APRN Practice: *Challenges, Empowerment, and Outcomes*

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In her 2008 article entitled "Advanced Practice Registered Nurses: The Impact of Patient Safety and Quality," Eileen O'Grady reported that the advanced practice registered nurse (APRN) workforce "has been growing exponentially with APRNs employed in every health care sector."[1] The Bureau of Labor Statistics agreed, underscoring the demand for APRNs with the ever-increasing need for access to cost-effective, quality health care.[2] Today, there are more than 267,000 APRNs across the United States, practicing in communities, hospitals, and many other healthcare settings. APRNs are categorized as certified nurse practitioners (NPs), certified nurse midwives (CNM), certified nurse specialists (CNS), and certified registered nurse anesthetists (CRNAs).[3] All groups continue to increase in number and effectiveness as integral members of the healthcare team.

BACKGROUND

With the evolution of practices, APRNs have sought to standardize requirements for education, clinical training, and competency in the provision of effective, safe, and quality care. An overarching framework has developed that includes accreditation of educational programs, curriculum requirements for education, and guidelines for regulation of practice, licensure, and board certification. All elements build the foundation for the individual APRN's scope of practice. Beyond the 4 categories of APRNs outlined above, the Joint Consensus Model for APRN regulation developed in 2008 and endorsed by more than 45 national nursing and government organizations, described the specialties within each of the categories.[3] For example, an NP must have a specialty and age-specific certification, such as an adult gerontology acute care nurse practitioner (AGACNP), which is a NP educated and clinically trained to diagnose and manage treatment of adults patients who are acutely ill. A family nurse practitioner (FNP), by contrast, is a primary care practitioner educated, licensed, and certified to treat patients of all ages. With national standards for practice, APRNs are educated and clinically trained to practice to the scope of their respective licensure and certification.[4] The general category of APRN is broad and encompasses a variety of nursing providers. Each specialty has specific nuances to their scope of practice and the climate surrounding their practice. Although this article touches on high-level APRN practice considerations, there is specific attention to NP practice highlighted.

The evolution of APRN practice has occurred within the context of a national mandate for significant improvements in our healthcare system. The growing body of evidence of the outcomes associated with APRN practice has influenced recommendations for future direction contained in consumer reports and healthcare policy initiatives. APRN practice outcomes have been studied for evidence of improved access to care, quality care delivery, and financial impact in terms of cost savings for the consumer and the healthcare system. These themes are reflected in the recommendations summarized below.

In 1999, the Institute of Medicine (IOM) issued the report *To Err Is Human: Building a Safer Health System*[5] with the premise that there are high numbers of preventable medical errors contributing to poor outcomes and costly care, errors that could be prevented from improved systems, processes, and coordinated care delivery. Follow-up reports, *Crossing the Quality Chasm* and *Health Professions Education: A Bridge to Quality*, underscored the need to better utilize resources and that all healthcare professions should work together to provide interdisciplinary, evidence-based practice and promote safe, effective, patient-centered, timely, efficient, and equitable care.[6,7] The IOM 2010 report *The Future of Nursing: Leading Change, Advancing Health* specifically described recommendations for nursing's role in the healthcare delivery system.[8] The report emphasized the critical role that nurses needed to play in the effort to improve cost-effective and quality healthcare delivery. The report underscored that in order to remove barriers to accessible, quality, and cost-effective care, nurses, including advanced practice nurses, should be able to practice to the full extent of their education and training.[8]

CHALLENGES

Despite significant improvements, APRNs continue to face challenges in practicing to the full extent of their education, clinical training, licensure, and certification. The recommendations contained in the IOM report targeting barriers to practice included: optimization of benefits coverage and reimbursement for services provided by APRNs; removal of state regulations that restrict APRNs from providing care to the extent that they are qualified; and the elimination of regulations that promote competition versus collaboration among healthcare providers. Organizations were also encouraged to expand opportunities for interprofessional collaboration and to include nurses in research and redesign efforts to improve health care systems and delivery. Recommendations regarding the development of transition to practice programs to integrate nurses into the practice environment and allow practice to the full extent of license and certification were particularly pertinent to APRNs.

This article briefly reviews literature related to APRN outcomes, with specific attention to NPs, which constitute over 70% of the APRN workforce. The intent of this article is to invoke the reader to explore strategies that empower the APRN to work at top of license and deliver cost-effective, quality care. Furthermore, the article considers the optimal environment in which APRNs experience job satisfaction and excel in clinical practice, scientific inquiry, and education.

APRN OUTCOMES REVIEW

A summary of studies specific to NPs is provided in Table 1.[9–22] The majority of studies listed found improvement in patient care outcomes after adding NPs to the respective practice.[9–18,20–22] One study compared outcomes between NPs and/or APRNs to other healthcare providers with either improvement or no difference in patient care outcomes.[19] Additionally, NPs showed significant cost savings and cost avoidance in the provision of care. Newhouse et al. (2011) conducted a meta-analysis of APRN outcomes.[19] A database search of multiple electronic sources revealed 27,993 studies, from which 37 studies were selected for comparison. Exclusion criteria included key factors such as requirement to be conducted within the United States, given that education, certification, and licensure, as well as the US healthcare system, are unique. The studies included were randomized control trials and observational studies that included at least 2 groups of providers and situations that were able to isolate the impact of APRNs. Outcomes were aggregated to include a minimum of 3 studies with the same outcome. Results revealed the positive impact of APRNs on patient satisfaction, self-reported perceived health, functional status, glucose control, lipid control, blood pressure, emergency department visits, hospitalization, duration of mechanical ventilation, length of stay (LOS), and mortality.[19]