Expanding Roles of Nurse Practitioners and Physician Assistants

Position Paper

American College of Physicians - American Society of Internal Medicine

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Background

ACP-ASIM has long supported the development of a cadre of non-physician providers as a sound way to improve the quality of and access to health care.[1] Nurse practitioners and physician assistants play a vital role in the health care system in the United States. During the economic recession of the early 1990s, when health care reform policymakers looked to alleviate some of the pressures in the health care system, nurse practitioners were seen as one means of meeting the demand. Recent changes have, in some ways, expanded the role of non-physician providers into traditional physician roles. Some see nurse practitioners and physician assistants as less costly alternatives to primary care physicians, competing with physicians and physicians-in-training for patients and employment opportunities. Others view them as health professionals who can enhance the quality of patient care and increase the productivity of physician practices.[2]

In 1993, the American College of Physicians appointed a Task Force on Physician Supply to examine expanded roles for physician assistants and nurse practitioners in light of projected shortages of primary health care providers. Review of various meta-analyses and other literature reviews comparing the care provided by nurse practitioners and physician assistants with that of primary care physicians showed that the studies had methodological shortcomings that made the data difficult to interpret. The task force did not find any studies comparing nurse practitioners in independent practice with physicians. Consequently, one of the major findings of the subsequent ACP position paper, issued in 1994, was that there was not sufficient evidence to support the hypothesis that independent practice by nurse practitioners is safe and effective.

This position paper updates the 1994 position paper and seeks to address concerns about the increasing number and expanding scope of practice of these non-physician clinicians. In preparing this updated paper, we found more than sixty articles published since 1992 that addressed the scope of practice and outcomes of care provided by nurse practitioners and physician assistants as well as the collaborative practice among physicians and these practitioners. To facilitate the literature review, Medline searches were conducted on the following key words: physician extenders, nurse practitioners, physician assistants non-physician providers, nurses, health care workers, non-physician clinicians, and allied health professionals. Our search for evidence on quality and effectiveness also included a search of the websites of professional organizations, such as the American Academy of Physician Assistants, American Medical Association, American Academy of Nurse Practitioners, American Nurses Association and others, as well as other relevant sites, such as the Bureau of Labor Statistics, Centers for Disease Control and Prevention, Department of Health and Human Services, the Health Policy Tracking Service and others. This new search of the literature again found virtually no outcomes

data concerning the quality or effectiveness of care provided by nurse practitioners in independent practice.

Upon completion of our review of the literature and analysis of the updated data on numbers and training of nurse practitioners and physician assistants, the College finds that there remains a need for outcomes research concerning the quality and effectiveness of patient care provided by non-physician clinicians in independent practice. The College reaffirms the positions of the 1994 ACP position paper, and urges high priority to generating the needed outcomes research.

Growing Numbers of Nurse Practitioners and Physician Assistants

Nurse practitioners are licensed registered nurses with advanced education and supervised clinical training, ranging from 9 to 24 months, in the diagnosis and treatment of illness. Their training program leads to a certificate or master's degree.[3] Certification is available to registered nurses from the American Nurses Association, nurse-specialty associations, and some academic nursing education programs.[4] However, one can practice as an advance practice nurse without certification. Nurse practitioners (NPs) are principally trained in primary care, with special emphasis on areas such as adult health, pediatrics, family health, women's health, or gerontology. Between 5% and 10% train in critical care, emergency care, and other specialty disciplines.[5] Many obtain additional training for specialized practice in school health, or mental health. The trend for NPs to move beyond primary care and seek advanced training for specialization is expected to continue for the foreseeable future.[6]

In contrast, physician assistants (PAs) are trained to provide medical care specifically under the direction and supervision of a physician. Training consists of a minimum of two years of classroom instruction and clinical training. PAs are trained in the primary care disciplines, although approximately half subsequently serve in specialty roles.[7] While a baccalaureate degree is not required, 60% of PA programs offer a baccalaureate degree or degree option and the remaining programs offer an associate degree or a certificate upon completion of a two-year program.[8],[9] PA training programs are accredited by the American Medical Association (AMA) Committee on Allied Health Education and Accreditation (CAHEA) of which the ACP-ASIM is a sponsoring organization, and nearly all states require PAs to pass the certification examination of the National Commission on Certification of Physician Assistants. State licensing laws permit PAs to work under the supervision of physicians, surgeons, and housestaff in providing diagnostic, therapeutic, surgical and preventive services. However, over 50% of PAs provide primary care services.[10]

Training and graduate programs for nurse practitioners have grown substantially since 1992. The number of programs increased from less than 100 to more than 250 and the number of enrolled students increased fivefold to more than 20,000.

As medical schools limit their enrollments, training programs for non-physician clinicians and the number of graduates continue to grow. If current training rates continue, the supply of these traditional non-physicians (including Certified Nurse Midwives) will increase to 242,000 in 2015. Broken down to per capita figures, this growth represents an increase from 34 per 100,000 population in 1995 to 57 per 100,000 in 2005 and 75 per 100,000 in 2015, an increase of 120% over 20 years. (Please see attached graph).

The number of training programs for physician assistants has also increased dramatically. Between 1992 and 1997, the number increased 50% to 76, leading to a doubling of the number of graduates. Although there is an increasing number of programs, the number of PA graduates is expected to stabilize by 2001.[11]

Medicare originally offered reimbursement for non-physician provider services in rural areas unsupervised by a physician but did not achieve its goal of distributing nurse practitioners to rural and underserved areas. Non-physician providers and physicians follow similar patterns of distribution, with the greatest density in the northeast and the lowest density in the south.

State Legislation Update[12]

Currently, practice scope among non-physician providers significantly varies among states, health care organizations, and practice locations. Levels of education and training also vary among these providers. A recent study found a direct correlation between the size and organization of a managed care organization and the freedom given to non-physician providers to provide primary care services to plan members.[13] Because there are no uniform standards across the country, piecemeal state legislation and individual health plans largely determine the roles of non-physician providers.

Nurse Practitioners: All states and the District of Columbia authorize Nurse Practitionersand grant various practice prerogatives. [14] Of states considering legislation that relates to nurse practitioners during 1999, at least 28 states (California, Colorado, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Minnesota, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Rhode Island, South Dakota, Tennessee, Texas, Virginia, and Wyoming) moved scope-of-practice bills from at least one chamber. Of those, laws have already been enacted in 16 states.

Virginia has enacted three laws relating to nurses. Two repealed laws that focused on prescriptive authority of nurses, and the third expanded nurse practitioners' prescriptive authority by allowing them to receive and dispense manufacturers' samples of Schedule VI controlled substances. Wyoming enacted legislation that allows advanced practice nurses to issue prescriptions for physical therapy services. A new Colorado law allows physical examinations of applicants for the Aid to the Needy Disabled program to be conducted by a licensed registered nurse to whom such medical functions have been delegated by a physician. Montana enacted legislation that allows an advanced practice registered nurse to make a determination of disability of a person for parking permit purposes. Iowa passed a law that prohibits hospitals from denying advance registered nurse practitioners clinical privileges solely due to their license.

New Jersey enacted a law that allows an advanced practice nurse to order medications and devices in the inpatient setting and to continue or reissue an order or prescription for a controlled dangerous substance that was originally ordered by a collaborating physician. The new law also allows an advanced practice nurse to order medications for a patient in an end-of-life situation or as part of a treatment plan for a patient with a terminal illness. Kansas enacted a law which allows an advanced registered nurse practitioner to prescribe drugs pursuant to written protocols.

Minnesota passed legislation that allows advanced nurse practitioners to receive and dispense sample drugs.

Physician Assistants: All states except Mississippi authorize Physician Assistants to practice. [14] As of June 30, 1999, 22 states (Arkansas, California, Colorado, Florida, Georgia, Illinois, Iowa, Kansas, Maine, Maryland, Minnesota, Nebraska, New Mexico, New York, North Carolina, Ohio, Oregon, Rhode Island, South Dakota, Tennessee, Texas and Virginia) had moved additional legislation from their respective chambers of introduction regarding scope of practice or prescriptive authority for physician assistants. Sixteen new laws were enacted in 15 states. Virginia enacted a law that authorizes PAs to receive and dispense manufacturers' professional samples of Schedule IV controlled substances. Nebraska enacted a law that allows PAs, once registered with the Drug Enforcement Administration, to prescribe medications as delegated by a supervising physician. The bill limits Schedule II prescriptions to a period not to exceed 72 hours and only for the relief of pain, and these prescriptions cannot be renewed by a PA.

In March, Arkansas passed the Physician Assistant Act Revision of 1999. The new law, in addition to addressing licensure and continuing education issues, allows physicians supervising PAs to delegate prescriptive authority to PAs to include prescribing, ordering and administering Schedule III through IV controlled substances, all legend drugs, and all non-schedule prescription medications and medical devices.

Colorado now allows physical examinations of applicants for the Aid to the Needy Disabled program to be conducted by a certified physician assistant to whom such medical functions have been delegated by a physician. Tennessee has enacted legislation that allows a supervising physician to delegate to a PA working under the physician's supervision the authority to prescribe and/or issue legend drugs and controlled substances listed in Schedules II, III, IV, and V. Kansas enacted legislation that allows PAs to sign for professional samples and distribute such samples to patients pursuant to a written protocol with a responsible physician.

Maine now allows PAs to perform those activities within his or her scope of practice outside of the direct presence of the physician or surgeon, instead of requiring that the physician or surgeon be present on the premises. A new law in Oregon allows a PA to provide medical services to ambulatory patients in a medical care setting where the supervising physician does not regularly practice if certain conditions are met. These conditions include whether the location of the medical care setting has been federally declared as underserved or is in a geographic area of the state that is designated as medically disadvantaged and in need of primary health care providers as determined by the Director of Human Resources or the Office of Rural Health.

Changes in Payment Policy and Coverage

Medicare

The Omnibus Reconciliation Act of 1989 (OBRA 89) established the nurse practitioner benefit as a separate benefit under the Medicare Part B program and also required that nurse practitioners collaborate with a physician in order for their services to be covered under Medicare. Nurse practitioners have always been required by Medicare to collaborate with a physician. Under OBRA 89, collaboration is defined as: "a process in which a nurse practitioner

works with a physician to deliver health care services within the scope of the practitioner's professional expertise, with medical direction and appropriate supervision as provided for in jointly developed guidelines or other mechanisms as provided by the law of the State in which the services are performed."[15]

More recently, Congress expanded Medicare coverage of non-physician practitioners' services in certain settings to improve beneficiary access to medical services. Effective for services furnished as of January 1, 1998, the Balanced Budget Act (BBA) authorizes nurse practitioners to bill Medicare directly for services furnished in any setting, regardless of whether the settings are located in rural or urban areas. The BBA allows the services of nurse practitioners and clinical nurse specialists to be eligible for Medicare Part B coverage and direct payments regardless of the geographic area in which these services are provided. The BBA defines covered physician services to include services provided by an NP or a CNS that would be considered physicians' services when provided by a physician. The BBA also included a new paragraph that authorizes payment for nurse practitioners' services when furnished in collaboration with a physician in all settings located in both urban and rural areas.[16]

A primary motivator behind Medicare reimbursement for NPs working without direct physician supervision was an attempt to entice NPs to practice in underserved areas that suffer from a dire shortage of medical personnel. However, for the same reasons that many physicians do not chose these locations, NPs are also reluctant to practice in underserved areas. The area where NPs have markedly increased patient access to health services is in inner-city hospitals.

Medicaid
Medicaid is available for non-physician reimbursement in almost every state for NPs and PAs. Reimbursement rates generally vary from 50% to 100% of physician fees.[17]

Private Insurance
Many states have enacted legislation mandating that private health care plans include reimbursement for particular groups of non-physician clinicians. Twenty-nine states require reimbursement for Nurse Practitioners, 37 states for Certified Nurse Midwives, 22 states for Certified Nurse Anesthetists.[18] In addition, 16 states have enacted "any willing provider" laws that, in general, prohibit health care plans from denying access to any licensed provider whose training and scope of practice include the services covered by the plan who is willing to meet the terms and conditions of the plan.[19] According to the 1999 State Health Care Priorities Study, lawmakers in 15 states predicted any willing provider bills to appear on their legislative agendas in 1999. As of April 27, seven had introduced legislation.[20] There has been similar, albeit less successful, action on the federal level for bills that would mandate the expansion of patient access to non-physician clinicians. Although these bills have been introduced in both the House and the Senate, and appear to receive great support from non-physician clinician providers, none have yet been enacted.

Position 1
ACP-ASIM supports expanded roles for nurse practitioners and physician assistants within a collaborative health care system that includes a physician who takes responsibility for the quality of care provided.

Nurse practitioners and physician assistants play an essential role in the provision of adult medical care. Many physicians rely upon these professionals not only for assistance, but also to efficiently provide direct patient care services within their areas of training and competence. However, non-physician providers make up a heterogeneous group, with different educational paths and varying clinical skills. The roles they should play depend on their clinical competencies. Traditional boundaries defining the roles of physicians and non-physician clinicians, particularly advanced practice nurses, are increasingly becoming blurred and necessarily must become more flexible as training and skills increasingly overlap. However, physicians are ultimately responsible for patient care, and must assure that the health professionals with whom they work are adequately supervised and do not perform services beyond their individual levels of expertise. In states where certain non-physician health care professionals are permitted to engage in independent practice, there must be safeguards to assure that they recognize the limits of their training and expertise and involve appropriate medical personnel when needed. Nurse practitioners and physician assistants can play a complementary role in providing many primary care services. We are committed to supporting these collaborative practice arrangements.

Position 2
A highly collaborative mode of practice will require improved systems for health professionals to communicate with one another. The ACP-ASIM supports development of these communication systems.

Through computer networks and the use of information technology, medical linkages and long-distance learning opportunities can be established that will enable physicians as well as non-physician providers to communicate readily concerning patient diagnosis and treatment. The availability of such communications systems will enhance opportunities for primary care services to be delivered through a collaborative team involving physicians, nurse practitioners, and physician assistants Telemedicine will afford even greater opportunities for improving communication linkages.

Position 3
The scope of practice by nurse practitioners and physician assistants should be evidence-based. Thus, ACP-ASIM encourages well-designed clinical trials that will test new roles for nurse practitioners and physician assistants.

Most of the research literature that compares the care provided by NPs and PAs with the care provided by physicians is difficult to interpret because of many methodological shortcomings. The problems include non-randomized study design, inability to generalize because of a limited number of study sites, focus on short-term rather than long-term outcomes, and insufficient study sample size to detect differences. Until recently, there have been no studies comparing outcomes of care provided by nurse practitioners in independent practice with outcomes of care provided by physicians.[21]

One recent study did compare outcomes for patients randomly assigned to nurse practitioners and physicians at urban primary care clinics of Columbia Presbyterian Medical Center in New York City. It found no significant differences in patients' health status after six months. [22], Although the study was well-done and internally valid, it too has important shortcomings that raise questions about whether its findings are likely to apply to other sites and populations. The study period was

too brief to include an adequate sample of difficult diagnoses and episodes of severe illness, the population patients were principally women in their mid-forties, and settings were limited to clinics of one urban academic medical center. [23] Moreover, the authors did not describe how well the nurse practitioners and physicians compared in their management of complex, sick patients, hospitalized patients, or difficult to diagnose patients. In short, the Columbia study was not a stringent test of nurse practitioner ability to manage primary care patients over time.

Another recent study found that nurse practitioners with an assigned panel of patients in a model of care similar to independent practice utilize more health care resources than physicians. [24] This study tracked 450 VA clinic patients for one year after assignment to either nurse practitioners, attending physicians or resident physicians. It found that all three groups had comparable use of blood and routine radiological tests, but nurse practitioners ordered more diagnostic tests. The conclusions of this study will also require further validation from similar studies in other treatment settings. ACP-ASIM supports research funding priority for additional studies that will overcome these limitations and further test the hypothesis that independent practice by nurse practitioners is safe and effective.

Position 4
Until there is evidence that advance practice nurses can provide high quality health care services in independent practice arrangements without accountability to physicians, the ACP cannot support independent practice of nurse practitioners or direct fee-for-service payments to them.

As noted earlier, evidence on the quality of care in the independent practice of nurse practitioners is limited to short-term care in a single practice of largely healthy people. Given this, we do not believe reimbursement practices should encourage the independent practice of nurse practitioners. Furthermore, this country appears to be moving toward greater use of integrated health care systems in which health care services are increasingly being delivered through managed prepaid arrangements. In this environment, an independent nurse practitioner practicing in a fee-for-service mode is a step in the wrong direction.

Position 5
*ACP-ASIM supports expanded roles for nurse practitioners and physician assistants working in hospital and ambulatory settings as substitutes for physician housestaff***.**

Changes in work hours and reductions in the number of physicians-in-training will lead to increased needs for hospital staffing. In addition, academic medical centers are under economic pressures to serve more with fewer personnel. These needs can in part be met by increasing the use of NPs and PAs as substitutes for certain physician housestaff activities. One study suggests that under a model using non-physician providers, only 20% of the physician housestaff's activities require a physician's attention.[23]

Prescribing Rights

There has been a dramatic rise in the number of drugs prescribed by nurse practitioners and physician assistants, which reflects the increased scope of practice and legal authority granted to non-physician providers by state laws. According to the Associated Press as reported by the

AMA News, nurse practitioners wrote 15 million prescriptions in the United States last year, a 66% increase from 1997. Physician assistants wrote 12 million prescriptions, up 33%.[24]

Position 6

Nurse practitioners and physician assistants should be empowered to prescribe prescription drugs under systems that ensure accountability to a physician.

The USPHS guidelines for nurse practitioners do not call for training in pharmacology. Nonetheless, under some nurse practice acts, advanced practice nurses are increasingly required to document a minimum of three credit hours of pharmacology if they seek independent prescribing authority.[25] Empirical work on the quality of nurse practitioner prescribing practices requires further study. One study conducted a random audit of the prescriptions of 18 primary care nurse practitioners and found that they prescribed a "very limited number of well known, relatively simple drugs to a young, female healthy population," but that minimal physician consultation was required to issue these prescriptions.[26] We would welcome further research work on the prescribing practices of nurse practitioners.

Position 7

ACP-ASIM is in favor of exploring possibilities for jointly developing continuing education programs with nurse practitioners and physician assistants.

To foster collaborative practice, the College would be interested in considering innovative continuing education programs emphasizing the team approach with NPs and PAs.

Position 8

ACP-ASIM suggests that research be conducted regarding the expanded roles of nurse practitioners and physician assistants to provide the following kinds of data:

- *a) The core curriculum or minimum standards of training of non-physician providers;*
- *b) Data on whether non-physician clinicians are doing what they are trained to do;*
- *c) Clinical outcomes data on non-physician practitioners and their professional roles;*
- *d) Cost data for comparable care for treatment of the same disease by non-physician clinicians and physicians;*
- *e) Data on the quality and effectiveness of nurse practitioners practicing independently;*

In making cost comparisons, it will be important to compare similar services for the treatment of the same kinds of illness. Data will need to be matched for severity of illness, age, diagnosis, complexity or level of care, and other factors. It will also need to be recognized that non-physicians may handle the more routine cases and may appropriately refer more complex cases to a physician. Cost comparisons should also consider total employment costs, and should include the use of all resources by non-physician clinicians and physicians, as opposed to cost-per-encounter data.

Despite the increasing numbers and expanding roles of nurse practitioners and physician assistants, few medical studies have examined the impact of these practitioners on the quality

and outcome of patient care. Our review of the literature since publication of our position paper in 1994, for which we conducted a meta analysis of the then existing literature, found little new research on quality or effectiveness, particularly concerning nurse practitioners in independent practice. Although we found several studies supporting collaborative practice between physicians and other health care providers, there was scarcely any information providing information about models of collaborative practice. Consequently, we again urge that high priority be given to this kind of research.

Conclusion

The numbers of Nurse Practitioners and Physician Assistants in training and in practice **have** continued to increase dramatically. There has also been a flurry of legislative activity at the state level expanding the scope of practice for these non-physicians, and federal payment policies for Medicare and Medicaid have encouraged their use in providing patient care services. The expanding roles of these health care professionals often overlap with those of physicians. Yet, there has been little research on the quality or effectiveness of these non-physician providers. There seems to have been no clinical trials, no cost data, no outcomes data, and little evidence that access has been improved for the underserved. Despite this lack of data, states are continuing to expand the scope of practice of these non-physician clinicians. The College supports the development of collaborative practice among physicians and non-physician clinicians. However, there has been little or no research on collaborative practice to provide models that physicians might adopt.

Consequently, the ACP-ASIM policy statement of 1994 remains appropriate. The College therefore reaffirms the positions adopted in its 1994 policy paper. The College remains committed to encouraging collaborative arrangements among physicians, nurse practitioners, physician assistants, who must increasingly work together as a health care team. However, we also continue to seek more research about quality and effectiveness.

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