] IOM op. cit. p. 3-41.
[11] *See* 42 CFR §§ 482.52, 482.639, 416.42.
[12] 42 CFR §410.69(b), 77 Fed. Reg. 68892, November 16, 2012.
[13] Institute of Medicine (IOM). *The future of nursing: leading change, advancing health*. Washington, DC: The National Academies Press, p. 3-13 (pdf p. 108) 2011.

There is no evidence that physician supervision of CRNAs improves patient safety or quality of care. In fact, there is strong and compelling data showing that physician supervision does not have any impact on quality, and may restrict access and increase cost. Studies have repeatedly demonstrated the high quality of nurse anesthesia care, and a 2010 study published in *Health Affairs*[14] led researchers to recommend that costly and duplicative supervision requirements for CRNAs be eliminated. Examining Medicare records from 1999-2005, the study compared anesthesia outcomes in 14 states that opted-out of the Medicare physician supervision requirement for CRNAs with those that did not opt out. (To date, 17 states have opted-out.) The researchers found that anesthesia has continued to become safer in opt-out and non-opt-out states alike. In reviewing the study, the *New York Times* stated, "In the long run, there could also be savings to the health care system if nurses delivered more of the care."[15] Most recently, a study published in Medical Care June 2016 found no measurable impact in anesthesia complications from nurse anesthetist scope of practice or practice restrictions.[16]

CRNA safety in anesthesia is further evidenced by the significant decrease in liability premiums witnessed in recent decades. In 2015, self-employed CRNAs paid 33 percent less for malpractice premiums nationwide when compared to the average cost in 1988. When adjusted for inflation through 2015, the reduction in CRNA liability premiums is an astounding 65 percent less than approximately 25 years ago according to Anesthesia Insurance Services, Inc. According to a May/June 2010 study published in the journal of *Nursing Economic$*, CRNAs acting as the sole anesthesia provider are the most cost-effective model for anesthesia delivery without any measurable difference in the quality of care between CRNAs and other anesthesia providers or by anesthesia delivery model.[17]

The evidence also demonstrates that the supervision requirement is costly. Though Medicare requires supervision of CRNAs (except in opt-out states) by an operating practitioner or by an anesthesiologist who is immediately available if needed, hospitals and healthcare facilities often misinterpret this requirement to be a quality standard rather than a condition of participation. The AANA receives reports from the field that anesthesiologists suggest erroneously that supervision is some type of quality standard, an assertion bearing potential financial benefit for anesthesiologists marketing their medical direction services as a way to comply with the supervision condition of participation. When this ideology is established, anesthesiologist supervision adds substantial costs to healthcare by requiring duplication of services where none is necessary. Further, the Medicare agency has clearly stated that medical direction is a condition for payment of anesthesiologist services and not a quality standard.[18] But there are even bigger costs involved if the hospital administrator believes that CRNAs are required to have anesthesiologist supervision.

According to a nationwide survey of anesthesiology group subsidies,[19] hospitals pay an average of $160,096 per anesthetizing location to anesthesiology groups, an increase of 13 percent since

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[14] Dulisse, op. cit.
[15] Who should provide anesthesia care? (Editorial) *New York Times*, Sept. 6, 2010.
[16] Negrusa B et al. op. cit.
[17] Paul F. Hogan et. al, "Cost Effectiveness Analysis of Anesthesia Providers." *Nursing Economic$.* 2010; 28:159-169.
[18] 63 FR 58813, November 2, 1998.
[19] Healthcare Performance Strategies. Anesthesia Subsidy Survey 2012.

the previous survey in 2008. An astounding 98.8 percent of responding hospitals in this national survey reported that they paid an anesthesiology group subsidy. Translated into concrete terms, a hospital with 20 operating rooms pays an average of $3.2 million in anesthesiology subsidies. Anesthesiology groups receive this payment from hospitals in addition to their direct professional billing.

As independently licensed professionals, CRNAs are responsible and accountable for judgments made and actions taken in his or her professional practice.[20] The scope of practice of the CRNA addresses the responsibilities associated with anesthesia practice and pain management that are performed by the nurse anesthetist as a member of inter-professional teams. The same principles are used to determine liability for surgeons for negligence of anesthesiologists or nurse anesthetists. The laws' tradition of basing surgeon liability on control predates the discovery of anesthesia and continues today regardless of whether the surgeon is working with an anesthesiologist or a nurse anesthetist. [21]

There is strong evidence in the literature that anesthesiologist supervision fails to comply with federal requirements, either the Part A conditions of participation or Part B conditions for coverage. Lapses in anesthesiologist supervision are common even when an anesthesiologist is medically directing as few as two CRNAs, according to a 2012 study published in the journal *Anesthesiology*,[22] the professional journal of the American Society of Anesthesiologists. The authors reviewed over 15,000 anesthesia records in one leading U.S. hospital, and found supervision lapses in 50 percent of the cases involving anesthesiologist supervision of two concurrent CRNA cases, and in more than 90 percent of cases involving anesthesiologist supervision of three concurrent CRNA cases. This is consistent with over ten years of AANA membership survey data. Moreover, the American Society of Anesthesiologists *ASA Relative Value Guide 2013* newly suggests loosening further the requirements that anesthesiologists must meet to be "immediately available," stating that it is "impossible to define a specific time or distance for physical proximity." This newer *ASA Relative Value Guide* definition marginalizes any relationship that the "supervisor" has with the patient and is inconsistent with the Medicare CoPs and CfCs, and with the Medicare interpretive guidelines for those conditions, which require anesthesiologists claiming to fulfill the role of "supervising" CRNA services be physically present in the operating room or suite.

If a regulatory requirement is meaningless in practice, contributes to greater healthcare costs, and is contrary to existing evidence regarding patient safety and access to care, we recommend that the Committee discourages the development of models that impose unnecessary supervision requirements.

Promote Access to Care in Rural Areas

[20] American Association of Nurse Anesthetists. Code of Ethics for the Certified Registered Nurse Anesthetist. Adopted 1986, Revised 2005.
[21] Blumenreich, G. Another article on the surgeon's liability for anesthesia negligence. *AANA Journal*. April 2007.
[22] Epstein R, Dexter F. Influence of Supervision Ratios by Anesthesiologists on First-case Starts and Critical Portions of Anesthetics. *Anesth.* 2012;116(3): 683-691.

As CRNAs provide anesthesia for a wide variety of surgical cases and in some states are the sole anesthesia providers in nearly 100 percent of rural hospitals, affording these medical facilities obstetrical, surgical, trauma stabilization, and pain management capabilities, it vital that the Committee promote access to the use of CRNA anesthesia services in rural America. Furthermore, the Committee should ensure models do not create unintended barriers to the use of CRNA services and that CRNA are practicing at their full professional education, skills, and scope of practice. CRNAs play an essential role in assuring that rural America has access to critical anesthesia services, often serving as the sole anesthesia provider in rural hospitals, affording these facilities the capability to provide many necessary procedures. The importance of CRNA services in rural areas was highlighted in a recent study which examined the relationship between socioeconomic factors related to geography and insurance type and the distribution of anesthesia provider type.[23] The study correlated CRNAs with lower-income populations and correlated anesthesiologist services with higher-income populations. Of particular importance to the implementation of public benefit programs in the U.S., the study also showed that compared with anesthesiologists, CRNAs are more likely to work in areas with lower median incomes and larger populations of citizens who are unemployed, uninsured, and/or Medicaid beneficiaries.[24]

Promote Multi-modal Pain Management in an Effort to Reduce the Need for and Reliance on Opioids

The AANA recommends that the Committee promote multi-modal pain management in models as a way to help curb the opioid epidemic. Likewise, the Committee should ensure that models do not limit the use of medically necessary CRNA pain management services. The AANA is concerned in the increase in opioid drug use, abuse and deaths and is committed to collaboratively working toward a common solution to help curb the opioid epidemic in the US. As a main provider of pain management services and as APRNs, CRNAs are uniquely skilled to provide both acute and chronic pain management in a patient centered, compassionate and holistic manner in all clinical settings (e.g., hospitals, ambulatory surgical centers, offices, and pain management clinics).[25] Furthermore, the holistic approach that CRNA pain management practitioners employ when treating their chronic pain patients may reduce the reliance on opioids as a primary pain management modality, thus aiding in the reduction of potential adverse drug events related to opioids. According to a recent AANA position statement, *A Holistic Approach to Pain Management: Integrated, Multimodal, and Interdisciplinary Treatment*, "CRNAs integrate multimodal pain management as an element of enhanced recovery after surgery (ERAS) protocols to manage pain. Management begins pre-procedure and continues after discharge by using opioid sparing techniques such as regional anesthesia, peripheral nerve blocks, non-pharmacological approaches, and non-opioid based pharmacologic measures. Careful assessment and treatment of acute pain, which may include appropriate opioid

[23] Liao CJ, Quraishi JA, Jordan, LM. Geographical Imbalance of Anesthesia Providers and its Impact on the Unisured and Vulnerable Populations. Nurs Econ. 2015;33(5):263-270. http://www.aana.com/resources2/research/Pages/NursingEconomics2015.aspx
[24] Liao, op cit.
[25] AANA Chronic Pain Management Guidelines, September 2014, available at: http://www.aana.com/resources2/professionalpractice/Pages/Chronic-Pain-Management-Guidelines.aspx.

prescribing, can decrease the risk of acute pain transitioning to chronic pain or the development of opioid dependency and abuse."[26]

In developing the plan of care for the patient, CRNAs obtain patient history, evaluate the patient, order and review necessary diagnostic testing, and assess the patient's psychological and emotional state. Non-pharmacologic pain mitigation techniques are often employed in the treatment of chronic pain and considered as part of the care plan. These techniques may include patient education regarding behavioral changes that can decrease pain, such as weight loss, smoking cessation, daily exercise, stretching, and physical or chiropractic therapy. Such therapies may not be sufficient when used alone, but they have significant benefit when they are used in a complementary manner with other therapies.

The Committee should ensure that models do not limit the use of these medically necessary CRNA pain management services. Leading physician subspecialty organizations in pain management research, practice guideline development, and education are known to use economic and advocacy means to exclude other members of the pain management team, such as CRNAs, from educational and practice opportunities, thereby limiting patient access to care, diagnosis, treatment, and ultimately improved patient quality of life.

Conclusion

A report issued in April 2015 by the Federal Trade Commission (FTC), "Competition and the Regulation of Advanced Practice Registered Nurses," underscores the point that for CRNAs and other APRNs, "even well intentioned laws and regulations may impose unnecessary, unintended, or overbroad restrictions on competition, thereby depriving health care consumers of the benefits of vigorous competition."[27] The AANA hopes the Committee will be cognizant of these barriers and require that models do not impose barriers that limit a CRNA's ability to provide comprehensive care.

CRNAs are proven to be safe, high-quality and cost-effective healthcare providers. As the Committee examines MACRA and other APMs for ways to develop value-based care, the ANNA encourages the Committee to recognize that CRNAs are vital to resolving the challenges facing the nation's healthcare system.

[26] See AANA Position Statement, "A Holistic Approach to Pain Management: Integrated, Multimodal, and Interdisciplinary Treatment, July 2016, available at: www.aana.com/HolisticPainMgmt.
[27] Federal Trade Commission. Policy Perspectives: Competition and the Regulation of Advanced Practice Nurses, March 2014, p. 1.