1-1-2014

Practice Authority For Advanced Practice Registered Nurses: Troubling Trends In Regulatory Variability

Susanne Johnson Phillips
Yale University, phillips.susie.uci@gmail.com

PRACTICE AUTHORITY FOR ADVANCED PRACTICE REGISTERED NURSES: TROUBLING TRENDS IN REGULATORY VARIABILITY

Submitted to the Faculty
Yale University School of Nursing

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Nursing Practice

Susanne Johnson Phillips

May 18, 2015

The capstone is accepted in partial fulfillment of the requirements for the degree Doctor of Nursing Practice.

Judith Kunisch, MBA, BSN

May 18, 2015

Ruth McCorkle, PhD, FAAN

May 18, 2015

Andrea Brassard , PhD, FNP-BC

May 18, 2015

Signed:_Susanne J. Phillips_____

May 18, 2015

Abstract

In response to the national call to increase the healthcare provider workforce, states are enacting more laws to give APRNs full practice authority. However, the approach is incremental and often politically motivated, leading to wide variation in state laws. A significant area of regulatory variability relates to the point at which APRNs have full practice authority. Some states never allow it for one or more APRN roles; some states have a transition to practice, where, following licensure there is a period of oversight or supervision; some states allow full practice authority upon licensure. Full practice authority for APRNs upon licensure is defined in the uniform Consensus Model and supported by extensive peer-reviewed research. Legislators are justified in adopting uniform laws and full practice authority upon licensure for APRNs. Uniform regulation resolves the interstate regulation disorder, improves APRN mobility, and provides greater access to safe, high quality care for the public.

Key Words:

Advanced practice registered nurse
Full practice authority
Transition-to-practice
Workforce issues
Consensus

Practice Authority for Advanced Practice Registered Nurses: Troubling Trends in Regulatory Variability

To help meet the overwhelming demand for access to healthcare following the 2010 passage of the Patient Protection and Affordable Care Act (ACA), state policy makers are increasingly turning to Advanced Practice Registered Nurses (APRNs) to help fill the growing gap of healthcare providers in all healthcare settings. Yet despite significant legislative advancements in APRN practice across the nation, and at a time when the full scope of their services are needed the most, a recent and growing trend in state regulatory variability is, in fact, further delaying access to these highly qualified healthcare providers.

In response to the national call to increase the healthcare provider workforce, APRNs stand ready to provide needed access to the millions of newly insured as well as the remaining and perpetually uninsured. Yet, recently-adopted state rules and politics are actually delaying full practice authority for APRNs in a growing number of states. And, while several states have responded to the immediate need to remove practice barriers and bolster provider ranks, especially within the safety net; analysis has uncovered a disturbing trend revealing state adoption of statutory mandates that delay APRN full practice

authority in several of those states[1-6]. As many states move toward regulatory consensus in APRN practice, this growing trend away from granting full practice authority to APRNs *upon licensure and certification* must be addressed by policy-makers. Continuing and increasing variability in state practice requirements for full practice authority does not bring APRN practice toward consensus; rather it creates additional layers of unnecessary regulatory constraint and costs, and limits APRN mobility (i.e. the ability to move across state lines to practice)[7-9].

Background

Definitions

It is helpful to understand who APRNs are, their educational background, as well as the roles and responsibilities of registered nurses who provide primary and specialty healthcare under this regulatory title. *APRNs* are graduate-prepared or doctorally-prepared registered nurses, educated in one of four practice roles. APRNs provide high quality, cost-effective healthcare services across the lifespan in nearly all healthcare settings[7], notably serving vulnerable populations throughout the nation in urban and rural underserved areas[10]. Licensed registered nurses enter APRN programs and complete a rigorous didactic and clinical program of study where direct supervision of clinical care is provided by experienced

interdisciplinary healthcare providers. APRN practice roles include the certified nurse practitioner (CNP), certified nurse midwife (CNM), clinical nurse specialist (CNS), and certified registered nurse anesthetist (CRNA). APRNs are licensed and regulated by state nursing or healthcare consumer boards and are independently and solely accountable for their practice. The quality and safety of care provided by advanced practice nurses is nationally recognized and evidence-based[8,11]. Although APRN educational standards and training are consistent and nationally-accredited, APRN regulatory authority is determined on a state-by-state basis and ranges from full autonomous practice (also cited as *full practice authority*) to physician-supervised practice with great irregularity among states[1,12].

The term *full practice authority* implies autonomous authority to provide healthcare within a legally-defined scope of practice, granted to a healthcare provider by a regulatory board upon successful completion of a formal academic program and successful demonstration of competency in that profession, such as passage of a national board certification examination. For licensed APRNs, legal authority to perform the healthcare services that they have been educated and trained to autonomously provide is recognized as *full practice authority*[7,13-16]. The National Council of State Boards of Nursing (NCSBN) describes full autonomous authority in terms of independence

from legally mandated physician supervision, collaboration, or conditions for practice, including prescriptive authority, following licensure. In some states, APRNs enjoy independent practice authority, where other states require a broad range of physician involvement; this, while completing the same educational preparation, training, and demonstration of professional competency[17].

National Call for APRN Workforce

Passage of the ACA sought to decrease the number of an estimated 41 million uninsured, providing health insurance coverage to low-income citizens through the expansion of state Medicaid programs and tax credits[18]. By July 2014, the Center for Medicare and Medicaid Services (CMS) reported Medicaid enrollment expanded by 8 million in states implementing expansion reforms since the initial open enrollment period in October 2013[19]. The projected enrollment in Medicaid Expansion states for fiscal year 2015 estimates 18% enrollment growth[18]. Although access to healthcare is promised to the growing insured population, a dearth of healthcare providers to provide that access has been widely recognized by the public, policy-makers, and health policy analysts. So, the crucial question is: who will provide this care? In early 2013, the U.S. Senate issued a national call to address the adequacy of our healthcare provider workforce. In testimony before the Senate Committee on Health,

Labor, Education & Pensions, Subcommittee on Primary Health and Aging, Uwe E. Reinhardt, Ph.D., a distinguished Princeton University economist, in response to overwhelming evidence of APRN quality and safety data, endorsed elimination of outdated and unnecessary physician supervision requirements and state variability in APRN scope of practice, recommending a unified model of autonomous APRN clinical practice[20].

The overwhelming nationwide call to remove all state regulatory barriers to APRN practice based on evidence extends from federal government organizations to consumer advocacy groups. AARP and the Citizen's Advocacy Center have called for evidence-based expansions and recognition of autonomous APRN care to improve consumer access[21,22]. Federal agencies including the Veteran's Health Administration and the Federal Trade Commission call for APRN autonomous practice and removal of state regulation-imposed physician supervision[23,24]. In 2001, the CMS authorized state governors to seek exemption from federally mandated physician supervision requirements for CRNAs[25]. Currently there are eighteen states following the federal "opt-out" rules[26]. The National Governor's Association has also provided recommendations to states, calling for consideration in elimination of scope of practice restrictions to improve access to primary care[27].

Numerous bipartisan policy institutes have also published objective, evidence-based analyses and reform recommendations aimed at expanding the health care workforce, including APRN-delivered care[8,28-31]. Intended to inform federal and state legislators and regulators on policy options, these recommendations call for removal of outdated licensing barriers for more effective and efficient care by reforming scope of practice laws to allow all health care providers, including APRNs, to practice to the fullest extent of their education and training. The National Center for Policy Analysis and the Macy Foundation both agree that expanding APRN scope of practice will improve primary care access[32,33].

As if the evidence and national bipartisan support did not provide enough weight to convince policy-makers to remove all practice barriers, economic evidence supporting this recommendation has emerged and is gaining traction in the debate[20,34]. Recently published economic modeling demonstrates that granting full practice authority to APRNs without restriction is an effective step to increase the supply of high quality primary care providers while reducing costs[35]. Evidence indicates that recommended reform in a restricted state such as California would increase the primary care workforce by 25%. California would realize a $1.8 billion dollar savings in cost of preventive care visits over the first ten years of

implementation from a resulting increase of 2 million preventive care visits per year[36].

National Call for Regulatory Consensus

The national call to improve access to quality health care through elimination of barriers to APRN practice is historically well documented beyond the nursing literature[20,24,27,37-39]. Yet inconsistency among state APRN scopes of practice hinders widespread adoption of recommended reforms. In response to this disorder, recommendations for national APRN regulatory consensus have been increasingly cited since 2008[7-9,20,22,24,27,32].

The *Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education* (Consensus Model) was published in 2008 and endorsed by forty-eight nursing organizations. To ensure consumers, employers, and policy-makers clearly understand the role, preparation, scope, and licensure requirements, this landmark document called for state-wide regulatory consensus in APRN licensure, accreditation, certification and education by 2015[7]. Implementing the national initiative *Campaign for Consensus*, the NCSBN has sought to assist state policy-makers with APRN regulatory alignment, providing model statutory and regulatory language for adoption in individual states[12].

Shortly after the publication of the *Consensus Model*, the Institute of Medicine (IOM) published *The Future of Nursing:*

Leading Change, Advancing Health (IOM Report)[8]. This seminal document recognizes the role of nurses in transforming the healthcare system and calls for a number of policy reforms to accomplish the ACA mandates. The first recommendation in the IOM Report urges Congress, States and other governing bodies to remove the profound regulatory barriers to APRN practice; this includes wide-spread variations in practice authority among states, limiting nurses' ability to effectively support transformation of healthcare delivery[8].

State Legislative Response

The research is clear: removing APRN scope of practice barriers positively impacts supply of providers and thereby access to care[36,40-42]. Twenty states, including the District of Columbia, authorize full practice authority for one or more APRN roles *upon licensure and certification*, enabling those providers to practice to the fullest extent of their education and training immediately following legal recognition (Table 1). Since roll-out of the ACA and subsequent expansion of Medicaid, many state leaders have clearly heard the national call for consensus in increasing numbers. Six states, all who have implemented Medicaid Expansion[49], enacted full practice authority upon licensure for one or more APRN roles since 2010 (Table 1).

Yet, with alarming and increasing frequency, states are adopting legislation which delays full practice authority for

APRNs. Six states have enacted practice authority laws for one or more APRN roles which move closer to full practice authority, but fall short of full practice authority upon legal recognition as an APRN. These new laws, adopted in Colorado, Vermont, Nevada, Connecticut, New York, and Minnesota, require APRNs in one or more roles to complete a period of post-licensure oversight prior to full practice authority (Table 2). These new legislative restrictions are modeled in concept after the State of Maine's 1995/2007 legislative efforts, a restrictive post-licensure supervised practice provision of 24 months. And in support of restricting practice authority, each of the six states has a unique time frame and standard for this period, none of which are supported in the evidence as necessary for safe, effective, quality practice[42,44,45].

Although these new laws might be perceived as a positive move toward full practice authority, state practice acts appear to be growing in variability rather than moving toward regulatory uniformity. With a minimum of a one to three year delay in autonomous practice authority following APRN licensure in a growing number of states, the likely result will be a negative impact on access to care—especially in states where Medicaid Expansion has already begun[9,41].

The Policy Debate, or Is It?

The safety and efficacy case for removal of APRN practice barriers is irrefutable based on research alone. Forty percent of states (19 states and the District of Columbia) authorize full practice authority for one or more APRN roles upon licensure and certification. Research demonstrates these twenty states with full practice authority have statistically higher rankings in national health outcomes when compared with states requiring post-licensure physician collaboration or supervision[46]. In addition, these states document lower hospitalization rates and improved outcomes in ambulatory and acute care settings, as well as lower utilization of emergency department care[42,44]. Also, in a study conducted between 1999 and 2005, anesthesia-related complications including death did not increase in the "opt-out" states where nurse anesthetists practice independent of physician supervision[45].

Quality, cost, safety, and efficacy studies of APRN practice have provided the public with substantial proof that healthcare delivered by these professionals is comparable to and in some cases better than other autonomous healthcare providers[11,47-52]. Yet despite the abundance of evidence, the national legislative trend for APRN practice authority appears to be moving toward various periods of practice oversight

following licensure and certification prior to full practice authority.

The Ongoing Political Debate

The national call for full, autonomous APRN practice authority is based on the undeniable growing body of peer-reviewed evidence on APRN care quality and mounting research of the cost-effectiveness of APRN full-practice reform. Thus, we are left to ponder the reasons why states are continuing to adopt restrictive scope of practice reforms. Six states plus Maine enacted laws authorizing APRNs' full practice authority only after post-licensure completion of various periods of oversight or supervision unsubstantiated by research, sometimes referred to as "transition to practice"[53] or "transition to full practice authority"[54]. Citing political strategy, stakeholders describe this transition regulation as a compromise to mitigate significant physician opposition to scope of practice reforms in states where state medical associations have political and economic incentive, and power, to maintain regulatory status-quo[54]. Of even greater concern, stakeholders have reported to the American Nurses Association that future utilization of "transition-to-practice" language is a purely political strategy to improve successful passage of legislative reforms. Data and evidence are being overlooked for political expediency,

resulting in the perpetuation of a scarcity of healthcare providers.

The strategy to structure APRN legislation around limited practice authority reforms are the result of turf battles[20,22,24]. Health policy and economic experts advocate that states reject outdated and unsubstantiated arguments promoted by opponents seeking to restrict healthcare practice to protect their own financial and professional interests. Sadly, in the short term, political expediency will trump solid long-term evidence and states will likely continue to enact laws which fall short of the national call for unrestricted APRN practice authority. The American Medical Association and their Scope of Practice Partnership[55] continues to provide state medical societies with significant funding and tools to "focus organized medicine's resources on disputing unwarranted [scope of practice] expansions by non-physician practitioners that threaten the health and safety of patients,"[56] despite research refuting their claim of lower quality and unsafe care.

The politics are clear: successful passage of full APRN practice authority legislation is contingent on political compromise, not research evidence. In our current system, political standing trumps access to care in the legislative process. The courage to move beyond professional turf battle politics will ultimately drive any reform of our healthcare

system. We need to ask an important question: Are our states leaders ready for the transformational change called for at a national level, or will we continue with baby-step politics as usual in healthcare provider scope of practice reforms?

Summary and Policy Recommendation

Inconsistent interstate regulation of APRN practice is widespread and incremental policy change away from consensus is the current trend. In contrast to physician colleagues who enjoy uniformity in state medical regulation throughout the nation, an APRN can practice with full practice authority in one state, then cross a state line and face mandated direct physician supervision. Remember that APRN educational preparation and licensure are nationally uniform, making state inconsistency in practice scope a profound contradiction. In an effort to reduce regulatory variability, a national call for removal of all APRN practice barriers by 2015, has garnered the attention of state policy-makers. However, since 2010, as access to quality healthcare escalated as a national concern, a new layer of regulatory burden has been adopted in several states. Alarmingly, incremental policy changes, which lead to wider regulatory inconsistency, may continue as more states are preparing to enact transition to practice laws.

The research evidence is clear: APRNs deliver high-quality, economically-sound healthcare in states that authorize full

practice authority upon licensure. Increasing regulatory variability institutes undue burden on regulatory agencies by adding additional administrative costs and oversight, ultimately limiting APRN mobility and therefore access to care. Given the lack of legitimate evidence showing transition-to-practice regulations enhance patient safety, policy-makers should avoid creating additional regulatory encumbrances simply to mitigate political opposition. Policy-makers are empowered and now justified to uniformly implement the evidence-based reform that is APRN full practice authority upon licensure.

Endnotes:

1. Phillips SJ. 27th annual APRN legislative update. Nurse Pract. Forthcoming 2015.

2. Phillips SJ. 26th annual legislative update: Progress for APRN authority to practice. Nurse Pract 2014 Jan 11;39(1):29-52.

3. Phillips SJ. 25th annual legislative update: Evidence based practice reforms improve access to APRN care. Nurse Pract 2013 January 10;39(1):18-42.

4. Phillips SJ. 24th annual legislative update: APRN consensus model implementation and planning. Nurse Pract 2012 January 19;37(1):22-45.

5. Phillips SJ. 23rd annual legislative update: As healthcare reforms, NPs continue to evolve. Nurse Pract 2011 January;36(1):30-52.

6. Phillips SJ. 22nd annual legislative update: Regulatory and legislative successes for APNs. Nurse Pract 2010 January;35(1):24-47.

7. APRN Joint Dialogue Group. Consensus model for advanced practice registered nursing (APRN) regulation: Licensure, accreditation, certification and education [Internet]. Chicago (IL): NCSBN; 2008 Jul 7 [cited 2014 2014 Oct 28]. 41 p. Available from: https://www.ncsbn.org/7_23_08_Consensue_APRN_Final.pdf

8. Institute of Medicine. The future of nursing: Leading change, advancing health [Internet]. Washington (DC): The National Academies Press; 2011 [cited 2014 Oct 25]. Available at http://www.nap.edu/openbook.php?record_id=12956

9. Chornick N. Moving toward uniformity in state APRN laws. J Nurs Regul 2010;1(1):58-61.

10. Skillman S, Kaplan L, Fordyce MA, McMenamin PD, Doescher MP. Understanding APRN distribution in urban and rural areas of the United States using National Provider Identifier Data, Final Report [Internet]. Seattle (WA): WWAMI Rural Health Research Center, University of Washington; 2012 [cited 2014 Nov 7]. 28 p. Report No.: 137. Available from http://www.nursingworld.org/aprndistributionreport

11. Newhouse RP, Stanik-Hutt J, White KM, Johantgen M, Bass EB, Zangaro G, et al. Advanced practice nurse outcomes 1990-2008: A systematic review. Nurs Econ. 2011 Sep-Oct;29(5):1-21.

12. National Council of State Boards of Nursing [Internet]. Chicago (IL): NCSBN; 2014. APRN campaign for consensus: Moving toward uniformity in state laws. 2014 [cited 2014 Oct 25]. Available from: https://www.ncsbn.org/738.htm

13. American Association of Nurse Practitioners. Issues at-a-glance: Full practice authority [Internet]. Washington (DC); 2014 Oct [updated 2014 Oct; cited 2014 Nov 7]. Available from: http://www.aanp.org/images/documents/policy-toolbox/fullpracticeauthority.pdf

14. American College of Nurse Midwives. Definition of Midwifery and Scope of Practice of Certified Nurse-Midwives and Certified Midwives [Internet]. 2012 Feb 6 [cited 2014 Nov 25]. Available from: http://www.midwife.org/ACNM/files/ACNMLibraryData/UPLOADFILENAME/000000000266/Definition%20of%20Midwifery%20and%20Scope%20of%20Practice%20of%20CNMs%20and%20CMs%20Feb%202012.pdf

15. American Association of Nurse Anesthetists. CRNA Scope of Practice [Internet]. 2010 May [cited 2014 Nov 25]. Available from: http://www.aana.com/aboutus/Documents/scopeofpractice.pdf

16. National Association of Clinical Nurse Specialists. A Vision of the Future for Clinical Nurse Specialists [Internet]. 2007 Jul [cited 2014 Oct 7]. Available from http://www.nacns.org/docs/AVisionCNS.pdf

17. National Council of State Boards of Nursing. Implementation status map [Image on internet]. Chicago (IL): NCSBN; 2014 May [cited 2014 Oct 25]. Available from: https://www.ncsbn.org/5397.htm

18. Henry J. Kaiser Family Foundation [Internet]. Menlo Park (CA): Kaiser Family Foundation; 2014. Key facts about the uninsured population; 2014 Oct 24 [cited 2014 Nov 7]. Available from: http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/

19. Centers for Medicare and Medicaid Services. Medicaid & CHIP: July 2014 monthly applications, eligibility determinations and enrollment report [Internet]. Washington (DC): CMS; 2014 Sep 22 [cited 2014 Nov 7]. Available from: http://medicaid.gov/AffordableCareAct/Medicaid-Moving-Forward-2014/Downloads/FINAL-July-Medicaid-Applications-Eligibility-Enrollment-Report-2.pdf

20. Reinhardt UE. Statement to the Senate Committee on Health, Labor, Education & Pensions; Subcommittee on Primary Health and Aging. "30 Million New Patients and 11 Months to Go: Who Will Provide Their Primary Care?" US Senate; 2013 Jan 29. Available from: http://www.help.senate.gov/imo/media/doc/Reinhardt.pdf

21. AARP. The 2010 supplement to the policy book: AARP public policies 2009-2010. Washington (DC): AARP; 2010 Feb 25. (Health Care Education and Licensing; 7-108).

22. LeBuhn R, Swankin DA. Reforming scopes of practice: A white paper [Internet]. Washington (DC): Citizen Advocacy Center; 2010 Jul [cited 2014 Oct 25]. 22 p. Available from: http://www.cacenter.org/files/ReformingScopesofPractice-WhitePaper.pdf

23. VA Health Care Office of Nursing Services. 2011 Annual report: Future of nursing [Internet]. Washington (DC): Veterans Health Administration; 2011 Dec [cited 2014 Nov 7]. Available from: http://www.va.gov/nursing/docs/2011onsAnnualRptweb.pdf

24. Gilman DJ, Isa Koslov T. U.S. Federal Trade Commission Policy Perspectives: Competition and the regulation of advanced practice registered nurses [Internet]. Washington (DC): Federal Trade Commission; 2014 Mar [cited 2014 Oct 25]. 53 p. Available from: http://www.ftc.gov/system/files/documents/reports/policy-perspectives-competition-regulation-advanced-practice-nurses/140307aprnpolicypaper.pdf

25. Medicare and Medicaid programs; Hospital conditions of participation: Anesthesia services. Final Rule. Fed Regist [Internet]. 2001 Nov 13 [cited 2014 Nov 26];66(219):56762-56768. Available from: http://www.aana.com/advocacy/stategovernmentaffairs/Documents/Federal%20Register%20Opt%20Out.pdf

26. American Association of Nurse Anesthetists. Federal Supervision Rule/Opt-Out Information [Internet]. Park Ridge (IL): American Association of Nurse Anesthetists; 2014 [cited 2014 Nov 26]. Available from: http://www.aana.com/advocacy/stategovernmentaffairs/Pages/Federal-Supervision-Rule-Opt-Out-Information.aspx

27. Shiff M. The role of nurse practitioners in meeting increasing demand for primary care [Internet]. Washington (DC): National Governors Association; 2011. NGA Center for Best Practices; 2012 Dec [cited 2014 Oct 25]. Available from: http://www.nga.org/files/live/sites/NGA/files/pdf/1212NursePractitionersPaper.pdf

28. Antos J, Baicker K, Chernew M, Crippen D, Cutler D, Daschle T, et al. Bending the curve: Person-centered health care reform, a framework for improving care and slowing health care cost growth [Internet]. Washington (DC): Engelberg Center for Health Care Reform at Brookings; 2013 Apr [Cited 2014 Nov 7]. 49 p. Available from: http://www.brookings.edu/research/reports/2013/04/person-centered-health-care-reform

29. Spetz J. Health reform and the health care workforce [Internet]. Houston (TX): Rice University's Baker Institute for Public Policy; 2012 March [cited 2014 Nov 7]. 24 p. Report No.: 51. Available from: http://bakerinstitute.org/files/593/

30. UnitedHealth Center for Health Reform & Modernization. Modernizing rural healthcare: Coverage, quality, and innovation [Internet]. UnitedHealth Group; 2011 Jul [cited 2014 Nov 7]. 84 p. Working Paper 6. Available from: http://www.unitedhealthgroup.com/~/media/UHG/PDF/2011/UNH-Working-Paper-6.ashx

31. Christian S, Dower C, O'Neil E. Overview of nurse practitioner scopes of practice in the United States – Discussion [Internet]. San Francisco (CA): Center for Health Professions, University of California, San Francisco; 2007 Dec 1 [cited 2014 Nov 7]. 27 p. Available from: http://futurehealth.ucsf.edu/Content/29/2007-12_Overview_of_Nurse_Practitioner_Scopes_of_Practice_In_the_United_States_Discussion.pdf

32. Culliton B, Russell S, editors. Who will provide primary care and how will they be trained [Internet]? Proceedings; 2010 April; Durham (NC): Josiah Macy, Jr. Foundation; [cited 2014 Nov 7]. 260 p. Accessible from http://macyfoundation.org/docs/macy_pubs/JMF_PrimaryCare_Monograph.pdf

33. Traweek V, Goodman JC. The doctor's out. Where's the nurse? [Internet]. Dallas (TX): National Center for Policy Analysis; 2011 Nov 10 [cited 2014 Nov 7]. Report No.: 757. Available from: http://www.ncpa.org/pub/ba757

34. Eibner CE, Hussey PS, Ridgley MS, McGlynn EA. Controlling health care spending in Massachusetts: An analysis of options. Santa Monica (CA): RAND Corporation; 2009 May. 244 p. TR-733-COMMASS

35. Weinberg M, Kallerman P. Full practice authority for nurse practitioners increases access and controls cost, spotlight brief [Internet]. San Francisco (CA): Bay Area Council Economic Institute; 2014 Apr [cited 2014 Oct 25]. 2 p. Available from: http://www.bayareaeconomy.org/media/files/pdf/BACEI_NPs_CA_Final.pdf

36. Weinberg M, Kallerman P. Full practice authority for nurse practitioners increases access and controls cost: Technical appendix [Internet]. San Francisco (CA): Bay Area Council Economic Institute; 2014 Apr [cited 2014 Oct 25]. 20 p. Available from: http://www.bayareaeconomy.org/media/files/pdf/BACEI_NPs_Tech_Final.pdf

37. DeBois Inglis A, Kjervik DK. Empowerment of advanced practice nurses: Regulation reform needed to increase access to care. J Law Med Ethics. 1993;21(2):193-205.

38. Safriet B. Health care dollars and regulatory sense: The role of advanced practice nursing. Yale J Regul. 1992;9:417-88.

39. American Hospital Association [Internet]. Washington (DC): AHA; c2006-2014. Workforce roles in a redesigned primary care model; 2013 Jan [cited 2014 Oct 25]. Available from: http://www.aha.org/content/13/13-0110-wf-primary-care.pdf

40. Stange K. How does provider supply and regulation influence health care markets? Evidence from nurse practitioners and physician assistants. J Health Econ. 2014 Jan;33:1-27.

41. Kuo Y, Loresto Jr. FL, Rounds LR, Goodwin JS. States with the least restrictive regulations experienced the largest increase in patients seen by nurse practitioners. Health Aff. 2013 Jul;32(7):1236-43.

42. Traczynski J, Udalova V. Nurse practitioner independence, health care utilization, and health outcomes. Paper presented at: Fourth Annual Midwest Health Economics Conference; 2013 Apr 4-5, 2013; Madison, WI.

43. Henry J. Kaiser Family Foundation [Internet]. Menlo Park (CA): Kaiser Family Foundation; 2014. Status of state action on the Medicaid expansion decision. 2014 Aug 28 [cited 2014 Oct 25]. Available from: http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/

44. Oliver GM, Pennington L, Revelle S, Rantz M. Impact of nurse practitioners on health outcomes of Medicare and Medicaid patients. Nurs Outlook. 2014 Nov-Dec;62(6):440-7.

45. Dulisse B, Cromwell J. No harm found when nurse anesthetists work without supervision by physicians. Health Aff. 2010 Aug;29(8):1469-75.

46. Oliver G, Pennington L, Revelle S. Nurse practitioners and national health outcomes. Mo Nurse [Internet]. 2014 [cited 2014 Nov 7];83(1):13-16. Available from http://www.mlppubsonline.com/publication/?i=218958

47. Naylor MD, Kurtzman ET. The role of nurse practitioners in reinventing primary care. Health Aff [Internet]. 2010 May [cited 2014 Oct 25];29(5):893-9. Available from: http://content.healthaffairs.org/content/29/5/893.full.html doi: 10.1377/hlthaff.2010.0440

48. U.S. Congress, Office of Technology Assessment. Nurse practitioners, physician assistants, and certified Nurse-midwives: A policy analysis (Health Technology Case Study 37). Washington (DC): US Government Printing Office. 1986 Dec. 88 p. Report No.: OTA-HCS-37

49. Brown SA, Grimes DE. Nurse practitioners and certified nurse-midwives: A meta-analysis of studies on nurses in primary care roles. Washington (DC): American Nurses Publishing; 1993. 125 p.

50. Topp R, Tucker D, Weber C. Effect of clinical case manager/clinical nurse specialist patients hospitalized with congestive heart failure. Nurs Case Manag 1998 Jul-Aug;3(4):140-5.

51. Brooten D, Youngblut JM, Brown L, Finkler SA, Neff DF, Madigan E. A randomized trial of nurse specialist home care for women with high-risk pregnancies, outcomes, and costs. Am J Manag Care. 2001 Aug;7(8):793-803.

52. Hogan PF, Seifert RF, Moore CS, Simonson BE. Cost effectiveness analysis of anesthesia providers. Nurs Econ. 2010 May-Jun;28(3):159-169.

53. *Vermont Nurse Practice Act 2011*, §§1612-1613

54. Brassard A. Transition to full practice authority for APRNs. Am Nurse [Internet]. 2014 Sep 2 [cited 2014 Nov 7]. Available from: http://www.theamericannurse.org/index.php/2014/09/02/transition-to-full-practice-authority-for-aprns/

55. Langston, EL. Scope of practice: Need for continuing dialogue; s [Internet]. 2008 Jun 2 [cited 2014 Nov 27]. Available from: http://www.amednews.com/article/20080602/opinion/306029992/5/

56. Carlson ES. ANA official observer at AMA annual meeting; AMA policies could affect nursing practice. Capitol Update. {Internet]. 2009 July [cited 2014 Nov 7];7(4). Available from: http://www.rnaction.org/site/PageServer?pagename=CUP_07_09_IntheAgencies_ANAOfficialObserversatAMA

Exhibits

EXHIBIT 1 (table)
States Authorizing Full Practice Authority to 1 or more APRN Roles ***upon Licensure***
SOURCE: National Council of State Boards of Nursing. Chicago (IL): NCSBN; 2014. Find your nurse practice act; ND [cited 2014 Nov 27]. Available from: https://www.ncsbn.org/npa.htm
Notes: NCSBN webpage updated 2014 May; new legislative changes and updated statutes and regulations were reviewed online at individual state board of nursing webpages. * Indicates adoption of full practice authority legislation or regulation since enactment of the ACA

EXHIBIT 2 (table)
States Authorizing Full Practice Authority to 1 or more APRN Roles **Following a Mandated Post-Licensure Practice Period**
SOURCE: State Statutes / Regulations as Listed
Notes: *Maine was the first State to pass this requirement in 1995; amended in 2007 to include a CNP as a supervising provider

TABLE 1

States Authorizing Full Practice Authority to 1 or more APRN Roles ***upon Licensure***

State	APRN Role
AK	CNP, CNS, CNM, CRNA
AZ	CNP, CNM
CT	CNM
DC	CNP, CNS, CNM, CRNA
HI*	CNP, CNS, CNM, CRNA
ID	CNP, CNS, CNM, CRNA
IA	CNP, CNS, CNM, CRNA
MD*	CNM
MA*	CNM
MN*	CNM
MT	CNP, CNS, CNM, CRNA
NE	CRNA
NH	CNP, CNM, CRNA
NM	CNP, CNS, CNM, CRNA
ND*	CNP, CNS, CNM, CRNA
OR	CNP, CNS, CNM, CRNA
RI*	CNP, CNM, CRNA
UT	CRNA
WA	CNP, CNM, CRNA
WY	CNP, CNS, CNM, CRNA

SOURCE: National Council of State Boards of Nursing. Chicago (IL): NCSBN; 2014. Find your nurse practice act; ND [cited 2014 Nov 27]. Available from: https://www.ncsbn.org/npa.htm

Notes: NCSBN webpage updated 2014 May; new legislative changes and updated statutes and regulations were reviewed online at individual state board of nursing webpages. * Indicates adoption of full practice authority legislation or regulation since enactment of the ACA

TABLE 2

States Authorizing Full Practice Authority to 1 or more APRN Roles ***Following a Mandated Post-Licensure Practice Period***

State	APRN Role	Statute or Regulation	Post-Licensure Requirements
ME*	CNP	Maine Nurse Practice Act, Maine Stat. §2102 (2007).	24 months; physician or CNP - supervised practice
VT	CNP, CNS, CNM, CRNA	Vermont Nurse Practice Act, Vermont Stat. §§1612-1613 (2011).	24 months & 2,400 hours; Collaborative Agreement with an APRN or physician
CO	CNP, CNS, CNM, CRNA	Colorado Nurse Practice Act, Col. Rev. Stat. §12-38-111.5 - 6 (2013)	3,600 hours; 1800 hours preceptorship + 1800 hours mentorship with a physician or physician & APRN
NV	CNP, CNS, CNM	Nevada Nurse Practice Act, Nev. Rev. Stat. §632.237 (2013)	2 years OR 2,000 hours; Collaborating physician-approved protocols for Controlled Substance Schedule II prescribing
MN	CNP, CNS	Minnesota Nurse Practice Act, Minn. Stat. §148.171 (2014).	2,080 hours; Collaborative Agreement with an APRN or physician
CT	CNP, CNS	Connecticut Nurse Practice Act, Conn. Stat. §20-87a (2-4)(2014)	3 years & 2,000 hours minimum; Collaborative Agreement with a physician
NY	CNP	Nurse Practitioner Modernization Act, Ed L, §6902 (2014)	3,600 hours; Collaborative Agreement with a physician then attestation of collaboration requirement

SOURCE: State Statutes / Regulations as Listed
Notes: *Maine was the first State to pass this requirement in 1995; amended in 2007 to include a CNP as a supervising provider

Acknowledgements:
This manuscript is submitted in partial fulfillment of doctoral work at Yale University School of Nursing. The author would like to acknowledge Judith Kunisch, MBA, RN, YSN Lecturer in Nursing,

Andrea Brassard, Ph.D., FNP-BC, FAANP, Director of Health Policy, American Nurses Association, and Ruth McCorkle, Ph.D., RN, FAAN, YSN Florence Schorske Wald Professor of Nursing and Professor of Epidemiology, who served as experts providing guidance in the preparation of this manuscript.