Physicians and Nonphysician Clinicians
Complements or Competitors?

For most of the 20th century, physicians have enjoyed a privileged position in US society. This "professional sovereignty" was buttressed by regulations that shielded physicians from competitors, such as laws granting the profession control over training and licensure and restricting opportunities for others to practice medicine. Physicians exercised considerable latitude in setting their own fees and in practicing medicine, with minimal external oversight or intrusion. Many physicians perceive that the managed care revolution is threatening to end this "golden era." Managed care organizations impose fee schedules, authorize clinical decisions, and restrict practice opportunities through selective contracting.

See also pp 788 and 795.

In this issue of THE JOURNAL, Cooper et al1 call attention to another force that may challenge the professional sovereignty of physicians. These authors document the explosion in the supply of nonphysician clinicians (NPCs) occurring in the United States. Between 1992 and 1997, there has been a 2- to 4-fold increase in the annual number of graduates of nurse practitioner, certified nurse midwife, and physician assistant programs and a doubling or more of graduates from chiropractic and acupuncture schools. As a result of this priming of the training pump, the supply of practitioners in these fields will dramatically increase in the coming decade. Cooper et al1 project that the number of traditional and alternative NPCs per capita will increase by about 60% between 1995 and 2005. Certified nurse anesthetists is the only profession studied that is expected to experience a decline in supply.

This growth in NPCs comes at a time when many policy analysts believe that the United States has an oversupply of physicians, especially specialists.10 The supply of physicians per capita in the United States is projected to increase by more than 10% between 1995 and 2005. Will there be room for this proliferation of physicians and NPCs? Will physicians and NPCs complement each other, fostering pluralism and collaborative teamwork, or will these groups primarily be competitors, tussling within the confines of a budget-limited system that cannot financially accommodate this many practitioners?

In the complementary scenario, the different types of practitioners would fill different ecological niches in the health care system. Multidisciplinary groups might allow each discipline to contribute its own unique perspective and training to the care of patients in a shared-care model in which the whole is more than the sum of the individual practitioners.12 In primary care, nurse practitioners might focus more on wellness care and generalist physicians more on illness care. In specialty areas, optometrists might maintain a focus on correcting refractive errors and minor eye complaints, with ophthalmologists concentrating more on serious eye disorders. Unfortunately, there is a paucity of research on these types of interdisciplinary care models in the United States.

The future probably will not be as rosy as this scenario implies, however. Nonphysician clinicians do not aspire merely to complement physicians. As Cooper et al point out in a second article in this issue of THE JOURNAL,8 NPCs are successfully advocating for liberalization of regulations to allow an expanded scope of practice and independence from physician supervision. For example, nurse practitioners have independent practice authority in 21 states,8 positioning these practitioners to be substitutes, not just adjuncts, to primary care physicians. Studies of nurse practitioners and physician assistants generally indicate that these clinicians can perform many of the clinical tasks of physicians and provide equivalent quality of care within their scope of practice.9,10

Nonphysician clinicians, to the extent that they can substitute for physicians, do not seem content to provide care only for populations abandoned by physicians. Advocates for certified nurse-midwives, nurse practitioners, and physician assistants have lobbied for public financing for education in these disciplines on the grounds that these clinicians might compensate for a shortage of primary care physicians in underserved communities.11 However, many, if not most, NPCs appear to practice in the same socioeconomically advantaged communities that are saturated with physicians.

Heightened competition between physicians and NPCs seems virtually inevitable in a system that already has an abundant supply of physicians and is intent on containing overall costs. The Evans Law of Economic Identity, a principle articulated by health economist Robert Evans, illustrates this logic.12 Evans points out that total expenditures on professional health care services are by definition equal to the total number of services provided multiplied by the price of each service, which are in turn equal to the total number of persons earning incomes in health care multiplied by the income of each person. If the supply of health care workers increases and income per worker remains constant, then health expenditures also will increase. To increase the supply of workers without increasing overall costs, either incomes per worker must diminish or new workers must displace other workers. Applying this concept to the data provided by Cooper et al, a simultaneous growth of 60% and 10% in the per capita supply...
of NPCs and physicians, respectively, implies either a substantial growth in expenditures for payment of these practitioners or rivalry among physicians and NPCs to protect incomes and jobs in a financially constrained system. As a consequence, some individuals and practitioner groups may experience reductions in their incomes.

The logic of the Evans Law is not lost on physician organizations, many of which continue to tenaciously defend their clinical turf. For example, ophthalmologist and optometrist associations in California recently spent nearly $2 million in political contributions in a 4-year battle over proposals to expand optometrists' scope of practice. At the national level, anesthesiologists are waging a fierce battle over a Health Care Financing Administration proposal to eliminate its requirement that nurse anesthetists be supervised by a physician to receive Medicare or Medicaid reimbursement.

Will this heightened competition benefit the public? Many observers welcome an expanded role for NPCs, arguing that restrictive practice laws have functioned more as protectionism for a physician guild than as protection for patients against unqualified practitioners. In this view, patients will benefit from wider options in health care and competition may drive down the prices for physician (and nonphysician) services. However, regulatory agencies will bear increased responsibility for ensuring the competence of a more diversified clinician workforce. The tremendous variation in regulations across states highlights the challenge for regulatory bodies to develop more uniform, coordinated, and publicly accountable policies. Moreover, the public may find that greater clinician pluralism comes at the price of higher overall health care costs, as physicians and NPCs alike prove resourceful at promoting their services and maintaining their incomes.

It is also not entirely clear that NPCs stand to benefit materially from an explosive growth in NPC supply. As Cooper et al note, this growth will exceed the requirements estimated by some leaders within NPC fields. Nonphysician clinicians may find themselves in the same uncomfortable position as many physicians graduating from specialty training programs in the United States, facing limited practice opportunities in fields oversaturated with practitioners.

The study by Cooper et al is one of the first systematic projections to carefully measure the burgeoning supply of NPCs. The magnitude of these trends will likely surprise many in both the physician and NPC professions. Although the methods and assumptions used by Cooper et al may somewhat overestimate future supply, it appears that the general magnitude of these projections is valid. These projected trends have an uncanny resemblance to a related pattern of workforce growth that began 25 years ago. At that time, fueled by a major increase in medical school enrollment in the late 1960s and expanded subsidies for graduate medical education, physician supply in the United States commenced a dramatic upsurge, with the per capita supply of specialist physicians increasing by nearly 60% between 1970 and 1983 alone. This zealous expansion of specialist supply continues to strain the current health system.

Leaders and educators in NPC professions will need to thoughtfully consider the data presented by Cooper et al and the implications of these workforce projections for policy and education. Researchers will need to investigate changing practice opportunities and restructuring of health care involving NPCs and carefully compare the quality and costs of care provided by physicians, NPCs, and interdisciplinary teams. Physicians, for their part, should guard against simply digging in their heels in response to these trends and resisting a meaningful role for nonphysician clinicians in the health care system. Nonphysician clinicians have an important contribution to make and collaboration between physicians and NPCs holds promise for improved models of care. The challenge for the health professions in the coming years will be to develop models that promote this complementary relationship while mitigating the harsh competition that may be the unhappy product of uncontrolled growth in the health professions.

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