Published in final edited form as:
Policy Polit Nurs Pract. 2010 August ; 11(3): 235–244. doi:10.1177/1527154410390381.

Health Care Reform and the Federal Transformation Initiatives: Capitalizing on the Potential of Advanced Practice Psychiatric Nurses

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Abstract

In the last decade the US federal government proposed a transformation vision of mental health service delivery; patient-centered, evidence-based and recovery oriented treatment models. Health care reform brings additional expectations for innovation in mental/substance use service delivery, particularly the idea of creating systems where physical health, mental health and substance use treatment is fully integrated. Psychiatric nurses, as one of the four core US mental health professions, have the potential to play a significant role in the both the transformation initiative and health care reform vision. However, psychiatric nurses, particularly advanced practice psychiatric nurses, are an untapped resource due in part to significant state regulatory barriers that limit their scope of practice in many states. The purpose of this paper is to document what is currently known about advanced practice psychiatric nurses and discuss policy implications for tapping into the strengths of this workforce. Strategies for facilitating utilization of advanced practice psychiatric nurses discussed.

Keywords

advanced nursing practice; nursing/health care workforce issues; health care quality

In the last decade, a new direction for mental health services has been proposed, largely from the convergence of several key federal initiatives: the 1999 Surgeon General Report on Mental Health, the President's New Freedom Commission, the Transformation Document, and the Institute of Medicine (IOM) reports, particularly improving the quality for mental health and substance abuse (Center for Mental Health Services, 2005; IOM, 2006b; The President's New Freedom Commission on Mental Health, 2003; U.S. Department of Health and Human Services, 1999). Recent passage of the Patient Protection and Affordable Care Act (PPACA), signed into law on March 23, 2010, signals a new era in the delivery of health services in the United States (Lavizzo-Mourey, 2010).

The proposed transformations in the mental health care delivery system are clear; it is to be consumer driven, recovery oriented, evidence based, and geared toward coordinated systems

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Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

of care. These values have been recently reinforced with the health care reform debate with additional emphasis on integration models (services that address mental health and substance abuse comorbidities; mental health and primary health care needs), a quality approach to service delivery built on comparative effectiveness data, and a greater emphasis on prevention and early intervention (Manderscheid, 2009).

An organizing force for this message is the Coalition for Whole Health (CWH), which represents 110 mental illness and substance abuse prevention, treatment, research, and recovery organizations (Manderscheid, 2010). The Whole Health Campaign (WHC), which merged with the CWH, developed a series of policy papers that outline their key messages: (a) increasing access, quality, and choice for people with mental health/substance abuse disorders and their family members; (b) supporting recovery from mental illnesses and addictions as integral to overall health, and (c) committing to investment in prevention, early intervention, and research on mental health disorders and addictions (Manderscheid, 2010). The coalition now aims to ensure that the Patient Protection and Affordable Care Act of 2010 is implemented in line with its principles (Manderscheid, 2010). Speaking at the 2010 meeting of the American College of Mental Health Care Administration (ACMHA) on behalf of the National Council for Community Behavioral Healthcare, Charles Ingoglia, MSW, argued that the combination of health care reform legislation, which increases coverage for previously uninsured individuals, and the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008 will set the stage for delivery system redesign that could operationalize the CWH goals (Ingoglia, 2010). The MHPAEA, which took effect for plan years after October 2009, ensures that mental health benefits are no more restrictive than medical/surgical benefits (U.S. Department of Labor, 2010). Thus, the legislation to support reform in mental health care delivery is lining up, and organizations such as ACMHA are vigorously educating mental health professionals on how to use these legislated changes in coverage to ready their systems to optimize movement toward the CWH vision of mental health care delivery reform (AHP Health and Behavioral Health Consulting, 2010).

Over the past several years, advanced practice psychiatric-mental health nurses (APPNs) have responded to the transformation initiative and have begun to incorporate this federal direction into a vision for their 21st-century practice. APPNs are registered nurses who have completed a graduate program in psychiatric nursing. They are educated as either psychiatric mental health (PMH) clinical nurse specialists (CNSs) or as PMH nurse practitioners (NPs). Contrary to the traditional systems/population oriented CNS, the PMH CNS developed as a direct care provider of psychiatric services. In 2002, a new role was forged with the introduction of the PMH-NP certification, but there remains considerable overlap between the PMH-NP and PMH-CNS (Delaney, 2005). Thus both cohorts are often referred to by the collective term *advanced practice psychiatric nurse* (APPN).

In the revised *Scope and Standards of Psychiatric Mental Health Nursing Practice* (American Nurses Association [ANA], American Psychiatric Nurses Association [APNA], & International Society of Psychiatric-Mental Health Nurses [ISPN], 2007), the specialty mapped out the refinements in the role of the APPN and the curricular changes that would be needed to meet the federal plan for a recovery-oriented workforce providing evidence-based treatment. It recognized the need for nursing in crafting individualized wellness plans, particularly for specialty populations such as the homeless, children, rural populations, and other underserved groups whose social needs are inextricably bound with their mental health issues. Finally in this document, the PMH nursing tradition of relationship-based care established by Peplau (O'Toole & Welt, 1989) was reiterated and tied to more recent trends in patient-centered care. Thus, psychiatric nursing has set an agenda for shaping a clinical workforce in line with the transformation initiative.

Owing to their broad graduate-level educational preparation, APPNs are well positioned to work within the integrated systems envisioned by the CWH. Psychiatric nursing graduate programs include advanced courses in pathophysiology, pharmacology, neurobehavioral science, diagnostics and management of mental illness and comorbid medical problems as well as treatment interventions such as psychotherapy and use of psychotropic medications (Society for Education and Research in Psychiatric Nursing, 1996). Graduate programs preparing NPs are also shaped by the National Organization of Nurse Practitioner Faculties (NONPF) guidelines which set competencies NP graduates must obtain and which tie to program accreditation and ultimately to NP certification (National Panel for Psychiatric Mental Health Nurse Practitioner Competencies, 2003). Given this background, APPNs are able to appreciate and address the complex mix of medical and psychiatric needs of consumers and their families. Psychiatric nurses' neurobiological understanding of substance/mental illness and pharmacologic interventions facilitates an easy movement to an integrated mind/body approach, and adapting interventions that bridge clinical and neuroscience research (Pine, Guyer, & Liebenluft, 2008). Inherent to the education of psychiatric nurses is a holistic, person–environment approach, which is an orientation that fits well with the WHC's health care reform vision. Furthermore, psychiatric nursing's long-established knowledge of complex health care systems meshes well with the call for service coordination and improving access to care.

Given their tremendous potential, it is problematic that beyond the boundaries of the nursing community, there are significant gaps in the awareness of the capabilities of the APPN workforce. Nursing is often left out of federal mental health policy statements (Delaney, 2008) and holds a weak presence in mental health workforce development and planning dialogue at the national level (Koppelman, 2004; Scheffler & Kirby, 2003). There are several potential reasons for this oversight. First, it is possible that policy makers assume that psychiatric nurses are a hospital-based workforce as the majority of APPNs are certified as CNSs, who traditionally practice in nondirect care roles. Second, although psychiatric nurse specialists are recognized by the Health Resources and Services Administration (HRSA) as core mental health professionals (http://bhpr.hrsa.gov/shortage/hpsaguidement.htm), the APPN workforce may be overlooked because their numbers are small in comparison with the other core professions (Psychiatrists, Psychologists, Social workers and Counselors; Duffy et al., 2004). Indeed, in the last published national data on workforce numbers, nursing with 8,751 certified APPNs was significantly smaller than psychiatry (n = 41,145), psychology (n = 84,883), social work (n = 103,128), or counseling (including marriage and family counseling; n = 150,691).

Another reason that the capabilities of APPNs might be overlooked in mental health care workforce planning is that outcomes of their practice are not widely published. Strong pockets of APPNs treatments outcomes are in print (Baradell, 1995; Baradell & Bordeaux, 2001; Parrish & Peden, 2009). However, more often APPNs function as a member of an interdisciplinary team and their practice outcomes are not parsed out (Howard et al., 2009). Finally, there is a lack of reliable data systems to track the workforce (Hanrahan et al., 2003), a situation common to mental health professional disciplines. This is unfortunate not just for nursing but for workforce planning in general. Due to these information deficits, little is known about the best mix of mental health professionals to obtain optimal outcomes. This impedes progress toward building a workforce that can make the transformation initiative and health care reform vision a reality.

This article will describe the current APPN workforce characteristics, employment patterns, and geographic distribution. We discuss educational trends of APPNs and the implications of these shifts for APPNs' role in the health care delivery system. Recognizing the potential of APPNs to significantly contribute to innovations suggested by health care reform leaders,

strategies for facilitating recognition of APPN capabilities are suggested. These strategies are aimed at the national policy arena and state planning boards. At the same time, the specialty must embark on policy initiatives to increase access to APPNs in the future. This demands a policy focus on changing existing state laws that limit APPN practice and increasing the number of graduate programs needed to increase the size and distribution of the workforce. The potential impact of emerging educational innovations are discussed, particularly ones soon to be implemented as a result of the advanced practice registered nurse (APPN) consensus model (National Council of State Boards of Nursing [NCSBN], 2008). Finally, we suggest directions for future research on the APPN role by measuring its effectiveness and deriving an outcome system that has social relevance to consumers of mental health and substance abuse services.

Data Sources

Using multiple and current data sources, we describe the APPN demographic and work characteristics, employment patterns, geographic distribution, and educational trends. The five data sources we use are as follows:

- The National Sample Survey of Registered Nurses (NSSRN) has been the leading national source of labor statistics for registered nurses in the United States since 1977 (survey methods are described in detail in publications from HRSA, 2007; U.S. Department of Health & Human Services, 1999). Advanced practice psychiatric nurses were identified from two questions on the 2004 NSSRN survey. The first of these asked if the participant had completed a formal educational program for advanced practice nursing. The second question asked the participant to designate a primary specialty. The sample yielded 15,973 APPNs, who selected they were an advanced practice nurse (APN) with a psychiatric/mental health specialty. Weighted frequencies were used. The NSSRN is used to profile U.S. APPNs, satisfaction with nursing position, employment characteristics, employment setting, positions, full-time/part-time work, on-call hours, educational trajectory, and potential source of recruiting to the profession.
- The American Nurses Credentialing Center (ANCC) provides national board certification for many nurses, including APPNs. Data sources for this study come from two separate data requests in 2003 and 2006. Variables for both datasets are the same and come from questions asked of each applicant who applies for certification. Applicants qualify for the exam if they have completed a credentialed graduate program in the specialty of PMH nursing. Applicants must renew their certification every 5 years. Thus, the data reflect 100% of the currently certified APPNs. The data are used to show the population density of APNs by state, annual patient encounters, and trend changes in the APPN workforce.
- The American Association of Colleges of Nursing (AACN) annually surveys more than 400 schools of nursing regarding enrollment, graduations, and programs. Data were used in this study to profile the number of schools offering the specialty of PMH nursing, enrollments, and graduations from 2003 to 2009.
- The APNA and the ISPN survey of APPNs conducted in 2007 (Drew & Delaney, 2009). The population for the APNA/ISPN 2007 survey was all certified APPNs who had emails listed with ANCC. The emails surveys were sent to 6,184 APPNs; 1,605 of the surveys were undeliverable and 2,010 APPNs responded, yielding a response rate of 44%. There was a total of 1,899 usable (sufficiently completed) surveys.

- *2006 U.S. Census data* were linked with ANCC data to present a population-based geographic distribution of APPNs by state.

Characteristics of the Advanced Practice Psychiatric Nursing Workforce

According to the 2004 NSSRN, there are 15,973 APPNs actively engaged in a nursing position (clinically active) in the United States (HRSA, 2007). The mean age for this group is 51.4 years with only 8% below the age of 40. Nearly 83% of APPNs are White, non-Hispanic/Latino, and 91.2% are female. Most are married (63%), widowed/divorced or separated (25.4%), and most of the APPNs live in urban settings. The 2004 NSSRN data source provides psychiatric nurse workforce data for APPNs (see Table 1). An important distinction of APPNs within this NSSRN cohort is certification status. According to the 2004 NSSRN data, although all the APPNs have specialty graduate education in PMH nursing, only 61.3% are certified by the ANCC. Thus this cohort of 15, 973 clinically active APPNs actually form two subgroups, one that has ANCC certification and another group that does not. Board certification is required to obtain reimbursement from most major payers such as Medicare, in most states Medicaid, and other third-party payers (Buppert, 2008; Frakes & Evans, 2006). Noncertified APPNs typically hold psychiatric liaison positions in hospital settings, teaching positions, or may hold management roles in inpatient or residential psychiatric and mental health facilities.

The employment patterns and activities of *certified* APPNs are reported in a 2007 practice survey conducted by the APNA and the ISPN (ANA, APNA, & ISPN, 2007; Drew & Delaney, 2009). Approximately, 1,899 APPNs responded to this survey; more than half (68.6%) indicated that they were employed full-time and nearly 93% provide direct services to clients. Of these APPNs who provide direct service, 65% practice in an outpatient setting as their primary place of work. Forty percent of participants indicated that they are directly reimbursed for their service; 57% are reimbursed by Medicare and 50% by Medicaid. The APPNs reported spending about 11% of their time performing diagnostic evaluations. Nearly 66.5% of APPNs who treat adults prescribe psychotropic medications and reported that one third of their week is spent either prescribing/managing medication regimens alone or in combination with psychotherapy. A 1994 survey of APPN practice reported that 33% of APPNs prescribed medications (Campbell, 1998), 2001 survey later put this figure at 46% (Talley & Richens, 2001), and the most recent national survey sets the figure at 95% (Goolsby, 2005). This steady increase in prescribing activities and direct care responsibilities of APPNs aligns with trends in the graduate preparation of this group which has primary mental health care as a major focus of its educational programs (National Panel for Psychiatric Mental Health Nurse Practitioner Competencies, 2003).

Geographic distribution of the 9,780 certified APPNs in 50 states and the District of Columbia was calculated as the ratio of the APPNs in the state to 100,000 populations. The ratio of APPNs to 100,000 populations by state ranged from 0.64 in Nevada to 20.55 in Maine. The five states with the highest density of APPNs to 100,000 populations were Maine (20.55), Massachusetts (14.32), Connecticut (13.13), New Hampshire (11.20), and Rhode Island (12.21). States with the lowest density of APPNs to 100,000 populations were Nevada (0.64), Oklahoma (0.91), California (0.97), Louisiana (1.18), Arkansas (1.39), and Texas (1.48). APPNs reside mainly in the New England, Middle Atlantic, or the South Atlantic regions of the United States (Table 2). The concentration of APPNs in any given state results from a combination of available advanced practice education and regulatory environment. Wide variation exists among the states in the statutory regulation of all APNs (Pearson, 2009), and these regulations have been shown to impact the density of APNs with more favorable regulatory environments associated with greater numbers of APNs (Lugo, O'Grady, Hodnicki, & Hanson, 2007). In addition to state density, another factor is within state maldistribution between urban and rural areas. In the NSSRN, more than 83% of

APPNs were located in urban areas and an additional 13.9% located in larger rural areas with less than 2% in smaller or isolated rural areas (Table 1).

Trends in education and certification of APPNs were studied using three data sources: the AACN data on enrollment and graduations, the NSSRN, and the ANCC certification data. APPNs have a minimum of a master's degree or a doctorate from a nationally accredited program in a school of nursing. Best estimates show there to be 330 schools of nursing offering graduate degrees in nursing, of which approximately one third (120) offer advanced degrees in the specialty of PMH nursing (AACN, 2008), Within these 120 programs, a school may offer several specialty options. For instances, a graduate program may offer the option of focusing on the child and adolescent or a life-span approach or the adult population. Schools may also offer both a PMH-CNS and a PMH-NP option. Thus the program tracks in 2007 appear much higher (274; see Table 3) than the actual number of schools offering an advanced practice psychiatric nursing program (Drew & Delaney, 2009). The number of graduate programs in PMH nursing has increased by 31% from 2003 to 2007. In 2007, there were 1,405 students enrolled in these programs. Graduations from these specialty nursing programs were 387 in 2007. Enrollment has increased by 28% from 2003 to 2007. Graduations have increased by 23% from 2003 to 2007 (AACN, 2008).

Capitalizing on the Potential of the APPN Workforce

Using multiple data sources, we described APPN workforce characteristics, employment patterns, geographic distribution, and educational trends. Clinically prepared APPNs have a skill set that aligns with the needs of a wide range of mental health consumers and allows them to work in integrated care systems. However, these capabilities are often unrecognized in national workforce policy planning. Compounding the issue is the small size of the workforce and the significant regulatory barriers that impact on all APNs practicing their full scope of practice (ANA, 2007). Health care reform initiatives present significant opportunities to promote consumer access to mental health care services. APPNs are critical to building a service network that will make this happen. At the national level, recognition of the capability of APPNs will be vital in the workforce planning dialogue. To assure their presence at this important juncture, APPNs must construct a policy message that conveys the need for nursing in mental health care delivery. The policy message should be built on APPNs' ability to provide access to safe and quality mental health care and substance use services; a claim supported by abundant research of APNs as an innovative solution to safe access and cost-effective health care services (Brooten, Youngblut, Deatrick, Naylor, & York, 2003; R. A. Cooper & Aiken, 2006; Hanrahan & Sullivan-Marx, 2005; Lugo et al., 2007; Safriet, 1994; Wolfe, Talley, & Smith, 2008). There is a recognized need for providers who are licensed to provide the full array of mental health services, including therapy and prescribing psychotropic medications. At this point, with the supply of psychiatrists showing only modest increases (Vernon, Salsberg, Erikson, & Kirch, 2009) and mental health needs increasing (IOM, 2006a), the APPN should become a valuable asset in outpatient and community-based care, particularly in rural areas (Hanrahan & Hartley, 2008). A national panel study of NP practice reported that not only do NPs consistently provide safe, effective care but also they increase access to primary care services (American Academy of Nursing Practitioners, 2007). As mental health service delivery evolves in line with the health care reform vision, owing to their broad education, APPNs will be the ideal professionals to forge the vision where mental health care and physical health are pursued with equal rigor (Geis & Delaney, in press). Indeed nursing should take a leadership role in assuring that people with mental health issues receive the health care they need (Hogan & Shattell, 2007).

To achieve these access/quality goals, APPN policy initiatives must address regulatory barriers. Inconsistent regulatory oversight of APNs is associated with poor access to safe

and effective health care services (Cooper & Aiken, 2001; Cooper, Laud, & Dietrich, 1998; Safriet, 1992). For APPNs to provide access to quality care, they need professional environments conducive to executing services within their full scope of practice. For instance, in six states there are restrictions on APPN's prescriptive authority for scheduled drugs (Staten et al., 2005). As this includes medications such as stimulants, APPN practice with individuals with attention disorders is highly restricted. In that same study, Staten et al. (2005) report that APPNs held independent prescriptive authority in only 13 states. Given the shortage of mental health providers in many areas of the country, and lack of collaborating psychiatrists, this practice restriction directly affects the APPNs ability to provide medication services. Limits on institutional admitting privileges are a significant barrier to full scope of practice for many APN specialties (ANA, 2007). Considering the need for hospitalization for individuals in mental health crisis, lack of admitting privileges becomes a significant barrier to APPN full scope of practice.

In each state, the Nurse Practice Act is the legal guide by which legislators and State Boards of Nursing authorize and regulate the practice of nurses. As with all APNs, there is wide state-by-state variation in the statutory regulation of APPN practice (Pearson, 2009). In a 2007 study, Lugo et al. measured and ranked state regulations using three dimensions: (a) the degree to which regulation allows patients' access to APNs as providers; (b) the relationship of patient access to services and reimbursement of NPs; and (c) patients' access to prescription medications. Scoring each of these areas according to state regulations, the researchers ranked each state's practice environments. They demonstrated that more favorable regulatory environments were associated with greater access to APNs (Lugo et al., 2007). This study provides evidence for framing policy issues around state regulation, dimensions of practice environments, and access to APPNs.

The first dimension concerns the environment affecting consumers' access to APPNs and involves criteria for regulating and authorizing APPNs to provide mental health care to the consumer. To assure full scope of practice and thus consumer access in this dimension, policy should focus on the following factors: that APPN practice is governed by the state board of nursing; that requirements for entry into practice are consistent across states; and that APPN practice is defined as autonomous (Lugo et al., 2007). Collaboration or supervision with a physician should be a professional option and not regulated or required.

In 2008, the NCSBN approved the APN consensus model (NCSBN, 2008), a model for APNs to be implemented by all the states. This model addresses the current state-by-state inconsistencies in regulation of advanced nurse practice by proposing reform in four essential areas: licensure, accreditation, certification, and education. Although it will take time to implement these changes, there is broad support of the NCSBN vision; the model has been widely endorsed by numerous nursing stakeholders. An important implication for PMH nursing is the stipulation that all PMH programs must prepare graduates to address the mental health needs of the entire age spectrum of populations, what the APPN model terms a life-span approach. Educating APPNs to practice across the life span is consistent with nursing's aim to create a broad-based, primary care–oriented practitioner who can move into a variety of practice sites (National Panel for Psychiatric Mental Health Nurse Practitioner Competencies, 2003). To grow these programs will also require support for faculty, who may themselves need additional training in direct care competencies and life-span education.

The second dimension of practice that must be in place for full scope to be realized involves reimbursement. If APPNs are to provide needed services, sufficient and appropriate reimbursement mechanisms must be in place. Criteria for gauging this dimension include the presence of hospital privileges, the authority to order laboratory testing or other essential services, and reimbursement for services rendered. The third dimension is associated with

the conditions whereby APPNs are regulated to prescribe medications. This criterion includes plenary authority to write prescriptions for appropriate amounts of legend or controlled drugs without the involvement of another provider's approval; clear identification as the prescriber on written prescriptions and pill bottles; and the authority to receive and dispense drug samples. Clearly, APPNs must join with other APNs to improve the regulatory environment and change practice laws that impede access (ANA, 2007). These three dimensions of practice environments provide excellent platforms for examining regulatory barriers and framing APPN scope of practice policy initiatives.

Increasing Access to APPNs: Focusing on the Size and Distribution of the Workforce

The specialty must also focus on policy initiatives to increase access to APPNs in the future. The workforce is small in numbers and limited by geographic misdistribution. Although there has been support for development of new types of programs from the HRSA, the actual numbers of graduate programs are increasing far too slowly, particularly programs focused on addressing mental health issues across the life span. Graduates from advanced practice programs are far fewer than those enrolled; many students are going part time and taking longer to get into the workforce. Several states have only one or two PMH graduate nursing programs (Delaney, 2009), making it difficult to provide education for all candidates who might seek a PMH nursing graduate degree. Given the tremendous mental health needs of the U.S. population, recruitment into this specialty is a key issue and increasing the number of PMH graduate programs or ones that provide distance education will be important to its growth.

Future Research

Workforce research is underfunded but is sorely needed for all mental health and substance use providers. To begin discussion of how the workforce in general and APPNs in particular need to realign training to build a reformed mental health care system, it is helpful to have a broad understanding of the capabilities of the core mental health professions. Building that platform for dialogue requires recent data on the size, work characteristics, and educational trends of the core professions. For social policy planning, it is necessary to have a sense of each profession's workforce development needs, particularly the major issues each profession faces in moving toward transformation principles and the possible solutions they might forge.

Without organized workforce research efforts, it is difficult to address the issues emerging from the current mental health workforce composed of various professions each with its own orientation to treatment and educational preparation (Duffy et al., 2004). It is relatively unknown which provider is best for what type of patient problem or patient population. Whereas mental health professionals should be educated with particular core competencies (Hoge et al., 2007), quality mental health and substance use care requires various types of providers with differing strengths. For instance, as holistic providers, APPNs understand the reality of mental illness as one of mind and body that affects an individual's ability to function fully in his or her life. Research is needed to show the relationship between a particular provider group's orientation and patient outcomes.

There is a great need for practice data and measures of patient outcomes associated with APPNs as well as other providers. For example, data are needed on exemplary models of primary mental health care and how the structure of services is associated with patient outcomes. Mental health reform advocates envision a prevention-oriented, public health approach to mental health care and substance use (Manderscheid, 2009). Such a model will

place services where the consumer might best access mental health treatment. To build this vision, evidence-based models of mental health and substance abuse care are needed in all areas in which they are being delivered, including primary care, pediatric primary care, the juvenile justice system, and schools. A recent IOM report proposes a national priority for comparative effectiveness research placing a high priority on studies of psychiatric disorders. The report should be used as a research agenda for psychiatric-mental health nursing (IOM, 2009).

Conclusion

APPNs need to rigorously work with clients toward an improved mental health delivery system. In this era of reform, they must become involved in policy change at the state and national level. Involvement in policy is also facilitated by membership in one of the two main professional organizations for psychiatric nurses in the United States, the APNA and the ISPN. Professional organizations focus resources toward governmental affairs and policy priorities. State and local professional nursing organizations are also important avenues for shaping nurse practice act reform within the state.

Americans expect change. Three blue-ribbon panel reports about poor access to evidence-based mental health/substance abuse services (IOM, 2006a; The President's New Freedom Commission on Mental Health, 2003; U.S. Department of Health and Human Services, 1999), combined with a U.S. White House administration that has prioritized health care reform, provides an excellent environment for APPNs to join with other advocates to create access to high-quality mental health and substance use services for all Americans.

Acknowledgments

Funding

This study was supported by grants R01-NR04513 and T32-NR0714 from the National Institute of Nursing Research, National Institutes of Health and the Robert Wood Johnson Foundation Nurse Faculty Scholar Award.

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Table 1

Sociodemographic Characteristics of Advanced Practice Psychiatric Nurses (*N* = 15,973)

	***M* (*SD*)**	**Min/max**
Age	51.4 (8.4)	26–73
Age grouped	*N*	%
26–30	340	2.1
31–39	859	5.4
40–49	4,677	29.3
50–59	7,993	50.0
60–69	1,779	11.1
≥70	325	2.0
Gender		
Male	1,398	8.8
Female	14,574	91.2
Race/ethnicity		
White alone (H)	115	0.7
Two or more races (H)	20	0.1
Asian alone (NH)	705	4.4
Black/African American (NH)	533	3.3
White only (NH)	13,199	82.6
Multiracial (NH)	13	0.1
Unknown/refused	1,388	8.7
Marital status		
Now married	9,972	62.5
Widowed/divorced/separated	4,064	25.4
Never married	1,877	11.7
Urban/rural area		
Urban	13,284	83.2
Large rural	2,227	13.9
Small rural	259	1.6
Isolated small rural	203	1.3

Source: Health Resources and Services Administration (2007).

Note: H = Hispanic; NH = not Hispanic. Frequencies are weighted.

Table 2

Density of Advanced Practice Psychiatric Nurses per 100,000 State Population

State	*N*	Density
Alabama	76	1.69
Alaska	64	9.67
Arizona	175	3.05
Arkansas	38	1.39
California[a]	345	0.97
Colorado	157	3.41
Connecticut	457	13.13
Delaware	28	3.38
District of Columbia	26	4.49
Florida	366	2.11
Georgia	229	2.57
Hawaii	53	4.23
Idaho	26	1.87
Illinois	201	1.59
Indiana	125	2.01
Iowa	85	2.89
Kansas	115	4.21
Kentucky	163	3.94
Louisiana	53	1.18
Maine	269	20.55
Maryland	429	7.75
Massachusetts	921	14.32
Michigan	211	2.09
Minnesota	268	5.27
Mississippi	165	5.72
Missouri	93	1.62
Montana	31	3.35
Nebraska	74	4.24
Nevada	15	0.64
New Hampshire	145	11.20
New Jersey	360	4.17
New Mexico	99	5.23
New York	745	3.87
North Carolina	212	2.48
North Dakota	33	5.18
Ohio	338	2.95
Oklahoma	32	0.91
Oregon	122	3.40
Pennsylvania	432	3.50

State	*N*	Density
Rhode Island	131	12.21
South Carolina	107	2.55
South Dakota	21	2.71
Tennessee	279	4.72
Texas	332	1.48
Utah	104	4.28
Vermont	59	9.53
Virginia	338	4.53
Washington	479	7.74
West Virginia	28	1.55
Wisconsin	112	2.03
Wyoming	14	2.78
Total	9,780	

Source: American Nurses Credentialing Center (2008); U.S. Census, 2006.

[a]California does not require national board certification which explains the low density.

Policy Polit Nurs Pract. Author manuscript; available in PMC 2012 July 09.

Table 3

Schools Offering the Specialty of Psychiatric Mental Health by Population: Enrollments and Graduates, Fall 2003–2007

	2003	2004	2005	2006	2007	Percentage change[a]
Schools offering specialty[b]						
Child/adolescent or family[c]	23	26	47	55	72	
Adult[d]	186	198	192	202	202	
Total	209	224	239	257	274	31.1%
Enrollment[e]						
Child/adolescent or family	51	154	215	294	359	
Adult	1,047	1,085	903	1,084	1,046	
Total	1,098	1,239	1,118	1,378	1,405	28.0%
Graduations						
Child/adolescent or family	10	32	33	79	62	
Adult	306	345	354	317	325	
Total	316	377	387	396	387	22.5%

Source: American Association of Colleges of Nursing (2008).

[a]Percentage change is calculated as the difference between 2003 and 2007.

[b]Schools of nursing often offer several types of programs such as a family or an adult option. Thus, the total number of programs represents program options and not unique advanced practice psychiatric mental health programs in schools of nursing. The total number of school offering these programs is 120.

[c]Child/adolescent or family population includes both clinical nurse specialist and nurse practitioner roles.

[d]Adult population includes both clinical nurse specialist and nurse practitioner roles.

[e]Includes full- and part-time students.