

Can Nurse Practitioners And Physicians Beat Parochialism Into Plowshares?

A collaborative, integrated health care workforce could improve patient care.

by Robert L. Phillips Jr., Doreen C. Harper, Mary Wakefield, Larry A. Green, and George E. Fryer Jr.

ABSTRACT: Nurse practitioners have evolved into a large and flexible workforce. Far too often, nurse practitioner and physician professional organizations do not work together but rather expend considerable effort jousting in policy arenas. Turf battles interfere with joint advocacy for needed health system change and delay development of interdisciplinary teams that could help patients. A combined, consistent effort is urgently needed for studying, training, and deploying a collaborative, integrated workforce aimed at improving the health care system of tomorrow. The country can ill afford doctors and nurses who ignore one another's capabilities and fail to maximize each other's contributions cost-effectively.

THE NURSE PRACTITIONER ROLE WAS CREATED IN 1965 through the joint efforts of Loretta Ford and Henry Silver.¹ Ford recalls, "The [NP] was not a substitute for the physician; their relationship was envisioned as collaborative and collegial." Some believe that the role of the NP has changed to that of a more independent provider who can substitute for physicians in primary care.² Many NP-physician collaborative practices use NPs' skills to benefit patients, but professional rancor has intensified over independence, particularly as more NP graduates go into practice and gain recognition and role legitimacy among patients. NPs are advanced practice nurses (APNs), a category that also includes nurse-midwives, nurse anesthetists, and clinical nurse specialists. For this paper we focus on NPs since they are the largest, fastest-growing cohort of APNs and a political focus for independent practice. First we describe the current status of NPs; we then consider how physician-NP relationships could evolve by allowing NPs to practice independently or by removing barriers that prevent them from being fully functional members of collaborative health care teams.

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Robert Phillips is assistant director of the Robert Graham Center: Policy Studies in Family Practice and Primary Care, in Washington, D.C. Doreen Harper is dean and professor at the University of Massachusetts–Worcester Graduate School of Nursing. Mary Wakefield is director of the Center for Rural Health, University of North Dakota, in Grand Forks. Larry Green is director of the Robert Graham Center; George Fryer is an analyst there.

Current Status Of NPs

Early definitions characterized NPs' role as providing primary health care in a variety of settings.³ Since the development of this role, NPs have sought recognition both within and outside of nursing. Early on, many NPs were denied hospital-nursing privileges, and medicalization of a nursing role was not consistently welcomed within nursing. For more than thirty-five years the definition and scope of NP practice have progressed toward more independent clinical decision making. However, it remains imperative and legally essential that NPs have access to consultative and referral networks of physicians. The American Academy of Nurse Practitioners (AANP) now defines NPs as unique in the constellation of APNs, functioning independently and collaboratively like APNs but active in a broad array of specialties and settings and managing both medical and nursing problems.⁴ The American College of Nurse Practitioners (ACNP) defines the NP role further vis-à-vis physicians: "A nurse practitioner provides some care previously offered only by physicians...working in collaboration with physicians."⁵

■ **Physicians' response.** NPs' role has evolved, as NPs have sought to expand practice autonomy and get independent reimbursement.⁶ Physician organizations have responded by seeking to control NP practice through mandatory supervisory relationships, keeping responsibility for patients, and limiting direct reimbursement of NPs.⁷

While many physicians have been strong supporters of NPs, the battle between the professions over practice control and compensation is clearly engaged at the policy level. Medicine also has attempted to control NP practice by appealing to the public and policymakers about quality concerns. For example, during the health care reform debate in the early 1990s a physician organization mailer depicting a duck with a stethoscope stated, "Lowering health care licensing standards and broadening the scopes of practice for healthcare providers who did not attend medical school is a serious and dangerous threat to the health of [state] and the United States." The advertisement's headline read, "Don't Duck with Healthcare."

More recently a Citizens' Petition, submitted by fifty physician organizations to the Centers for Medicare and Medicaid Services (CMS, then HCFA), called for stricter legal compliance in the distribution of billing numbers and payments to NPs and an immediate audit.⁸ More than 200 nursing organizations responded, calling the initiative "an attempt to restrict NP and CNS practice."⁹

Despite these tensions, some collaboration takes place in the public policy arena, and effective practice models of physician-NP collaboration are common. In Wisconsin a professional conflict over expansion of APNs' diagnostic test ordering and interpretation authority generated an administrative rule that actually clarified the important relationship that must exist between APNs and physicians.¹⁰ This policy collaboration was not a compromise but rather an example of political leadership with a focus on improving patient care. There also are a few good examples of interprofessional efforts to develop policy through grant-funded

projects, including Partnerships for Quality Education (PQE), which received initial funding from the Pew Charitable Trusts and now is funded by the Robert Wood Johnson Foundation (RWJF); Partnerships for Training: Regional Education Systems for Nurse Practitioners, Certified Nurse-Midwives, and Physician Assistants, funded by the RWJF; the Area Health Education Centers, the Quentin N. Burdick Rural Program for Interdisciplinary Training, and the Geriatric Education Centers, funded by the Health Resources and Services Administration (HRSA); and Community Partnerships in Health Professions Education, funded by the W.K. Kellogg Foundation.

NP Professional Issues

■ **Education.** NP programs began as certificate-level training beyond the basic education for registered nurses. Rapid growth in the number of NP programs during the 1990s prompted concerns about their quality.¹¹ Consequently, two national groups—the National Organization of Nurse Practitioner Faculties and the American Association of Colleges of Nursing—collaborated to write standards for competency-based master's-level education for NPs. These efforts culminated in the National Task Force on Quality Nurse Practitioner Education, whose report is becoming the standard for evaluating NP programs.¹² Master's-level NP programs now combine twelve to twenty-four months of full-time study with a minimum of 500 hours of clinical experience.¹³

■ **Certification and accreditation.** Although program accreditation is now standardized, four different organizations have unique certification exams and eligibility criteria. This fractured process contributes to the lack of national data about NPs and considerable variation in state statutes. The Alliance for Nursing Accreditation has been formed to establish stronger linkages between education and accreditation/certification.

■ **Supply and workforce.** With favorable changes in state laws and the job market, the number of NP students rose from fewer than 4,000 in 1992 to more than 21,558 in 1999.¹⁴ Changes in certification standards requiring a master's degree in nursing greatly reduced certificate-level programs, while master's-level programs more than tripled (from 239 in 1993 to 743 in 2000).¹⁵

The annual number of NP graduates is approaching the number of medical school graduates, yet there is no national data set comparable to the American Medical Association (AMA) Physician Masterfile to monitor this workforce. Estimates derived from national surveys and graduation rolls make it difficult to know where and how NPs are deployed. Federal Bureau of Nursing surveys of registered nurses (RNs) suggest that about 71,000 NPs were formally trained and employed as of 1996.¹⁶ About two-thirds provided direct patient care, 22 percent of whom did not have “NP” in their title. A follow-up RN survey estimated the NP workforce at 102,829 in 2000.¹⁷ Projections indicate that 106,500 NPs could be practicing by 2005—double what planners say is adequate for the primary care

workforce.¹⁸ However, a national random sample survey of NPs suggests that only 60,905 NPs were working in 1999, well below federal government estimates.¹⁹ A partial explanation for the estimate discrepancies may be that NP training and experience are sought for roles other than direct patient care (nursing management, insurance evaluation, and phone triage). National health surveys offer no insights into NP activities; for example, the Medical Expenditure Panel Survey (MEPS) lumps NPs with nurses, which precludes analysis of care provided by NPs.²⁰

Understanding where NPs work is also hampered by poor national data. Some research suggests that nonphysician clinicians tend to follow the same geographic distribution pattern as physicians, but NP sample surveys suggest that nearly half practice in rural or inner-city areas.²¹ Whom NPs work with is also unclear; however, a 1998 survey of a sample of practicing physicians found that 21 percent either employed or worked with NPs.²² These physicians were more likely to be under age fifty, in practice for fewer than twenty years, have a high proportion of managed care patients, and work in a large group practice. Although these trends suggest increasing options for NPs and more collaboration between the professions, better data are needed to understand the size, function, and deployment of the NP workforce and how it functions with other health professions.

Practice Issues

■ **Scope of NP practice.** In the past fifteen years state practice laws for NPs have moved steadily away from requiring physician supervision and protocols. In 2000 forty-three states and the District of Columbia authorized NP practice through a state board of nursing.²³ Of these, only half had statutory requirements for physician collaboration or supervision. Seven states authorized practice through a combined medicine-nursing board or other regulatory body; six of these required physician supervision. Where nursing boards regulate NPs, their autonomy is highest, leading to greater numbers in practice.²⁴

■ **Reimbursement.** The Balanced Budget Act (BBA) of 1997 expanded previous Medicare eligibility such that NPs in all settings are eligible for direct Medicare reimbursement at 85 percent of the physician rate when they collaborate with physicians. When care provided by an NP is billed as “incident to” a physician, it is billed in the physician’s name and reimbursed at the physician rate.²⁵ This latter provision submerges NPs’ professional identity. For example, Medicare carriers complain that “incident to” services are difficult to track and obscure care provided by NPs.²⁶ A survey of NPs found that only 4.4 percent of NPs bill directly, 71 percent bill “incident to,” and 8 percent have other arrangements.²⁷ A federal mandate allows family and pediatric NPs to bill Medicaid directly within state limits, further contributing to variation, since each state determines NPs’ reimbursable scope of practice.²⁸

A U.S. Department of Health and Human Services announcement recognizing NPs as independent providers met strong resistance from physician organizations, which argued that such federal policies threaten the quality of patient care

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and provide leverage at the state level to expand NPs’ scope of practice.²⁹ Nursing organizations claim that such policies merely recognize current NP functions.

■ **Prescribing privileges.** NPs have some prescriptive authority in all fifty states, but there is considerable variation.³⁰ Alice Running and colleagues found that 82 percent of NPs were authorized to prescribe, but only 45 percent of all NPs were authorized to prescribe controlled substances.³¹ Although expansion of prescriptive authority contributed to a 66 percent increase in prescriptions written by NPs between 1997 and 1998, this represents less than 0.01 percent of all prescriptions.³²

This variability in scope of practice, reimbursement, and prescribing complicates NP practice. Interstate variation is an outcome of turf battles that embitter combatants and make collaboration difficult as practices contract with multistate insurers and delivery systems.

Quality Of Care

Early studies of NP practice were fraught with methodological problems, but they suggest that within areas of expertise, there are no important differences between NPs and primary care physicians regarding quality of care, number of visits per patient, use of the emergency room (ER), and prescribing.³³ More recent randomized clinical trials comparing NPs with primary care physicians found no major differences in selected patient outcomes and higher patient satisfaction with NP care.³⁴ Two of these studies were conducted in the United Kingdom, where similar issues apply: evolving scope of practice; limited prescribing rights; and limited but successful collaborative arrangements with physicians.

There is relatively little in the literature about collaborative care models, but what has been published shows improved patient satisfaction and outcomes over practice by either profession alone. Analyses of NP-physician collaborative practice show that patients benefit from the combination of complementary skill sets.³⁵ Studies of NP-physician teams have demonstrated cost and quality-of-care improvements in nursing homes, ERs, and surgical inpatient settings.³⁶ Disease prevention and care of chronic conditions also benefit from NP-physician teams.³⁷ Physicians who work with NPs report improved job satisfaction, reduced workloads, and increased ability to offer a higher standard of care.³⁸

The models described above are the result of physician-NP teams’ figuring out how to best meet the needs of their patients. Evidence is lacking on how to best distribute patient-care functions within a collaborative team and how to improve providers’ willingness or ability to collaborate.³⁹ A great deal has been written about breaking down hierarchies, developing trust, and the need for major pre-planning of roles. Jane Salvage and Richard Smith suggest that “instead of bound-

ary disputes and substitution squabbles, efforts could be directed toward capitalizing on the wealth of skills that all professionals can bring to bear on solving health problems.”⁴⁰

The Future: Alternative Options

Thirty-five years after its inception, a robust NP workforce coexists with many other health care workers, specifically a large, well-trained physician workforce. Most physicians and NPs function quite well together, but their best efforts are impeded by regulatory variations that make it difficult to contract with multistate insurance providers and by battles between physician and NP organizations. What options exist at this point?

■ **Continue fight for NP autonomy.** One option is for NP organizations to continue battling for power, position, and prestige in the open market and policy arenas. The potential for professional autonomy, respect, and higher incomes may be particularly attractive to NPs. Health insurers may welcome another front-line competitor in the marketplace. The NP workforce has proved to be quite flexible and could fill positions not wanted by doctors or could outcompete them for others. In this option, NPs function as a disruptive technology within the health care system. Disruptive technologies in other industries, like cellular telephone service and personal computing, have revolutionized cost, quality, and availability. Some health economists feel that health care is ripe for such innovation.⁴¹ This outcome is entirely possible, given the steady evolution of NP autonomy and the persistent failure of physicians to fulfill unmet patient expectations, and its potential fuels aggressive protective behavior, such as the petition developed by physicians. This option, however, might compromise the likelihood that these disciplines will pool their efforts to address the health system changes called for by the Institute of Medicine (IOM).⁴²

■ **Develop models of integrated care.** A second option is for physician and NP organizations to work with other health care professions to develop models of integrated, patient-centered care, each profession bringing the best of its discipline to the table. In this approach, differentiation of work is applauded, and teams are made accountable for performance. The patient-safety and quality movement, led by the IOM and taking hold in the United States, could be a crucial driver for this type of model. This option might reinvigorate public trust and strengthen the roles of both NPs and physicians as patient advocates. As Donald Berwick noted, “Achieving the highest-quality health care system will require shedding of the old model in which professional roles trump teamwork.”⁴³ In this option, prestige, position, and payment yield to patients, populations, and performance.

How To Turn Parochialism Into Effective Collaboration

■ **Revise payment systems.** As noted in the IOM’s *Crossing the Quality Chasm*, the goal of any payment method should be to reward high-quality care and to permit the development of more-effective ways of delivering care to improve the value of re-

sources spent. The report also asserts that if payment methods encompassed the scope of services received, providers could allocate resources according to patients' needs, across types of clinicians and care settings. There is little embedded in current payment methods that encourages fielding a multidisciplinary team approach to care in spite of the possibility that cost savings and improved quality may be among its outcomes. Demonstration projects that pay for integrated care teams with patient-centered outcomes may provide testable alternatives to revising payment policies for discipline-specific providers.

■ **Define shared authority and accountability.** Quality of care is a concern for both professions, yet it is typically pursued through parallel efforts. Given that no health care professional practices independently anymore, statutory language, professional organization policies, and even separate ethical principles may be outdated for both professions.⁴⁴ Patient-centered systems of care require new leadership roles in which professionals have the authority to perform differentiated roles and the flexibility to change those roles to best meet patients' needs. Research is needed to understand the best configurations of health care teams and the specific functions and flexibility of physicians and NPs within them. As this understanding develops, physician and NP professional organizations could cooperate to translate it into model practice acts and remove legislative barriers to collaboration.

■ **Stipulate integrated education and certification requirements.** Medical and nursing education programs could incorporate interdisciplinary requirements into the education, certification, and accreditation processes for medicine and nursing at the graduate and undergraduate levels. Educating new generations of physicians and NPs for collaborative, patient-centered care is important. Many organizations have called for multidisciplinary education to improve quality of patient care. Vincent Fulginiti acknowledges the challenges of integrating education but suggests that there is no better place to start than in health professionals' early education.⁴⁵ Maria Clay and colleagues moved a step further, saying, "We need to train learners who are not only competent in their own disciplines but also able to work side by side with other health professionals to provide quality health care at a price our nation can afford."⁴⁶ So far, no educational model has been widely adopted that socializes NP and medical students to collaborate by teaching what each profession brings to patient care. A first step could be agreement about content for integrated education, followed by evaluation and dissemination of model programs. State and federal agencies could advance this effort by rewarding multidisciplinary health professional education programs. Government should encourage multidisciplinary training through funding for demonstrations and discourage the uncoordinated proliferation of NP and physician training programs.

■ **Fund health services research focused on integrated care models.** Major research has been conducted on the characteristics of effective teams and team interactions in general; however, assessments of specific characteristics of integrated care models and related patient outcomes are still limited. The cost-effectiveness of

these models also merits further exploration. Absent such research, regulatory, payment, health care setting, and professional association policies run the risk of wasting resources and inhibiting the provision of efficient, high-quality care. Government agencies and private foundations concerned about quality of care should make evaluating outcomes of collaborative practice a higher priority in the health services research they support. Furthermore, demonstrations that implement selected models with an eye toward financing mechanisms could be conducted through the CMS.

■ **Assess and plan the workforce jointly.** When nursing and medicine separately consider supply within their own disciplines, they tend to underestimate the combined effects on needs and resources. Multidisciplinary workforce efforts might do better focusing on how to deploy an integrated workforce rather than on controlling numbers. To accomplish this, there is a need for better health care workforce data, particularly regarding NPs. A regular national survey or census of health care workers would be helpful in correcting this deficiency.

NURSE PRACTITIONERS are a large, important, and flexible workforce that now functions as both collaborator with and competitor to physicians. Their role is inconsistent because of variations in training, experience, scope of practice, certification, and reimbursement. Despite organizational conflicts, a few examples of NP and physician cooperation exist in practice. While there is evidence that integrated NP-physician practice enhances care, more research is needed to develop an evidence base to optimize delivery models. Furthermore, education, regulation, and payment policies that support evidence-based NP-physician approaches to care delivery should be encouraged. Will physicians and NPs set parochialism aside and embrace improved patient care as a shared priority? The American public deserves no less.

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