POSITION PAPER

Reprinted from ANNALS OF INTERNAL MEDICINE Vol. 121; No. 9, 1 November 1994
Printed in U.S.A.

Physician Assistants and Nurse Practitioners

American College of Physicians*

■ **This position paper by the American College of Physicians Task Force on Physician Supply examines expanded roles for physician assistants and nurse practitioners in light of projected shortages of primary health care providers. Meta-analyses and other literature reviews comparing the care provided by nurse practitioners and physician assistants with that by primary care physicians had methodologic shortcomings that made the data difficult to interpret. There were no studies comparing nurse practitioners in independent practice with physicians. Seven policy positions are articulated.**

Ann Intern Med. 1994;121:714-716.

The United States has several options for meeting the nation's projected shortage of primary care providers, but changes in the training pipeline will not meet this demand for decades. Even if we were to begin today and commit the careers of half of all physicians-in-training to primary care, we would not reach the goal of a 50:50 ratio of generalists to subspecialists until the year 2040. We must therefore address this need in the immediate future. One potential solution is to expand the role of nonphysician providers in the health care system.

Most health care reform proposals recognize the importance of primary and preventive health care and seek to provide increased financial incentives for primary care physicians and greater support for primary care training programs to encourage more physicians to pursue careers in primary care. President Clinton's plan also called for a doubling of training positions for nurse practitioners, certified nurse midwives, and physician assistants. The American Nurses Association sponsored a recent meta-analysis of studies on nurses in primary care roles. The authors of this study recommended that policymakers "encourage the continued and expanded use of nurse practitioners and certified nurse midwives as providers of primary care services to a wide variety of patient populations" (1).

Nonphysician providers are a heterogeneous group with different educational paths. The roles they should play depend on their clinical competencies. Two types of nonphysician providers are particularly important to adult medical care. Nurse practitioners and physician assistants are both engaged in preventing, diagnosing, and treating medical illnesses.

Nurse practitioners are licensed registered nurses with advanced education ranging from 9 to 24 months of supervised clinical training in the diagnosis and treatment of illness. Their training program leads to a certificate or a Master's degree (2). Although trained to provide primary care, many obtain additional training for specialized practice in family practice, pediatrics, geriatrics, school health, or mental health. Certification is available to registered nurses from the American Nurses Association, nurse-specialty associations, and some academic nursing education programs (3). Of note, an advanced practice nurse can practice without certification.

In contrast, physician assistants are trained to provide medical care specifically under the direction and supervision of a physician. Training consists of a minimum of 2 years of classroom instruction and clinical training. Although an undergraduate degree is not required, 60% of physician assistant programs offer this degree or a degree option, and the remaining programs offer an Associate degree or a certificate when a 2-year program is completed (4, 5). Physician assistant training programs are accredited by the American Medical Association Committee on Allied Health Education and Accreditation, of which the American College of Physicians is a sponsoring organization, and nearly all states require physician assistants to pass the certification examination of the National Commission on Certification of Physician Assistants. State licensing laws permit physician assistants to work under the supervision of physicians, surgeons, and housestaff in providing diagnostic, therapeutic, surgical, and preventive services. However, more than 50% of physician assistants provide primary care services (6).

Three issues are central to expanding the role of nurse practitioners and physician assistants in our health care system: 1) prescribing authority; 2) reimbursement privileges; and 3) the legal scope of professional practice. In 43 states, nurse practitioners have some measure of prescribing authority. Currently, 22 states grant statutory independent prescribing authority for nurse practitioners, although 7 of these exclude controlled substances (7). In some states, such as Texas, prescribing authority extends only to nurse practitioners serving in areas with a shortage of health professionals. In 8 states, nurse practitioners must seek additional training to become an authorized prescriber of medications (8). In 1992, under the direction and supervision of physicians, physician assistants wrote 165 million prescriptions, or 8% of the total prescription market in the United States (9).

Under Medicaid, 42 states have allowed reimbursement for nurse practitioner services. In 20 of these states, nurse practitioner services receive 100% of the physician Medicaid payment rate. To varying degrees, 18 states have permitted Medicare reimbursement for certain services

* This paper was authored by Harold C. Sox, Jr., MD; Jack A. Ginsburg, MPE; and H. Denman Scott, MD, MPH. It was developed for the ACP Task Force on Physician Supply: James P. Nolan, MD, *Chair*; William Cannon, MD; Clifton R. Cleaveland, MD; Robert Copeland, MD; Frank Davidoff, MD; Susan Deutsch, MD; F. Daniel Duffy, MD; Paul A. Ebert, MD; Robert I. Frye, MD; Paul F. Griner, MD; Rolf M. Gunnar, MD; Ruth Hanft, PhD; Howard Shapiro, PhD; Joseph S. Solovy, MD; and Steven A. Wartman, MD, PhD. Ruth Hanft dissented from positions 4 and 6. Approved by the Board of Regents on 18 April 1994.

provided by advanced practice nurses (7). In 1990, the Health Care Financing Administration extended payment for nurse practitioner services in nursing facilities. However, these direct payments for nursing facility services were made to employers with the stipulation that the nurse practitioner work collaboratively with a physician. The Rural Nursing Incentive Act of 1991 goes further by authorizing direct reimbursement to all nurse practitioners practicing in designated rural areas (10).

Various meta-analyses and literature reviews have compared the care provided by nurse practitioners and primary care physicians (1, 3, 11–14). These overviews consistently report that nurse practitioners perform equal to or better than physicians on measures of process of care, patient satisfaction, and outcomes of care. However, as the Office of Technology Assessment study notes, "many studies that analyze these relationships are methodologically flawed and almost none examine the quality of services provided without physician involvement" (3). It is therefore not possible to draw conclusions about independent nursing practice from the available literature.

American College of Physicians Policy Positions

1. *The American College of Physicians 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.*

During the next decade, generalist physicians alone cannot meet the anticipated gap in primary care services. Nurse practitioners and physician assistants will have a key, complementary role in filling this need. We are committed to supporting these collaborative practice arrangements.

2. *A highly collaborative mode of practice will require improved systems for health professionals to communicate with one another. The College supports the development of these communication systems.*

Through computer networks and the use of information technology, medical links and long-distance learning opportunities can enable physicians and nonphysician 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 us even greater opportunities for improving communication links. *ACP Online*, the College's new computer network, is one example of the kind of improved communications systems that are now being implemented.

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

The research literature that compares the care provided by nurse practitioners and physician assistants with the care provided by physicians is difficult to interpret because of many methodologic shortcomings. The problems include nonrandomized study design, poor generalizability 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. Most importantly, no studies compare nurse practitioners in independent practice with physicians (3). The College supports research funding priority for studies that will overcome these limitations and test the hypothesis that independent practice by nurse practitioners is safe and effective.

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

Given the absence of evidence about quality of care by nurse practitioners in independent practice, we do not believe reimbursement practices should encourage the independent practice of nurse practitioners. Furthermore, this country appears to be moving toward a 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.

5. *The College supports expanded roles for nurse practitioners and physician assistants working in hospital and ambulatory settings as substitutes for physician housestaff.*

Proposed changes in work hours for physicians-in-training will lead to increased needs for staffing. In addition, academic medical centers are under economic pressures to serve more patients with fewer personnel. These needs can in part be met by increasingly allowing nurse practitioners and physician assistants to perform some activities usually done by physician housestaff.. One study suggests that under a model using nonphysician providers, only 20% of the physician housestaff's activities require a physician's attention (15).

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

The United States Public Health Service 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 3 credit hours of pharmacology if they seek independent prescribing authority (16). Empirical work on the quality of nurse practitioner prescribing practices requires further study. Investigators of one study randomly audited 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 (17). We would welcome further research work on the prescribing practices of nurse practitioners.

7. *The College favors 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 that emphasize the team approach with nurse practitioners and physician assistants.

Requests for Reprints: Jack A. Ginsburg, MPE, American College of Physicians, 700 Thirteenth Street Northwest, Suite 250, Washington, D.C. 20005.

References

1. **Brown SA, Grimes DE.** Nurse Practitioners and Certified Nurse-Midwives: A Meta-Analysis of Studies on Nurses in Primary Care Roles. Washington, D.C.: American Nurses Publishing; 1993.
2. **Safriet BJ.** Health care dollars and regulatory sense: the role of advanced practice nursing. Yale Journal on Regulation. 1992;9:417–88.
3. **U.S. Congress, Office of Technology Assessment.** Nurse Practitioners, Physician Assistants, and Certified Nurse-Midwives: A Policy Analysis. (Health Technology Study 37). OTA-HCS-37. Washington, D.C.: U.S. Government Printing Office; 1986.
4. **American Academy of Physician Assistants.** Physician Assistants: Partners in Medicine (HOD 1303-01-01). Alexandria, Virginia; 1991.
5. **Jones PE, Cawley JF.** Physician assistants and health system reform. Clinical capabilities, practice activities, and potential roles. JAMA. 1994;271:1266–72.
6. **Senenman S.** Physician extenders in great demand. Medical Tribune. May 27, 1993.
7. **Pearson LJ.** 1992–93 update: how each state stands on legislative issues affecting advanced nursing practice. Nurse Pract. 1993;18:23–38.
8. **Faucher MA.** Prescriptive authority for advanced nurse practitioners: a blue-print for action. J Pediatr Health Care. 1992;6:25–31.
9. **Thomas GP, Nelson RL.** Role of physician assistants in the U.S. health care system. Product Management Today. January 1993; 8–10.
10. **Sullivan EM.** Nurse practitioners & reimbursement. Nurse Health Care. 1992;13: 236–41.
11. **Ventura MR, Feldman MJ, Crosby F.** Information Synthesis: Effectiveness of Nurse Practitioners. Washington, D.C.: Veterans Administration; 1985.
12. **Sox HC Jr.** Quality of patient care by nurse practitioners and physician's assistants: a ten-year perspective. Ann Intern Med. 1979;91:459–68.
13. **Edmunds MW.** Evaluation of nurse practitioner effectiveness: an overview of the literature. Evaluation and the Health Professions. 1978;1: 69–82.
14. **Prescott PA, Driscoll L.** Nurse practitioner effectiveness: a review of physician-nurse comparison studies. Evaluation and the Health Professions. 1979;2:387–418.
15. **Knickman JR, Lipkin M, Finkler SA, Thompson WG, Kiel J.** The potential for using non-physicians to compensate for the reduced availability of residents. Acad Med. 1992;67: 429–38.
16. AMA Report of the Board of Trustees. Economic and quality of care issues with implications on scopes of practice–physicians and nurses. (I-93-35). Chicago: American Medical Association; 1993.
17. **Rosenaur J, Stanford D, Morgan W, Curtin B.** Prescribing behaviors of primary care nurse practitioners. Am J Public Health. 1984;74:10–3.