
Defining Nurse Practitioner Scope of Practice: Expanding Primary Care Services

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Abstract

INTRODUCTION

Fifty-eight million Americans have no insurance coverage,¹ with as much as 25% of the population uninsured. As the U. S. Congress continues the debate over universal health coverage, the dynamics of health care have forced numbers of people to seek primary care services. With only one-fourth of medical school graduates selecting residencies in the primary care specialties e.g., family medicine, pediatrics, general internal medicine, and obstetrics/gynecology, significant gaps in services compound the urgency. Nurse Practitioners (NPs) are uniquely qualified with advanced practice skills to meet the increased demand for primary care services.

Nurse Practitioners have demonstrated the ability to provide care to many underserved groups, such as children, women, migrant workers, the homeless, and the elderly in nontraditional settings, such as schools, work sites, and health departments. Although multiple studies have documented the high quality of care and cost-effectiveness of APNs, these nurses remain an under-utilized resource.²

Schools of Nursing are investing significant resources for preparation of NPs and NPs are graduating in record numbers. Globally, there are increasing opportunities for nurses with advanced practice skills. It becomes imperative to resolve the scope of practice issues for NPs to gain the needed public support to expand their role to meet much needed primary care services.³ Yet restrictive practice environments continue to limit their efficient use both nationally and internationally.

The degree of legal authority for APNs to practice varies by state. The Nurse Practice Act legislated in each state of the U.S. specifically delineates requirements for registered nurses in advanced practice roles. While registered nurses

are now legally authorized to provide services for primary health promotion, disease prevention, and assessment of health status, questions remain as to the degree of independence, prescriptive authority, and reimbursement for APN for services. A broader definition of the scope of NP practice would enable expansion of primary care services to better serve the health care needs of the nation.⁴ To promote the role of the NP as a major player in health care reform, this paper will describe the current scope of practice, clinical competencies, and practice settings while tracing the historical development of this type of APN.

ADVANCED PRACTICE OVERVIEW

Advanced Practice Nurse (APNs) include registered professional nurses, with a current license to practice, who is prepared for advanced nursing practice by virtue of knowledge and skills obtained through a post-basic or advanced education program of study acceptable to the State Board of Nurse Examiners. The APN is prepared to practice in an expanded role to provide health care to individuals, families, and/or groups in a variety of settings including, but not limited to, homes, hospitals, institutions, offices, industry, schools, community agencies, public and private clinics, and private practice. The APN acts independently and/or in collaboration with other health care professionals to deliver health care services (Texas Nurse Practice Act, Section 221).⁵ APNs conduct comprehensive health assessments aimed at health promotion and disease prevention. They also diagnose and manage common acute illnesses, with referral as appropriate, and manage stable chronic conditions in a variety of settings. APNs titles include Nurse Practitioner, Clinical Nurse Specialist, Certified Nurse Midwife, and Certified Nurse Anesthetist. Independent practitioners are capable of solo practice with clinically competent skills and are legally approved to

provide a defined set of services without assistance or supervision of another professional.⁶

APNs are uniquely qualified to resolve unmet needs in primary health care by serving as an individual’s point of first contact with the health care system. This contact provides a personalized, client-oriented, comprehensive continuum of care and integrates all other aspects of health care over a period of time. Care should be provided as much as possible by the same health care professional, with referrals coordinated as appropriate. The focus of care is on health surveillance (promotion and maintenance of wellness), but it also provides for management of acute and stable chronic illness in order to maintain continuity.^{7 8}

NP DEVELOPMENT

The NP role originated as one strategy to increase access to primary care ⁹, in response to a shortage of primary care physicians. The first successful program to prepare NPs was developed at the University of Colorado in 1965 under the co-direction of a nurse, Loretta Ford, and a physician, Henry Silver to prepare pediatric NPs with a focus on health and wellness. Working collaboratively with physicians, NPs with this advanced education from non-degree, certificate programs, were able to identify symptoms and to diagnose and manage health problems in children.

Federal legislation in the mid 1960’s provided funding to support the development of primary care providers. In 1971, the Secretary of Health, Education and Welfare issued primary care intervention recommendations for which nurses and physicians could share responsibility, thus implying support for nurses as primary care providers.

With the support of federal monies, nursing programs for NPs multiplied.¹⁰ By the mid-1970’s, there were more than 500, mostly certificate, programs across the country that were preparing nurses to deliver primary care.¹¹ Programs gradually shifted from certificate to master’s degree preparation as accrediting bodies increasingly required a master’s degree. By the 1980’s, master’s degree programs far outweighed certificate programs. In response to health care reform in the 1990’s, NP programs are proliferating at an astonishing rate to meet increasing demands for primary care services. As of 1995, 248 programs in the U.S. offer a master’s degree with preparation as a NP.¹² In 1994, 49,000 nurses were employed as NPs.¹³

In 1974, the American Nurses Association published

educational guidelines for the preparation of NPs and implemented a credentialing program in 1976 that still exists. Other specialty nursing organizations have likewise approved credentialing requirements. In many states, this certification is required for licensure as a NP. Data in Table 1 show the current credentialing organization for NPs.

Figure 1

Table 1: Current Nurse Practitioner Credentialing Organizations

Program Clinical Focus	National Credentialing Body
Family	American Nurses Association (ANA)
	American Academy of Nurse Practitioners*
Adult	ANA*
	American Academy of Nurse Practitioners*
Gerontology	ANA*
Women’s Health Care	National Certification Corporation for the Gynecological/Obstetrics & Neonatal Nursing Specialities
	ANA*
Pediatric	National Certification Board of Pediatric Nurse Practitioners and Nurses*

Recent increases in the numbers of new NP programs have generated concern regarding quality and effectiveness of NP preparation.¹⁴ For instance in 1994, The Texas Higher Education Coordinating Board and the Board of Nurse Examiners for the State of Texas studied the standard curriculum requirements for advanced practice designation. In addition to research and theory courses, the curriculum for APNs typically include advanced physiology, pharmacology, and clinical practice emphasizing a selected role. Preceptorships in an appropriate clinical area are a vital part of the educational process. The changes made in Texas strengthened the content requirements for advanced courses in health assessment, pathophysiology, pharmacotherapeutics, practice role, and preceptorship. Additionally, to address quality issues and strengthen the practice role, educators are standardizing nurse practitioner curricula across the state and are working collaboratively with new initiatives to meet the increasing need for NPs. Clearly, excellence in educational standards is a key to public acceptance and professional effectiveness.¹⁵

SCOPE OF PRACTICE

The American Academy of Nurse Practitioners (1993)⁶ developed standards for practice that specify activities within the NP scope of practice and govern the services

provided. The standards cover qualifications, the process of care, environment, collaborative responsibilities, documentation, client advocacy, quality assurance, supporting roles, and research. NPs provide primary health care services to individuals, families, groups of clients, and communities. In general, NP care is characterized by an emphasis on health promotion and disease prevention and, in addition, involves the diagnosis and management of common acute illnesses/injuries and stable chronic diseases. In the provision of these services, NPs may order, conduct, and interpret appropriate diagnostic and laboratory tests and prescribe pharmacologic agents, treatments, and nonpharmacologic therapies. Educating and counseling individuals and their families regarding healthy lifestyle behaviors are key components of NP care.¹⁶

Data in Table 2 lists services which may be performed by any NP, regardless of specialty. The general scope of services provided by NPs has three main categories: assessment of health status, diagnosis, and case management. Specific services are listed for each category.

Figure 2

Table 2: Scope of Services Provided by Nurse Practitioners in Primary Care

Type of Care	Specific Activity
Assessment of Health Status	Obtain a relevant health and medical history
	Perform a physical examination, based on age and history
	Conduct preventive screening procedures based on age and history (e.g., hearing, vision, dental, cancer)
	Identify medical and health risks and needs
	Order appropriate diagnostic tests
Diagnosis	Developmental assess and evaluation and referral
	Order appropriate diagnostic tests
Case Management	Formulate appropriate differential diagnosis based on history, physical examination and clinical findings
	Identify needs of the individual, family or community, based on evaluation of data collected
	Identify, implement and evaluate appropriate plan of care, including pharmacologic and non-pharmacologic interventions
	Provide relevant patient/family education
	Refer to other health professionals and community agencies
	Reassess and modify plan of care as necessary to achieve medical and health goals

NPs with a designated clinical focus or specialty may add specific activities to their scope of practice which reflect the needs of the target population served. Data in Table 3 represent additional

population-based skills which specialty NPs perform. One of the published references detailing approved protocols used by NPs to direct their practice is selected and co-signed by the collaborating physician.

Figure 3

Table 3: Expanded Nurse Practitioner Services for Specific Target Populations in Primary Care

Target Population	Specific Activity
Children and Adolescents (Pediatric Nurse Practitioner)	Analyze factors which affect the child's growth and development Differentiate between normal and abnormal development in relation to anatomical, physiological, motor, cognitive, psychological and social behavior of the child
Women and Infants (Women's Health Care Nurse Practitioner or Perinatal Nurse Practitioner)	Provide family planning services, including prescription and management of birth control pills and diaphragms Normal antepartal and postpartal care Normal newborn care up to six weeks Fertility counseling and infertility management
Elderly (Gerontological Nurse Practitioner)	Provide comprehensive functional assessments (Activities of Daily Living, Instrumental Activities of Daily Living, economic, environmental, mental status and social)

Some NPs choose to seek additional training and experience to be able to perform additional advanced clinical procedures to further expand the scope of practice. These procedures which can be completed by NPs with additional training depending upon prior experience and practice restrictions of individual state Nurse Practice Acts.

While the role of NP was first envisioned for practice based in the rural under-served community, NPs have worked in a wide variety of settings. Traditionally, most NPs practiced in either community- or hospital-based ambulatory care. Today, new roles are expanding opportunities for NPs to practice in such acute settings as hospital inpatient specialty units and emergency departments as demonstrated in Table 4.

Figure 4

Table 4: Nurse Practitioner Care Settings

Setting	Examples
Health maintenance organizations (HMOs)	
Clinics -- public and private	
Private physicians' offices	
Alternative living situations	
Ambulatory clinics associated with hospitals	Group homes, vocational training centers, hospices, retirement communities, shelters
Hospital-based skilled nursing facilities	
Correctional facilities	
School-based clinics	Cardiac, sickle cell, oncology, and hematology clinics
Mobile medical clinics	
City and county clinics	Jails, juvenile justice institutions
Hospital-based practice	Elementary, middle, and high schools and colleges/universities
Age-related developmental centers	
Psychiatric facilities	Newborn nursery, emergency departments
Home care	
Day care facilities for the sick	
Screening/health education programs	
Camps	
Rural health clinics	

MEASURING EFFECTIVENESS OF NPS

During the last 30 years, a large number of studies have documented the safety of NPs as effective providers of primary care. These studies compared outcomes of patients who received NP care with outcomes of patients who received physician care. One of the best designed studies, the Canadian Burlington Randomized Trial,¹⁷ was conducted in the early 1970s. NPs safely and effectively managed 67% of their patient visits without physician consultation, with the remaining 33% of the patients appropriately referred to physicians for management.^{18 19}

More recently, three important reviews have summarized the growing body of research literature on NP care. Two have been narrative reviews,^{20 21} with one a quantitative synthesis using meta-analytic methods.² The first major review was conducted by the OTA in 1986, at the request of the U.S. Congress. A multidisciplinary panel reviewed the literature on NPs, Certified Nurse Midwives (CNMs), and Physician's Assistants (PAs). Reviewers concluded that the care provided by NPs, as well as that provided by CNMs and PAs, is of quality equivalent to physician care. In areas of

communication and preventive care, NPs and CNMs are "more adept than physicians".²⁰

The second major review was an information synthesis of 248 documents on NP effectiveness.² Consistent with the OTA study, the authors reported that; 1) patients are satisfied; 2) NP interpersonal skills are better than those of physicians; 3) the technical quality of NP services is equivalent to that of physician services, and 4) NP patient outcomes are equivalent to physician patient outcomes.

Brown and Grimes (1992)² compared the effects of nurse-provided care with physician-provided care in similar settings to equivalent clients on process of care, clinical outcomes, and cost-effectiveness in a meta-analytic review for the American Nurses Association. NPs achieved clinical outcomes equivalent to physicians on most variables. Patients of NPs demonstrated greater satisfaction with their health care providers and greater compliance with health promotion/treatment recommendations than did patients of physicians. NPs spent more time per visit with their patients than did physicians, although the average number of visits per patient was equivalent. Because care activities of the nurse and physician practitioners were under-reported, the content of these visits was not determined. It must be noted, however, that, unlike the well-designed Burlington Trial,¹⁷ few studies (n = 12) on NP care involved randomized research designs; therefore, some of the findings may be due to differences in acuity between nurse and physician patients.

Both Brown and Grimes (1992)² and Crosby et al. (1987)²¹ found authors of primary studies rarely described the processes of care used by nurse-providers and physician-providers. Research is incomplete on the analyses of cost-effectiveness as well as patient outcome variables such as quality of life and functional status. Almost all of the research studies are based on urban settings, leaving little information on the impact of NPs in rural areas, a major practice site for NPs.

In summary, the research literature has consistently supported the favorable patient outcomes associated with NP

care and outcomes research remains a priority.²² Important questions remain regarding cost-effectiveness; processes of care employed by NPs compared to those used by physicians; and the “cost-effective mix of nurse-providers and physician-providers in the various types of practice settings, types of newly emerging delivery systems, and with various patient populations”.²

ISSUES IN NP PRACTICE

In spite of changes in Nurse Practice Acts in many states, barriers to NP practice remain.²³ In a comprehensive review of states’ regulations, Safriet (1992)²⁴ identified three major barriers to practice: the lack of third-party reimbursement, prescriptive authority, and hospital admission privileges. Without third-party reimbursement to ensure a financial base, NPs are unable to provide direct services for the care they provide. Instead, cost increases are generated by supervision requirements, complex billing services, and lack of autonomy in decision-making. When NPs are unable to prescribe medications for client needs, there can be a delay in treatment. Otherwise, sophisticated systems are required to provide for prescription disbursements such as pre-signed prescription pads, call-in services, and prescription writing by other providers who have not themselves assessed the client’s needs. When NPs are not allowed to admit their clients to the hospital, follow them during their stay, nor obtain referral information when clients are discharged, the concept of primary care services is altered. A multi-tiered system results, in which the client encounters delay and lack of follow up. These barriers hinder autonomous and holistic health care practice, both in a collaborative practice based on a team approach and in independent health care practice.

An update published each year describes how each state stands in regard to legislative issues affecting advanced nurse practice.²³ NPs in Alaska, Oregon, and Washington historically have had the most expansive regulations. In Alaska, authorized NPs have independent prescriptive authority, including controlled drugs (Schedule II-V) and have DEA numbers. Alaska has a non-discriminatory clause for third-party reimbursement to NPs. PNPs and FNPs received Medicaid reimbursement at 80% of physician payment.

In Oregon, NPs are reimbursed for Medicaid at the same rate as physicians (known as “equal pay for equal services”). NPs have prescribing authority, including

controlled substances III-IV, and are able to obtain DEA numbers. A council consisting of NPs, MDs, and pharmacists determine the formulary from which qualified NPs may prescribe.

In Washington state, legislation pertaining to private insurers and health care service contractors states that benefits shall not be denied for any health care service provided by a nurse practitioner within the lawful scope of that nurse’s license, provided such services would have been reimbursed if provided by a physician. Medicaid reimburses NPs at 100% of physician payment. Legislation for prescriptive authority for Schedule V and legend drugs for qualified NPs is currently pursued for expansion to include Schedule II-IV. DEA numbers are available to qualified NPs.

While each state defines the rules which regulate advanced practice nursing, the law does not mandate private third-party reimbursement for NPs, although some companies elect to do so.²³ Medicaid reimbursement covers 85% of a physician’s payment. Recent advances in New York state reveal that at least one health plan is allowing members to choose a NP as their primary care provider even with the same reimbursement rate as physicians (Healthweek, February 24, 1997, p. 4).²⁵

Legislation in 1989, as part of the Omnibus Rural Health Rescue Act, provided authority for the Board of Nurse Examiners to approve NPs for prescriptive authority under standing orders of protocols, meaning prescriptions must be “pre-signed”. Because the statute says “limited prescriptive authority”, controlled substances are restricted. Furthermore, to be authorized to prescribe, the NP must serve populations with designation as “medically underserved”. This restrictive practice environment is a significant factor in limiting NP autonomy in curtailing their practicing to full potential.²⁶

EVOLVING FOR THE FUTURE

NPs work independently, as well as in collaboration, with a variety of individuals to diagnose and manage clients’ health care problems. For example, a NP might be the only health care provider in a rural, underserved community. In this setting, the NP would function fairly independently, with physician consultants available when needed. Conversely, a NP might function autonomously while in a joint practice with a physician or

group of physicians. In this setting, the physician(s) or NP provide initial care for clients. The NP would manage the care of clients with minor acute or stable chronic conditions. In this collaborative model, the NP and physician(s) would work together closely; and the NP would consult with the physician when necessary for elaboration and illustrations of autonomous and collaborative NP practice.

NPs serve as health care resources, interdisciplinary consultants, and patient advocates. The autonomous nature of advanced clinical practice of NPs requires accountability for outcomes in health care.²² Ensuring the highest quality of care requires certification, periodic peer review, clinical outcome evaluations, a code for ethical practice, evidence of continuing professional development and maintenance of clinical skills. NPs are committed not only to seeking and sharing knowledge that will promote quality health care, but also to improving clinical outcomes by conducting research or applying the research findings of others.

CONCLUSIONS

In summary, the role of the NP continues to evolve in response to changing societal and health care needs as consumers in all settings seek increasing services, NPs have an opportunity to claim a significant core of health care delivery.²⁷ In clarifying their leadership role in primary health care, NPs combine the roles of provider, mentor, educator, researcher, and administrator. NPs employed in academic settings contribute to the missions of the university, as do other faculty. Consequently, NPs participate in the discovery of new knowledge (research), the application of knowledge (clinical practice), the integration of nursing concepts and concepts from related disciplines, and teaching.²⁸ Members of the profession are responsible for advancing the role of the NP, and ensuring that the standards of the profession are maintained. Outcomes research of their practice will allow NPs to influence public policy through participation in professional organizations and in health policy activities at the local, state, national and international levels. Even as the scope of practice evolves, NPs are confirmed as a vital force in expanding and shaping primary care services in the U. S. and represent a model for global expansion.

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