Health Care Dollars and Regulatory Sense: The Role of Advanced Practice Nursing

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Our current health care "system" has been criticized for providing too little care, too late, for too few people, at too high a cost. In this Article, Dean Safriet argues that these problems require a fundamental restructuring of existing health care delivery systems and more effective utilization of all health care personnel. Dean Safriet urges immediate legislative reform to reduce the restrictions that currently constrain advanced practice nurses, especially nurse practitioners and certified nurse-midwives. Advanced practice nurses have demonstrated repeatedly that they can provide cost-effective, high-quality primary care for many of the neediest members of society, but their role in providing care has been has been severely limited by restrictions on their scope of practice, prescriptive authority, and eligibility for reimbursement. Eliminating these restrictions would enable advanced practice nurses to increase access to health care while preserving quality and reducing costs.

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Introduction

The root of the controversies that entangle our current "health care system" can be found in the inaccuracy of the term itself. The word "system" connotes organization, coordination, and a considered structure, none of which accurately describes our present arrangement. In addition, what we do have is oriented to medicine, rather than health, and to biomedical research and cure, rather than care. This gap between terminology and reality is growing, and it is swallowing our resources at an ever-increasing rate.

This country needs a genuine health care system, in fact as well as in name. The American people are clamoring for solutions to the many undeniable failures of our current scheme. These consumers intuitively know what policymakers too often forget, that any rational health care system must address three basic concerns: Can I get care? How good will it be? How much will it cost? Not surprisingly, the same questions are central to expert assessments of health care delivery at the state and national levels. The three primary factors commonly used to evaluate the efficacy of our system are access to care, quality of care, and cost of care. As to each, recent studies confirm the existence of serious, even overwhelming problems.

**Access to care.** This factor has been defined as "the ability to enter the health care system independent of any changes in health status."1 Between thirty-four and forty million people in this country have little or no access to care when they need it because they lack health insurance or the ability to pay for themselves. In addition, people in some parts of the country, such as rural areas where there are few if any health care providers, have reduced or nonexistent access even when their financial resources are adequate. Some groups, including the poor, ethnic minorities, and pregnant women, face additional barriers to access. Whatever their cause, access problems delay care, even when it is finally obtained. This delay in turn results in higher costs and increased morbidity.2

**Quality of care.** This factor is typically described in terms of effective results from the delivery of appropriate care. Adequate quality has long been assumed to exist in our country, and the resolution of recognized problems has

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2. Often, those who lack access to routine care resort, by necessity, to emergency room services. A recent study confirmed that "patients with lower socioeconomic status are more likely than other patients to use the emergency department as their means of access to the hospital and that patients admitted via the emergency department use far more resources than patients in the same diagnosis related group admitted by other means." Robert S. Stern et al., *The Emergency Department as a Pathway to Admission for Poor and High-Cost Patients*, 266 JAMA 2238, 2238 (1991).
been left to the tort system, educational and institutional accrediting bodies, or licensure agencies. Recent studies analyzing infant mortality and general life expectancies indicate, however, that the quality of care in the United States is lower than that in many other industrialized countries. In addition, it is increasingly apparent that American consumers are burdened with a rather high incidence of inappropriate or unnecessary care, such as hospital admissions, caesarean section deliveries, cardiac pacemaker implantations and coronary bypass surgery. This trend is closely linked with another, the emphasis of medical services on curing objectively defined illnesses and injuries in a way that takes little account of the personal and psychological aspects of health and illness. One final, but crucial, measure of the quality of care is the prevention of illness in the first instance. On this score, our efforts have been woefully inadequate.

Cost of care. The proportion of the Gross National Product (GNP) devoted to health care has grown from 5.9% in 1965 to 12.5% in 1990, increasing in dollar amounts from $42 billion to approximately $647 billion. The rate of increase for health care spending has been almost twice that of the GNP. At the same time the predominant source of payment for these costs has shifted dramatically from the private sector, including patients and insurance companies, to the public sector. In addition to the fiscal problems caused by this proliferation of expenditures, there is mounting evidence that the “cost” factor is directly and negatively affecting not only the access to care, but also the quality of care.


5. Traditionally, private and governmental insurance programs have not “covered” or paid for preventive or wellness care. Coverage was and, to a large extent, still is dependent upon the actual or suspected existence of a disease or abnormality. This “illness” requirement derives both from cost considerations and from the traditional emphasis upon “medical” modalities which focus upon “curing” deviations from the physical or mental norm.


7. See, e.g., Paula A. Braverman et al., Differences in Hospital Resource Allocation Among Sick Newborns According to Insurance Coverage, 266 JAMA 3300 (1991) (“Sick newborns without insurance received fewer inpatient services than comparable privately insured newborns with either indemnity or prepaid coverage. . . . Length of stay, total charges, and charges per day were 16%, 28%, and 10% less, respectively, for the uninsured than for all privately insured newborns. . . . Both uninsured and Medicaid-covered newborns were found to have more severe medical problems than the privately insured.”)
These massive problems do not lack for proposed solutions. This is evident in the media and in the records of the state and federal legislatures. Proposals range from the tamely incremental to the radically innovative. None, however, is sufficiently expansive in its scope, including a thorough inquiry into the regulation of health care providers' licensing, accreditation, education, reimbursement and related activities.

Policymakers will need to undertake such an inquiry in order to envision and enact the integrated reforms that will ultimately be necessary. Meanwhile, however, one small step that could be taken immediately would directly improve access and quality at the same or lower cost, especially for poor and rural people. That step is simply to remove the unnecessary barriers to practice that certified nurse-midwives and nurse practitioners, two groups of advanced practice nurses now face. Unnecessary restrictions on their scope of practice, prescriptive authority, and eligibility for reimbursement actively impairs these providers' proven ability to safely meet the health care needs of many of our neediest citizens. Removing these barriers would be an important first step to restoring the focus on health, and on care, that our system so desperately needs.

In advancing this proposal, I will first briefly describe nurse practitioners (NPs) and certified nurse-midwives (CNMs), two types of advanced practice nurses (APNs) whose empowerment would have the greatest immediate impact on access while preserving quality and reducing costs. I will review these professionals' proven ability to provide cost-effective, quality primary care, and I will analyze the three most significant barriers to their effective practice. Restrictions on APNs' legally defined scope of practice should be removed to allow them to deliver the health services they are capable of providing. Prescriptive authority should be granted or broadened to encompass the pharmacological therapies necessary for care within their scope of practice capabilities. Reimbursement mechanisms should be provided for direct payment to APNs for services rendered within their scope of practice. Since these barriers are embodied in statutes and regulations, they are directly amenable to legislative reform.8

8. Two additional barriers—malpractice insurance and admitting privileges—are both significant and significantly interactive. That is, the high cost of malpractice insurance for NPs and CNMs (at least in relation to their incomes) often precludes their independent practice. Similarly, the lack of malpractice insurance, or the limitations in available policies on the total coverage amounts, often prevent these providers from obtaining hospital admitting privileges.


Furthermore, the problems caused by barriers such as a lack of institutional admitting privileges can effectively negate legislative efforts to expand APNs' practice authority. For example, legislatively granted prescriptive authority for psychiatric APNs is practically useless unless they also can obtain admitting...
Since these various barriers exist largely at the state level, state legislatures can address them directly. I will offer several proposals for how they might most effectively do so. The national government, however, can also play a significant role, and I will conclude by elaborating upon several options for federal action.

I. Nurse Practitioners and Certified Nurse-Midwives: Advanced Practice Nurses in Primary Care

A. Defining Primary Care

Since current health-care policy and political debate centers on the lack of access to affordable care, I have chosen to emphasize primary health care services. By primary health care, I mean "a basic level of health care, usually provided in an outpatient [or community] setting, that emphasizes a patient's general health needs." The most frequently emphasized aspects of primary health caregiving focus on "first contact care" which is accessible, comprehensive, coordinated, continuous, and accountable. The patient-oriented rather than disease-oriented focus of primary care emphasizes preventative measures, such as immunizations and health assessments, as well as the diagnosis and management of commonly occurring conditions such as acute and chronic illnesses.

By improving the quality of this initial contact with the health care system, we can expect to improve access to care, promote the enhancement of health and prevention of illness, and improve the efficiency and effectiveness of delivery of care. Another increasingly important aspect of primary care is the provision of continuous or chronic care: given the increase in the number of our elderly, impaired newborns, and HIV patients, there is a growing need for this kind of care.

privileges. A psychiatric APN must be able to admit patients on an emergency or sometimes non-emergency basis in order to manage the possible side effects of certain psychopharmacologic agents and/or to manage patients who are having difficulty complying with or adjusting to certain medication regimes. This is essential because of the dual problems of managing the psychiatric illness, which can lead to patient errors in judgement, as well as the medication effects themselves. Cf. Sondra Talley & Penny S. Brooke, Prescriptive Authority for Psychiatric Clinical Specialists: Framing the Issues, 6 ARCHIVES OF PSYCHIATRIC NURSING 71 (1991).

Although these issues are vitally important to APNs and their practice potentials, their market-based character counsels that they not be included in this analysis of regulatory barriers.


12. Id. at IV-D-7.
Since most Americans who need health care require primary care of one kind or another, the invisibility of non-physician providers is especially telling. The cultural weight and force—indeed, the pervasive dominance\(^\text{13}\)—of the medical model in our received tradition is perhaps best illustrated by the difficulty of naming and defining those health care providers who are not physicians. These professionals, variously, and rather awkwardly, referred to as “physician extenders”, “mid-level practitioners”,\(^\text{14}\) or “non-physician practitioners”,\(^\text{15}\) fall into several groups. Of these groups, NPs and CNMs are least like the medical model because of their nurse-based orientation and training, and their central role in providing primary care. For the same reasons, they offer a genuine potential for immediate improvement in the delivery of health care in this country. I have therefore structured this proposal to address the barriers to their successful integration.\(^\text{16}\)

B. Defining the Role of Nurse Practitioners

Although titles and precise definitions vary from state to state, NPs are generally understood to be, at a minimum, registered nurses\(^\text{17}\) whose formal

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13. There are many extensive analyses of the development of the cultural, economic, political, and social authority and dominance of the physician, and especially of organized medicine. See, e.g., ELIOT FREIDSON, PROFESSIONAL DOMINANCE: THE SOCIAL STRUCTURE OF MEDICAL CARE xi (1970) (“Health services are organized around professional authority, and their basic structure is constituted by the dominance of a single profession [medicine] over a variety of other, subordinate occupations. . . . [T]hat professional dominance is the analytical key to the present inadequacy of the health services.”); ELIOT FREIDSON, PROFESSION OF MEDICINE: A STUDY OF THE SOCIOLOGY OF APPLIED KNOWLEDGE 48 (1970) (“In a way unparalleled in any other industry, the physician controls and influences his field and all who venture near it. . . . [T]he division of labor surrounding the highly professionalized activity of healing is ordered by the politically supported dominant profession [medicine]. Formally, it is a hierarchy.”) (quoting Dale L. Hiestand, Research into Manpower for Health Services, XLIV MILBANK MEMORIAL FUND 148 (1966)); PAUL STARR, THE SOCIAL TRANSFORMATION OF AMERICAN MEDICINE 27 (1982) (“By the mid-twentieth century, the strategic position of the medical profession in relation to hospitals, health insurance, and the pharmaceutical industry became pivotal in sustaining the profession’s economic position, superseding the earlier role played by their monopolization of practice. . . . Throughout the medical system, the profession was able . . . to establish organizational structures that preserved a distinct sphere of professional dominance and autonomy.”).

14. RURAL HEALTH, supra note 9, at 249.


16. I have not included other non-physician practitioners, despite their demonstrated efficacy in their own settings, because they are not either nurse-trained or principally devoted to primary care. For example, physicians’ assistants are trained in the medical model and perform principally medical tasks. Clinical nurse specialists “have their origins in tertiary care settings” and practice mostly in those settings. Id. at 186 n.1.

Certified registered nurse anesthetists provide anesthesia services for dental, surgical, and obstetrical procedures and are not thought of as primary caregivers. While anesthesia services are not normally considered to be primary care, they often are required to facilitate the care of primary care providers in underserved and other areas in obstetrical deliveries, trauma, minor surgical procedures, and life-threatening emergencies. Indeed, certified registered nurse anesthetists are the sole anesthesia providers in approximately 30-35% of all hospitals, and of those hospitals, 85% were located in rural areas. RURAL HEALTH, supra note 9, at 257, 259.

17. Registered nurses must take the same licensure examination, although the pre-requisite educational preparation for licensure may vary. Nursing education programs include the 2-year associate degree, the
education and clinical training "extend[] beyond the basic requirements for licensure." The additional training, in the form of certificate or master's degree programs encompassing from nine to twenty-four months of study and supervised clinical training in direct patient care, prepares NPs to perform a wide range of professional nursing functions, as well as functions that traditionally have been performed only by physicians. These functions include assessing and diagnosing; conducting physical examinations; ordering laboratory and other diagnostic tests; developing and implementing treatment plans for some acute and chronic illnesses; prescribing some medications; monitoring patient status; educating and counseling patients; and consulting and collaborating with, and referring to, other providers. In short, NPs' training and competencies include the diagnosis and management of common acute illnesses, disease prevention, and management of stable, chronic illness.

Although formal education and training programs began only in the mid-1960s, a significant number of registered nurses have enrolled in formal NP programs. A 1988 sample survey indicated that approximately 63,000 registered nurses had received NP training through certification or masters programs, and that approximately 23,000 of those were in practice positions carrying the title of NP. The survey estimates also reflected the various practice settings in which NPs are employed, including among others, hospitals (inpatient and outpatient), health maintenance organizations, free-standing primary care clinics (community and public health centers), private practice offices, and extended care facilities.

3-year diploma, and the 4-year baccalaureate degree. See HHS 7TH REPORT, supra note 11, at VIII-3; RURAL HEALTH, supra note 9, at 259.

18. HARRY A. SULTZ ET AL., NURSE PRACTITIONERS: U.S.A. 3 (1979). See also RURAL HEALTH, supra note 9, at 250 ("registered nurses who have completed advanced training programs in primary health care delivery").

19. For summaries of the educational preparation and practice characteristics of NPs and other non-physician providers, see RURAL HEALTH, supra note 9, at 250; LUCIE YOUNG KELLY, DIMENSIONS OF PROFESSIONAL NURSING 333-37 (6th ed. 1991); PPRC 1991 REPORT, supra note 15, at 186.


21. HHS 7TH REPORT, supra note 11, at VIII-12, VIII-20. See also RURAL HEALTH, supra note 9, at 250.

The disparity in the numbers of RNs who have completed NP programs and the number of NPs actually practicing is difficult to explain with any specificity. Probable explanations include the difficulty of counting differently titled practitioners from state to state (see text accompanying note 116, infra, for the multi-titled nomenclature dictated by states' regulatory provisions), as well as the inclination of many NPs to discontinue their NP practice because of their frustration with the many regulatory barriers which are described in detail in the remainder of this article.

The most reasonable estimate of the number of NPs actually practicing is between 25,000-30,000. See THE NATIONAL HEALTH SERVICE CORPS WHITE PAPER, PROPOSED STRATEGIES FOR FULFILLING PRIMARY CARE PROFESSIONAL NEEDS: PART II: NURSE PRACTITIONERS, PHYSICIAN ASSISTANTS, AND CERTIFIED NURSE MIDWIVES (1991); Letter from Katie Lemley, Chair, The National Alliance of Nurse Practitioners, to the author (Feb. 20, 1992) (on file with author).
C. Defining the Role of Certified Nurse-Midwives

Like their NP counterparts, nurse-midwives\(^{22}\) are professional registered nurses who also have received advanced training, in this case in midwifery.\(^ {23}\) Nurse-midwifery practice has been defined by the American College of Nurse-Midwives (ACNM) as follows: "the independent management of care of essentially normal newborns and women, antepartally [before birth], intrapartally [during birth], postpartally [after birth] and/or gynecologically . . . within a health care system which provides for medical consultation, collaborative management, and referral."\(^ {24}\) In addition to delivering babies, in other words, nurse-midwives provide gynecological care, family planning services, and pre- and postnatal care for mothers and infants. They also co-manage with physicians those pregnancies deemed to be high-risk.\(^ {25}\)

The vast majority of these providers are that CNMs referred to earlier: registered nurses with advanced training in midwifery who have been certified through a national certification examination.\(^ {26}\) This proposal focuses specifically on them both because they are the most numerous non-physician providers of this type and because they are either the assumed or the stated norm for most regulatory and research activities concerning midwifery.\(^ {27}\)

In 1990, there were approximately 4200 CNMs educated in either certificate or master's degree programs and certified by the ACNM.\(^ {28}\) These professionals practice in hospitals, birthing clinics, health maintenance organizations, homes, school-based clinics, public and private clinics, and private practices. In 1988,
they delivered approximately 115,000 babies in hospitals, accounting for 3.4% of all births in the United States.29

II. The Effectiveness of Nurse Practitioners and Certified Nurse-Midwives

In assessing the effectiveness of any health care provider, one must, at a minimum, determine the provider's ability to deliver quality care at a reasonable cost to a significant portion of the general population or particular groups. Ironically, these criteria have only recently been applied in a systematic way to the care provided by physicians. General effectiveness studies of the quality, cost, and accessibility of physician-provided care were undertaken seriously only when the current health care crisis prompted policymakers and payers to ask about the cost-effectiveness and quality of the services actually rendered.30

NPs and CNMs, on the other hand, have been the specific focus of hundreds of effectiveness studies for more than twenty years. Although many of these studies have been methodologically biased against their subjects in that the comparative norm has been the care given by physicians within the medical model, the results have repeatedly demonstrated superior performance with respect to each criterion: quality, access, and cost.

The most comprehensive of these studies was a case study released in 1986 by the Office of Technology Assessment in response to a request from the Senate Committee on Appropriations. Entitled Nurse Practitioners, Physician Assistants, and Certified Nurse-Midwives: A Policy Analysis [OTA STUDY],31 the study assessed the contributions of NPs and CNMs, as well as physician assistants, in meeting the nation's health-care needs. It also evaluated how the then-current methods of payment for their services would alter their roles in the health-care system and affect overall costs. Given the OTA's extensive assessment32 of the effectiveness of NPs and CNMs, the

30. As recently and succinctly stated: "The problem is, for many medical treatments, we don't know what works and what doesn't, and for whom it works and for whom it doesn't." Louis W. Sullivan, From the Secretary of Health and Human Services, 266 JAMA 3264 (1991).
31. OTA STUDY, supra note 24.
32. The methods used by the OTA in completing its case study were described as follows: The study is based on an analysis of information obtained from an extensive review of the literature and from individuals and organizations with relevant experience. An advisory panel of
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study, supplemented by more recent study results, will form the principal basis for the following analysis of these providers' roles.

A. Quality of Care

In concluding that "within their areas of competence, NPs . . . and CNMs provide care whose quality is equivalent to that of care provided by physicians,"\textsuperscript{33} the OTA Study relied upon an analysis of the numerous studies\textsuperscript{34} that have assessed the quality of care (defined as encompassing both technical care and the art of care\textsuperscript{35}) by process and outcome measures,\textsuperscript{36} as well as by patient satisfaction and physician acceptance.\textsuperscript{37}

1. Nurse Practitioners

OTA summarized ten studies which concluded that the quality of care provided by NPs and physicians (MDs) was equivalent. These studies analyzed process measures, such as the adequacy of pediatric physical assessment, the adequacy of prescribing medication, and the degree of short and long-term patient compliance. They also analyzed outcome measures, such as the resolution of acute problems, improvement in the patient's physical, emotional, and

\begin{itemize}
    \item experts with backgrounds in health policy, medical economics, health insurance, medicine, nursing and consumer advocacy defined the goals for the study and suggested source material, subject areas, and perspectives to consider in presenting the material. The drafts of the report were revised to reflect the thoughtful comments of the panel.
    
    \textit{Id.} at 69. The list of references cited includes 268 sources, primarily the results of published studies.
    
    \textsuperscript{33} Id. at 5 (emphasis in original). The OTA included physician assistants [PAs] within its study scope, and the policy conclusions reached by the OTA generally are applicable to PAs as well as to NPs and CNMs. However, since PAs are not trained in nursing and, unlike NPs and CNMs, always work under physician supervision, they are not included in this Article's analysis.
    
    \textsuperscript{34} The OTA Study noted the methodological problems encountered in evaluating some studies of the quality of care provided by NPs and CNMs. These included small sample size, use of nonrandomized study populations, comparison with house staff physicians rather than experienced physicians, few studies with no physician involvement, evaluation of only one practice setting, and comparison of medical tasks performed by NPs and CNMs without accounting for the additional nursing tasks that these providers perform. However, the results of "well-conducted, randomized, controlled trials that are valid within their own design;" \textit{id.} at 18, combined with the results of other studies, allowed some generalized conclusions to be drawn.
    
    \textsuperscript{35} Id. at 17 (citing K.N. Lohr & R.H. Brooks, \textit{Quality Assurance in Medicine}, AM. BEHAV. SCIENTIST May/June 1984, at 583-607).
    
    \textsuperscript{36} "Process measures evaluate what a provider does to and for a patient. . . . Outcome measures evaluate the result of patient care, i.e., health status." OTA STUDY, supra note 24, at 17 n.1.
    
    \textsuperscript{37} While not directly related to quality of care, this last criterion is important because many physicians oppose expanded or advanced nursing practice by arguing that APNs' care is qualitatively inferior to that of physicians. Therefore, if it is demonstrated that APNs' care is equal to physicians, one would assume that physicians would withdraw these objections.
\end{itemize}
social functional status, and reduction in pain or discomfort among pediatric patients.  

Furthermore, OTA reviewed fourteen studies whose results demonstrated a difference in the quality of care provided by NPs and MDs. Of these, twelve showed that the relative quality of care given by NPs was better than that given by MDs. Again, these studies included process measures such as the number of diagnostic tests, the effectiveness of interpersonal management, and the thoroughness of diagnosis and treatment documentation, as well as outcome measures such as reduction in the number of patient symptoms, the level of blood pressure control in patients with hypertension, the degree of weight reduction in obese patients, pain or discomfort reduction in adult patients, and the level of activity limitation and anxiety in patients with chronic problems.  

The one study which concluded that the care given by MDs was better than that given by NPs included the process measure of management of problems requiring technical solutions, thus reflecting the not-surprising fact that MDs receive much more extensive technical training.

In further assessing NPs' quality of care as reflected in the secondary measures of patient satisfaction and physicians' acceptance of NPs, the OTA found consistent results for the former and sketchy results for the latter. The overwhelming number of studies reviewed by OTA indicated that patients are satisfied with the care that NPs provide. Indeed, several studies indicated that patients are more satisfied with NP than MD care in relation to the amount of information conveyed, the reduction of professional mystique, and the costs of care. A final measure of patient satisfaction, the incidence of malpractice claims, was briefly noted, with the conclusion that successful malpractice cases against NPs are extremely rare.

While acknowledging both that physician acceptance is of debatable relevance in assessing NPs' quality of care, and that such acceptance may be affected by non-quality factors such as fiscal interests and financial competition, the OTA Study does summarize some illuminating findings. In keeping

38. OTA STUDY, supra note 24, at 20, Table 2-1.—Equivalence in Quality of Care Provided by Nurse Practitioners (NPs) and Physicians (MDs) (citations omitted).
39. OTA STUDY, supra note 24, at 21, Table 2-2.—Difference in Quality of Care Provided by Nurse Practitioners (NPs) and Physicians (MDs) (citations omitted). Although Table 2-2., under relative quality of care (column 2), indicates there are two results where Nps are less than MDs, actually there is only one. The Levine, et al (1976) study is summarized in the text, at 21 as indicating just the opposite; in other words, the NP patients had less limitation of activity and anxiety than did the MD patients.
40. OTA STUDY, supra note 24, at 21.
41. OTA STUDY, supra note 24, at 21.
42. OTA STUDY, supra note 24, at 19.
43. OTA STUDY, supra note 24, at 20.
44. OTA STUDY, supra note 24, at 18.
with the intuition that bias or opposition is often grounded in ignorance, the
studies indicate that MDs who “work with NPs express more satisfaction with
NPs’ performance... than do physicians whose contact is indirect or nonexist-
ten.” It is also not surprising, given the traditional hierarchy within the
health care system, that the “level of physicians’ satisfaction increases with
the degree of their control over the activities of NPs.” The difficulty of
using physician acceptance to measure the quality of NP care is reflected in the
concluding comments of the OTA Study, which noted that “potentially height-
ened competition may decrease physicians’ acceptance of these health practitio-
ners,” and pointed out that in 1985, the American Medical Association adopted
a resolution opposing any new legislation which would extend medical practice
to non-physician providers. This opposition has been reconfirmed recently
by the AMA House of Delegates’ resolution to “oppose any attempt at empow-
ering nonphysicians to become unsupervised primary medical care providers
and be directly reimbursed for case management activities.”

2. Certified Nurse-Midwives

The OTA Study found equally positive results for the quality of care
provided by CNMs. After reviewing the literature and study results, it con-
cluded that in a wide array of settings “CNMs can manage normal pregnancies
safely and can manage them as well as, if not better than, physicians” and also

45. OTA STUDY, supra note 24, at 21.
46. See, e.g., FREIDSON, PROFESSIONAL DOMINANCE; FREIDSON, PROFESSION OF MEDICINE; STARR, supra note 13.
This direct correlation of increased control and increased acceptance is consistent with the analysis
articulated by medical sociologist Eliot Freidson. Freidson defined “functional autonomy” as “the degree
to which work can be carried on independently of organizational or medical supervision, and the degree
to which it can be sustained by attracting its own clientele independently of organizational referral or referral
by other occupations, including physicians.” He then observed that “on the whole, the more autonomous
the occupation and the greater the overlap of its work with that of physicians, the greater is the potential
for conflict, legal or otherwise.” FREIDSON, PROFESSION OF MEDICINE, supra note 13, at 53.
This phenomenon has been documented in a study which assessed state boards of nursing and medicine
members’ perceptions of NP practice. The study found that board of medicine members were least supportive
of NP roles that would support autonomy and NP functions that were viewed traditionally as medical tasks,
such as receiving direct reimbursement and prescribing drugs. JEANNETTE L. SASMOR, REPORT ON THE
NATIONAL SURVEY OF STATE BOARDS OF MEDICINE AND STATE BOARDS OF NURSING PERCEPTIONS OF
48. OTA STUDY, supra note 24, at 26.
Such opposition from organized medicine is not new. See for example, the 1981 resolutions adopted
by the AMA House of Delegates which called for the AMA to “work to eliminate federal funding for
training of further numbers of midlevel practitioners” (including NPs and CNMs), and which called for
the AMA to “recommend to all hospital staffs that admission history and physicals be performed only by
physicians.” AMA: Cut Federal Funds for Advanced Nurse Training, HEALTH PLANNING REP. 8-9 (June
17, 1981).
49. Board of Trustees, INDEPENDENT NURSING PRACTICE MODELS, AM. MED. ASS’N PROC. 192 (June 24-
that CNMs "recognize deviations from the norm and seek medical consultations promptly."50 When measured by fetal, perinatal, neonatal and maternal mortality rates, CNMs' and MDs' care was found to be comparable. Process and outcome measures indicated that low-risk pregnancies and deliveries managed by CNMs, compared to those managed by physicians and obstetricians, result in fewer low-birth-weight babies, shorter inpatient stays for labor and delivery, fewer forceps' deliveries, less medication, and less fetal monitoring.51 In addition, although the primary focus of CNMs is on the management of low-risk pregnancies, studies have shown their effectiveness in providing quality care to some high-risk patients in collaboration with physicians.52

As for patient satisfaction, the results for CNMs again parallel those for NPs. Although OTA recognized the "possible bias resulting from the non-random assignment" of patients to CNM or physician/obstetrician providers, it still concluded that "studies consistently find patient acceptance of CNMs and some studies find that patients express relatively greater satisfaction with CNMs' care than with obstetrician's care."53 These attitudes are based upon positive outcomes and upon patients' repeatedly expressed satisfaction with the quantity and quality of information provided by CNMs and with the shared control during delivery that they encourage.

Again paralleling the experience of NPs, physician acceptance of CNMs is a bit more tentative, despite the formal support of the American College of Obstetricians and Gynecologists.54 The sources reviewed by the OTA reflect-

50. OTA STUDY, supra note 24, at 23 (citing several studies).
51. OTA STUDY, supra note 24, at 23. Most of the studies cited by the OTA either explicitly measured comparable populations, eg., low-risk pregnancies, or corrected for these factors to obtain statistically reliable results.
52. Id. at 23-24. For the results of a study of CNMs' co-management with physicians of patients in an affluent, suburban HMO population, see Kenneth E. Bell & Jack I. Mills, Certified Nurse-Midwife Effectiveness in the Health Maintenance Organization Obstetric Team, 74 OBSTETRICS & GYNECOLOGY 112 (1989).
53. OTA STUDY, supra note 24, at 24 n.8. See also Bell & Mills, supra note 52, at 114, 116 ("The majority [of patients] preferred to be delivered by a certified nurse-midwife or had no preference between an obstetrician or a certified nurse-midwife. . . . [Study participants'] comments portrayed physicians as being concerned chiefly with the technical aspects of patient care, such as treating complications of pregnancy. On the other hand, study participants viewed certified nurse-midwives as being concerned with teaching, answering questions, and giving social support to patients in addition to treating the medical aspects of pregnancy").
ed resistance by general and family practitioners, opposition resulting from the “tightening market conditions facing obstetricians and gynecologists in urban areas,” and a perception that competition from CNMs is “threatening to physicians’ position as the sole providers of a special type of medical care.”55 Finally, echoing the situation of NPs, physicians’ acceptance of CNMs diminishes as the latter practice more independently.

B. Access Implications

The quality of care provided by NPs and CNMs is crucially important for two reasons. First, their effective deployment depends upon their ability to render care that is safe and effective; only when that issue is settled do questions of relative cost and access become relevant. Second, the most often articulated basis for physicians’ opposition to these and other non-physician providers has been concern about their ability to provide such care. As the preceding section makes clear, however, virtually all of the studies to date have demonstrated that the quality of care rendered by NPs and CNMs is at least equivalent to that provided by physicians for comparable services.

Once this baseline of equivalent quality is established, an evaluation of the additional factors of access and cost demonstrates how NPs and CNMs can uniquely contribute to an improved health care system. Although there are some minor distinctions, the compelling similarities of NPs and CNMs in their relative impact on access and cost, as revealed in many studies, allow them to be combined in the analysis that follows.

In significant part, both NP and CNM roles evolved in response to the lack of basic health services in certain parts of the country, particularly in rural and inner-city areas. From the establishment of the Frontier Nursing Service in eastern Kentucky in 192556 to the creation of the first nurse practitioner program in Colorado in 1965,57 CNMs and NPs have offered services to populations and in areas that physicians have chosen not to serve. Especially as physicians have pursued specialties and sub-specialties, access to primary care has remained unavailable to many. Even though the promotion of NP and CNM programs has been spurred in part by the perceived undersupply of physicians, an increase in the physician supply would not guarantee an adequate geographic

55. OTA STUDY, supra note 24, at 25.
57. See Loretta C. Ford & Henry K. Silver, The Expanded Role of the Nurse in Child Care, 15 NURSING OUTLOOK 43 (1967).
and population distribution. Nor, of course, would it guarantee the type of care that is most needed—primary health care, not specialty medical care.58

NPs and CNMs have increased people's access to basic health services in a wide variety of geographic and practice settings.59 In many rural and inner-city areas, they are the only providers available. In addition, they have demonstrated their ability to enhance the delivery of care in school-based clinics,60 long-term care facilities and nursing homes, correctional institutions, industrial health clinics, community health clinics, and community birthing centers,61 as well as in the more traditional settings of hospital ambulatory and inpatient departments and private practice offices. The demonstrated improvement in the continuity of care provided by NPs and CNMs has especially positive implications for significant population groups, such as the chronically ill, the elderly,62 the poor, and adolescent mothers and their newborns.63 For example, a 1985 Institute of Medicine report noted by the OTA recommended that "more reliance be placed on nurse-midwives . . . to increase access to prenatal care for hard-to-reach, often high-risk groups" because CNMs "have been shown to be particularly effective in managing the care of pregnant women who are at high risk of low birthweight because of social and economic factors."64

58. Although the total number of active MDs increased 68% from 1970 to 1988, the number of general/family practice MDs increased only 20%. This trend is projected to continue for the next 30 years. RURAL HEALTH supra note 9, at 225. See also AMA CENTER FOR HEALTH POLICY RESEARCH, PHYSICIAN SUPPLY AND UTILIZATION BY SPECIALTY: TRENDS AND PROJECTIONS (1988). This pattern of rapid and sustained medical specialization in the United States stands in marked contrast to the experience in Canada—the percentage of practicing physicians in primary care (general or family practice) in Canada is 50% and in the United States is 13%. RURAL HEALTH, supra note 9, at 229.

59. OTA STUDY, supra note 24, at 29-35; see also RURAL HEALTH, supra note 9, at 249-259; PPRC 1991 REPORT, supra note 15, at 102-104.

60. See ROBERT WOOD JOHNSON FOUNDATION, UPDATED REPORT ON ACCESS TO HEALTH CARE FOR THE AMERICAN PEOPLE: SPECIAL REPORT (1983); Marsha F. Goldsmith, School-Based Health Clinics Provide Essential Care, 265 JAMA 2458 (1991); Susan Moses, School-Based Clinics Help Teens Be Healthy, 21 AM. PSYCHOL. ASS'N MONITOR 38 (1990).


62. For an analysis of the positive access and quality effects on care provided by geriatric APNs in three nursing home demonstration projects, see Mathy Mezey, Nursing Homes: Residents' Needs; Nursing's Response, in CHARTING NURSING'S FUTURE, supra note 24, at 198, 206-210 ("Results from the evaluation studies of the three projects show that geriatric nurse specialists (1) decreased hospital admissions; (2) improved quality of care in the nursing home; (3) stabilized staff and decreased turnover; and (4) improved resident and family satisfaction.")

63. See OTA STUDY, supra note 24, at 30-32, 33-34.

The results of a study reported over twenty years ago signaled the significant improvements in access and quality of care which can be derived from the introduction of CNMs into the health care system. See Barry S. Levy et al., Reducing Neonatal Mortality Rate with Nurse-Midwives, 109 AM. J. OF OBSTETRICS AND GYNECOLOGY 51 (1971). The California legislature enacted special legislation which authorized the practice of nurse-midwifery in a demonstration project in one county. During the three-year life of the project, both the prematurity rate and the neonatal mortality rate declined 50% in the county. Opposition by the California Medical Association to a permanent legalization of nurse-midwifery practice resulted in the legislature's termination of the pilot program's authority. Following the termination, the county's prematurity rate increased 50% to pre-project levels, and the neonatal mortality rate almost tripled.

64. INSTITUTE OF MEDICINE, PREVENTING LOW BIRTHWEIGHT 160-161 (1985).
In a more recent report issued in 1988, the Institute of Medicine concluded that the “use of nurse-practitioners, certified nurse-midwives, and other midlevel practitioners is often central” to programs designed to increase the capacity and utilization of prenatal care systems relied on by low-income women.65 Furthermore, the Institute report noted that special access barriers which arise from cultural preferences of some patient populations may be more readily overcome by NPs and CNMs than by physicians.66

What is most remarkable about these study results is not that they repeatedly confirm that NPs and CNMs can substantially increase access to basic health care. That contribution is indeed noteworthy, given the relatively recent evolution and deployment of these providers. What is remarkable, however, is that they have been able to do this, as the OTA67 and many other governmental68 and other organizations69 reports acknowledge, despite the multiple legal and professional restrictions70 on their practices. Although these restrictions will be detailed later, it is worth noting here that many states’ statutory and regulatory provisions require physicians to be present when NPs and CNMs deliver care; that many physicians refuse to collaborate with or accept referrals from them; that a multitude of restrictive reimbursement schemes either refuse to pay them for their services or funnel their payment through physicians or hospitals and other institutions; and that those same reimbursement schemes, when they provide for payment at all, most often allow for only a portion of the fee that would be paid to a physician who provided exactly the same service with exactly the same quality outcome.

66. Id. at 76. “Among some Hispanic and Asian populations, for example, it is unacceptable to have a pelvic examination done by a man. Yet not all clinics are able to accommodate such preferences, because most physicians are men and not all settings can or will rely on certified nurse-midwives or nurse-practitioners.”
67. See OTA STUDY, supra note 24, at 29.
68. See, e.g., RURAL HEALTH, supra note 9, at 251, 331, 367, 375, 395.
69. See, e.g., INSTITUTE OF MEDICINE, PRENATAL CARE, supra note 65.

Despite the evidence that such personnel [NPs and CNMs] are particularly effective in managing the care of pregnant women who are at high risk because of social and economic factors . . . legal restrictions and obstetrical customs limit their numbers and scope of practice. . . .

INSTITUTE OF MEDICINE, PRENATAL CARE, supra note 65, at 68.

We recommend . . . increased use of certified nurse-midwives and obstetrical nurse practitioners; state laws and physicians themselves should support hospital privileges for CNMs and collaboration between physicians and nurse-midwives or nurse-practitioners; eventually, large interstate variations in the laws governing the use of such midlevel practitioners should be eliminated. . .

INSTITUTE OF MEDICINE, PRENATAL CARE, supra note 65, at 144.

Even when faced with such significant obstacles to their practice, NPs and CNMs have extended high-quality health services, in a wide variety of settings, to substantial segments of our population that have otherwise been significantly underserved.

C. Cost-Effectiveness Implications

The remaining question in any assessment of NPs’ and CNMs’ current and potential contributions to alleviating pressing health problems, of course, is cost-effectiveness. Since health care economic paradigms are rapidly created and altered in today’s public policy arena, analysis must of necessity be historically based and largely extrapolative. The evidence to date, however, confirms the cost-effectiveness of these providers, given the diversity of the populations they serve, often as substitutes for physicians; the fact that their care results in at least equivalent and sometimes better outcomes, perhaps more quickly, given their patients’ enhanced adherence to care regimes; the substantially lower cost of their training; and the collateral benefits of increased consumer choice and satisfaction.

Efforts to assess the costs of NP and CNM deployment have been numerous and complicated. They have been numerous because heightened awareness of these providers’ demonstrated ability to deliver quality care to many people prompted inquiries into the potential for their increased utilization. They have been complicated for several reasons. First and most strikingly, there is insufficient data, for comparative purposes, on the costs and efficacy of physicians’ services. Second, the legal and professional constraints on NPs and CNMs vary widely by state and by practice setting. Third, it is methodologically difficult, and sometimes impossible, to define discrete tasks as among medicine, nursing, and midwifery for comparative purposes. Finally, it is difficult to determine the content and process of MD- and NP/CNM-provided care for the same health episode, and to factor in the improved care resulting from the latter’s blend of nursing and medical skills. Although one must be mindful of these constraints, it is possible to evaluate the cost-effectiveness of NPs and CNMs in terms of productivity measures, as well as training and employment costs.

1. Nurse Practitioners

In measuring productivity, one must determine how much output is obtained for each unit of input, assuming that the inputs are fully equivalent, and can

71. For a summary of several studies assessing the cost implications of nursing care, see Claire M. Fagin, Cost-Effectiveness of Nursing Care Revisited: 1981-1990, in CHARTING NURSING’S FUTURE, supra note 24, at 13-28.
be substituted for one another without altering the quality of the resulting output. When evaluated by the number of patient visits per unit of time or by the average time per visit—the most commonly used measures of output in health research—NPs are generally agreed to spend more time per patient visit, and see fewer patients during a day or a week, than do physicians. The most consistently offered explanation for this disparity, in the words of the OTA Study, is that NPs “provide both services usually provided by physicians as well as services generally provided by nurses,” including preventative counseling and increased information about compliance with the prescribed course of treatment.

The OTA Study noted three problems with using patient visits per unit of time as a measure of productivity, two of which are especially relevant to NPs. First, the patient/time measure overvalues the provision of individual services for its own sake, and undervalues the treatment and prevention of health problems that are the ultimate goals of care. To overcome the quality- and outcome-insensitivity of this productivity measure, one study of NPs and MDs substituted episodes of care, noting that the episode is a “more appropriate unit for measuring differences in effectiveness of care, since the outcome of the care process may be causally related not only to a service received at a single visit, but to any services received over the course of the episode.” Measured in this way, costs-per-episode were found to be at least 20% less when NPs provided the initial care than when physicians did.

The second problem in using standard productivity measures is that they are based upon studies that reflect current substitution practices, and it is precisely the point that these practices do not use NPs to their best advantage in cost-effective ways consistent with the full scope of their abilities. Even though NPs are capable of independently providing a wide range of medical services safely and effectively, they are constrained, in actual practice, by...
restrictive legal requirements. They are also constrained by physicians' actual willingness to delegate tasks to them. Willingness to delegate can depend upon, among other factors, knowledge of NPs' training and expertise, acceptance of the roles of non-physician providers generally, assumed preferences of patients, desire to retain a mix of routine and complex cases, and competitive caution.

Regardless of the reasons, physicians themselves have indicated that they could safely delegate more medical care to NPs than they actually do. This necessarily results in an underestimation of the potential productivity of these and other non-physician practitioners. Despite these methodological problems, studies to date have consistently concluded that NPs' practices increase actual productivity, and that their potential for contributing to even greater productivity is substantial if unnecessary legal and professional restrictions are removed.

2. Certified Nurse-Midwives

Appropriate productivity measures of CNMs' practices are difficult to determine for at least two reasons. First, like NPs, CNMs provide both nursing other services (in this case, midwifery services), and their "input" therefore cannot be easily equated with that of physicians. Second, most studies of nurse-midwifery practices have concentrated on outcomes rather than processes, and it is therefore difficult to measure their inputs. One study found that CNMs were 98% as productive as obstetricians when outputs were measured by volume of patient visits, but only 23% as productive when the measure was number of deliveries. The disparity is readily explained by the fact that variations in practice settings, personnel and policies can result in the "loss" of deliveries to physicians for reasons unrelated to CNMs' abilities or patients' needs. Given the demonstrated capacity of CNMs to provide safe and effective care for essentially normal pregnancies, it is fair to conclude that their productivity within their scope of practice is very high, at least when productivity is defined as ability to substitute for physicians.

79. See OTA STUDY, supra note 24, at 43.
80. See OTA STUDY, supra note 24, at 49.
81. See Donna Diers, Future of Nurse-Midwives in American Health Care, in Nursing in the 1980s, supra note 72, at 267, 275.
82. Id. at 274; OTA STUDY, supra note 24, at 43-44.
84. Diers, supra note 81, at 274. The "loss" of normal deliveries by CNMs to physicians can occur because of the need for medical students and interns to gain "practice" in deliveries, and for other reasons related to reimbursement issues.
3. Training and Employment Cost Comparison

Although the productivity measures for NPs and CNMs are promising, other considerations such as training and employment costs must be factored into any final cost-benefit analysis of their potential cost-effectiveness. These will be analyzed separately.

a. Training Costs

Studies have shown that the direct costs of education for NPs are approximately one-fifth of those for physicians. Per-student total costs in 1979 were $60,700 for physician basic medical training, and $10,300 for NPs.\textsuperscript{85} The OTA projected that 1985 costs would be $86,100 for physicians, $14,600 for NPs, and $16,800 for CNMs.\textsuperscript{86} These costs are defrayed primarily by the government in the form of subsidized tuition, grants and loans to students and grants to educational institutions for clinical training and research.

Efforts to ascertain the indirect costs of health care training, measured as opportunity costs or foregone earnings, have yielded rather imprecise results. One study, again based upon 1975 figures, estimated the opportunity costs for physician training to be $84,000.\textsuperscript{87} No doubt this figure would be substantially higher today, and would be significantly greater than the opportunity costs of NP and CNM education given the protracted training of physicians. Whatever the true current figures, it is clear that total physician training costs, both direct and indirect, are at least four to five times greater than those for NPs and CNMs. It therefore follows, as noted by the OTA, that "several NPs could be trained for the cost of educating one physician."\textsuperscript{88}

b. Employment Costs

Measuring the employment costs of NPs and CNMs, as against the employment costs of physicians, is simultaneously simple and complicated. Some factors—such as salaries or compensation, office and equipment needs, and support staff requirements—are relatively easily determined. On the other hand, NPs/CNMs and physicians differ to some degree in the process and content of the care they provide. For example, NPs and CNMs use high-technology diagnostic and therapeutic measures less frequently, and this could have an

\textsuperscript{85} OTA STUDY, supra note 24, at 45 (citing CONGRESSIONAL BUDGET OFFICE, PHYSICIAN EXTENDERS: THEIR CURRENT AND FUTURE ROLE IN MEDICAL CARE DELIVERY 27-28 (April, 1979)) (These costs figures did not include the costs of medical training beyond medical school, such as internships and residencies, nor did they include the costs incurred for initial nursing education).
\textsuperscript{86} OTA STUDY, supra note 24, at 45.
\textsuperscript{87} Record et al., supra note 72, at 490-493.
\textsuperscript{88} OTA STUDY, supra note 24, at 45.
effect on total practice revenue or at least on the per-procedure use (hence, marginal costs) of such technology. Similarly, it is difficult to measure the effects upon practice revenues of the wellness and preventive emphasis of these providers. While society would clearly benefit from the reduction of illness and the costs of illness-related care, the effects of such success upon hospital or private practice revenues may not be viewed as a benefit by their owners. In addition, it is easier to identify than to quantify the economic efficiency that could result if highly trained physicians were freed up to concentrate their skills on more technically demanding tasks. These and other problems confound any simple effort to assess the cost-effectiveness of NPs and CNMs in terms of employment costs. Nevertheless, these providers have proven to be economically efficient replacements for physicians.

Indirect employment costs, such as office space and the like, are generally assumed to be equivalent for the addition of one physician or NP/CNM. The direct costs of provider compensation, however, differ substantially. Primary care physicians earn approximately four times as much as NPs and CNMs, on average. Much of this disparity can be attributed to the overvaluation of physicians’ services, which has resulted from both their state-sanctioned practice monopoly and from the historically unregulated fee-for-service basis of their compensation, and to the undervaluation of NPs’ and CNMs’ services, which has resulted, in part, from the “derived demand” nature of their practices, as well as from the legal and professional restrictions they encounter. Regardless of the cause, the salary differential has been and remains significant. This, combined with the increase in patient volume that has been shown to result from the addition of an NP or a CNM, can result in significant benefits for a practice that hires an NP or a CNM rather than an additional physician. Although there is some evidence that the savings thus derived are retained by physicians and not passed along to patients in the form of lower fees, it is

89. Record et al., supra note 72, at 488.
90. OTA STUDY, supra note 24, at 46. In a paper commissioned by the Institute of Medicine, the comparison between CNMs’ and obstetricians’ incomes revealed even more striking differentials. Based on 1988 data, the average gross income of CNMs was $30,000, and the average gross income of obstetricians was $296,000. See Cohn, supra note 8, at 110-111.
91. Sylvester E. Berki, The Economics of New Types of Health Personnel, in INTERMEDIATE-LEVEL HEALTH PRACTITIONERS 104, 125 (V. Leppard et al. eds., 1973). That is, before patients are likely to know of and value the services of NPs and CNMs, these providers must first be introduced by or be legitimated by physicians.
92. LeRoy, Cost Effectiveness, supra note 72, at 305-307. Physicians may fail not only to pass along practice savings to patients, but also to pass along increased practice revenues to NPs in the form of compensation. In its report to Congress on the newly implemented Medicare physician fee schedule (see infra Part III), the Physician Payment Review Commission cautioned that NPs may not realize any monetary benefit from the fee schedule’s increased valuation of evaluation and management services (EM services). While acknowledging that “payments for EM services will increase by about 30 percent," and “these services comprise the bulk of their [NPs’] caregiving,” the PPRC noted:

Whether these expected increases are passed on to NPs in the form of increased salaries will depend upon their employment arrangements. Nurse practitioners who are employed by physicians
clear that the potential employment cost savings are substantial, both in private practice settings and in the increasingly prevalent HMOs or prepaid organized systems, even if the compensation of these providers were increased to more accurately reflect their true value. Repeatedly, in studies reviewed by the OTA and others, both NPs and CNMs have been shown to be cost-effective providers of quality health care.

4. Satisfaction of Patients

One final aspect of cost-effectiveness that should be noted is the increased satisfaction of health care consumers who are given a choice among equally competent providers. At the moment, patients' choices are dramatically constrained by the legal and market domination of physicians. While the economic value of such satisfaction would be difficult to measure, it is not insignificant in light of the close connections between health and mental well-being, and between health outcomes and patients' satisfaction and informed trust in their providers.


93. In one HMO program, NPs "conducted a Health Evaluation Service (HES) consisting of automated multiphasic health testing followed by a physical examination and health appraisal. Of the patients who entered the [HMO] system through HES, 74% were managed without physician referral. . . . [E]ntry costs (health appraisal, follow up, and referral) for the HES group were $43.09 as compared to $61.41 for patients using physicians as the point of entry. Costs of overall medical resources used over 12 months by cohorts of patients with comparable health status were $98.63 for the HES group and $131.18 for the physician group." Leroy, Cost Effectiveness, supra note 72, at 300, 303 (citing R. Feldman et al., Nurse Practitioner Multiphasic Health Checkups, 6 PREVENTIVE MEDICINE 301-304 (1977)).

Similarly, in a demonstration project in rural Georgia, the quality and cost of CNM-provided care in four counties was compared to that of physician-provided care in seven surrounding counties. The multi-year results reflected a 42% lower infant mortality rate for the CNM-counties, as well as an estimated $1.1 million savings in prenatal care expenditures for those four counties. See Michael L. Reid & Jeffery B. Morris, Prenatal Care and Cost Effectiveness: Changes in Health Expenditures and Birth Outcomes Following the Establishment of a Nurse-Midwife Program, 17 MED. CARE, 491-500 (1979).

94. See OTA STUDY, supra note 24, at 46-49 (noting one study which concluded that utilization of NPs as substitutes for physicians for all care "for which such substitution has been demonstrated to be safe and feasible" could result in 10-15% savings for all medical costs, or between 16-24% of the total costs for ambulatory care); Frank T. Denton et al., Potential Savings From the Adoption of Nurse Practitioner Technology in the Canadian Health Care System, 17 SOCIO-ECON. PLAN. SCI. 199 (1983).

95. For a review of several recent studies of the cost-effectiveness of APNs, see Claire M. Fagin, Cost-Effectiveness of Nursing Care Revisited: 1981-90, in CHARTING NURSING'S FUTURE: AGENDA FOR THE 1990s 13 (Linda Aiken et al., eds. 1992). Especially noteworthy is a summary of a 1989 national survey of maternity care costs which found that "the average cost of a nurse-midwife's services is $994 compared with physicians' fees for a normal pregnancy and delivery of $1492." Id. at 18 (citing A. F. Minor, The Cost of Maternity Care and Childbirth in the United States, 1989, in HEALTH INSURANCE ADMINISTRATION OF AMERICA (1989)).
5. Conclusion

Since the productivity of NPs and CNMs has been demonstrated by the fact that they can provide equal care for a full range of health services traditionally provided by physicians, and since their training costs and employment costs are substantially less than those of physicians, it appears indisputable that they are truly cost-effective health care providers. This cost-effectiveness, combined with their proven ability to provide quality care to a large number of people, suggests that they should play a central role in the solutions currently being developed for our health care crisis. Despite their proven and potential contributions, however, several unnecessary barriers stand in the way of their full utilization.

III. Barriers to the Effective Utilization of Nurse Practitioners and Certified Nurse-Midwives

Although our ailing health care system presents an endless array of symptoms, the diagnosis is relatively straightforward: too few people can get good care when they need it and at a price they can afford. Any proposed cure should therefore include, at a minimum, steps to eliminate disorders and disabilities, those things that impede the efficient and effective provision of health care. As currently configured, our nationwide health care system imposes numerous disabilities on patients or would-be-patients seeking care, and on many of those who would care for them. Chief among these are conflicting and restrictive state provisions governing the scope of practice and prescriptive authority of NPs and CNMs, as well as the fragmented and parsimonious state and federal standards for their reimbursement. As a result of these provisions, NPs and CNMs are severely hampered—or disabled altogether—in their efforts to fulfill their fully proven potential to enhance our nation's health.

A. Scope of Practice

Providing health care includes one or more of the following functions: promoting healthy lifestyles, assessing health status, identifying or diagnosing normal and abnormal conditions and determining the causes of the latter, selecting appropriate therapeutic measures, implementing treatment, and supervising or monitoring the patient on an ongoing basis. In common parlance, these tasks are referred to as prevention, diagnosis, prescription and treatment. That is, having identified a health problem by diagnosis, a provider then chooses among available therapeutic options and prescribes and implements a course of treatment.
In carrying out their police power to protect the public with respect to health care, every state has enacted licensing laws for nurses, physicians, and many other health care providers. In so doing they have acted upon the premise that not all health care consumers have adequate information to make safe and considered judgments about the qualifications and abilities of potential providers. The state therefore provides a proxy for this information-gathering function by restricting health care practice to those who have satisfied its licensure requirements. Many commentators have noted that licensure is the "most restrictive type of regulation" possible, and that its "effectiveness in protecting the public has not been conclusively demonstrated." Whatever the merits of recurring de-licensure proposals, it seems clear that licensure is an established mechanism in each state and territory, and that its continued existence must be assumed in any proposal to improve the current health care system.

Physicians were the first health care practitioners to gain legislative recognition of their practice. The statutory definitions of their scope of practice were, and are, extremely broad. For example, one state's definition of the practice of medicine or surgery is as follows: "Any person . . . who shall diagnose or attempt to diagnose, treat or attempt to treat, operate or attempt to operate on, or prescribe for or administer to, or profess to treat any human ailment, physical or mental, or any physical injury to or deformity of another person. . . ." The typical breadth of this definition, combined with the usual provision making it illegal for anyone not licensed as a physician to carry out any acts included in the definition, resulted in a preemptive strike by the medical profession to totally occupy the health care field, at least for any activity that could be deemed diagnosing, treating, prescribing, or curing. All other health care providers, including nurses, would have to "carve out" tasks or functions from this all-encompassing medical scope of practice in seeking legislative recognition of their own professional roles, no matter how traditional or longstanding their activities.

The history of nursing regulation is characterized by the efforts of nurses to gain recognition for their practice. Some commentators have suggested a substitution of "task" licensure for the broad, all-inclusive licensure which characterizes the regulation of physicians. See, e.g., Elizabeth Harrison Hadley, Nurses and Prescriptive Authority: A Legal and Economic Analysis, 15 AM. J.L. & MED. 245, 284-299 (1989). For a description of the evolution of medical licensing efforts, see STARR, supra, note 13, at 102-112.

N.C. GEN. STAT. §90-18 (1983). Fourteen specific exceptions are listed following the basic definition. Ironically, definitions such as this are actually rather limited in their scope, in that they restrict medical practice to illnesses and deformities, etc. Thus, one could argue that any wellness care or preventive care is not medicine, but rather something else, such as nursing.

As Eliot Freidson has noted, in the mid-to late 1800s, physicians rose from the ranks of previously undifferentiated occupations devoted to healing, and claimed preeminence through their highly organized practices.
terized by often-tortured efforts to accommodate this medical preemption, and the current practices of NPs, CNMs and other non-physician providers continue to be distorted by what is in fact a historical, but not inevitable, phenomenon.

1. Early Nursing Acts

When the first state nursing laws were enacted in the early 1900s, they did not directly conflict with medical practice acts because they were merely registration or certification acts. That is, they allowed anyone to practice nursing, but restricted the use of the title “Registered Nurse” to people who demonstrated adequate preparation and voluntarily registered with the state. The potential for interprofessional conflict arose when mandatory, rather than voluntary, licensure began in the late 1930s. Paralleling their medical counterparts, nurse practice acts defined the practice of nursing, specified the educational and/or training qualifications necessary for licensure, and prohibited the practice of nursing without a license. Actual conflict was avoided, however, because nursing was defined rather narrowly to include as independent functions only such activities as the “supervision of a patient[,] . . . observation of symptoms and reactions[,] and the accurate recording of the facts, . . .” The remainder of nurses’ scope of practice was dependent; they were limited to “carrying out treatments and medications . . . and medical orders as prescribed by a licensed physician.” This dependent or complementary role continued to be the model as more states moved to mandatory licen-

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102. 1938 N.Y. Laws, ch. 472, §1374.2

103. 1938 N.Y. Laws, ch. 472, §1374.2 (emphasis added). New York was the first state to enact mandatory nursing licensure, and several states subsequently enacted legislation modeled upon New York’s.

104. For an economic analysis of the relationship between nursing and medicine, see Elizabeth Harrison Hadley, supra note 97, at 250-251.

In economic terms, the initial regulatory scheme required nurses’ services to be complementary to physicians’ services. Complements are products used jointly in a production process or consumed with another good or service. . . . Substitutes, in contrast, are products that perform similar functions and fulfill similar needs. In the consumption process, the consumer chooses which of two perfect substitutes to buy but does not purchase both. Similarly, in the production process, if products are substitutes, one but not both will be chosen as an input.

In the production of medical services, nurses can function both as complements to physicians and as substitutes. In surgery, for example, nurses are inherently complementary. But in other settings, particularly in the provision of primary care and in outpatient settings, nurses can function as substitutes for physicians.
sure. The division between nursing acts and medical acts was drawn even more sharply in the model definition of nursing prepared in 1955 by the American Nurses' Association [ANA], and adopted by many states:

The practice of professional nursing means the performance for compensation of any act in the observation, care, and counsel of the ill . . . or in the maintenance of health or prevention of illness . . . or the administration of medications and treatments as prescribed by a licensed physician. . . . The foregoing shall not be deemed to include acts of diagnosis or prescription of therapeutic or corrective measures.°

Read in its broadest sense, this definition does not require physician supervision of all nursing functions. It does, however, prohibit nurses from diagnosing and prescribing therapeutic actions, and it limits the implementation of treatments and administration of medications to those specifically prescribed by a physician.

Even at the time the ANA's model definition was issued, and surely at the time many states subsequently included it in their mandatory licensure laws during the next decade or so, it was already unduly restrictive when measured by then-current nursing practice. Nurses had assessed their patients and implemented treatments, based on their own nursing skills and abilities, and they continued to do so during this period.° Faced with these legal restrictions, and mindful of nurses' increased ability and the growing need for them to undertake more independent tasks than simply "observing and recording accurately," hospitals and medical and nursing associations issued joint practice statements declaring that nurses could start intravenous fluids, draw blood samples, use defibrillators in coronary care units, and perform cardiopulmonary resuscitation—all tasks that would, at least implicitly, constitute the practice of medicine in the ANA's vision of nursing. Although these joint statements did not constitute law, they did reflect a professional consensus that nurses were capable of carrying out many traditional medical tasks on their own initiative and without direct physician supervision. By accommodating the expanding professional knowledge base of nurses, and by at least implicitly acknowledging that the boundary between medicine and nursing was not immutable, these

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105. A.N.A. Board Approves a Definition of Nursing Practice, 55 AM. J. OF NURSING 1474 (1955).
107. Id. at 375.
108. An AMA Report issued in 1970 explicitly acknowledged the "overlapping" functions of nursing and medicine, but simultaneously attempted to perpetuate boundaries by noting that when the same function was performed by a nurse it was nursing but when performed by a physician it was medicine. AMA Committee on Nursing, Medicine and Nursing in the 1970's, 213 JAMA 1882 (1970).
practice agreements positioned nurses, and especially advanced practice nurses, to gain legislative recognition of their expanded roles.

2. The 1960s: Expansion of the Role

Several events in the mid-1960s set the stage for an expansion of nursing generally, and advanced practice nursing in particular. The birth of Medicaid and Medicare increased the number of people legally entitled to government-subsidized health care. The federal government forecast a shortage of physicians, especially primary care physicians. The first formal nurse practitioner training programs were established. Specialized care units, such as intensive care and coronary care, were created in hospitals. The emerging women's movement emphasized autonomy for women in both work and personal lives, resulting in a greater demand for gynecological and obstetrical services of nurse-midwives and midwives, on the part of women who perceived traditional medical services to be male-dominated and hierarchical. Finally, newly created physician assistants' programs utilized as adjuncts to physicians many medical corpsmen returning from Vietnam, thus helping to demonstrate that many medical tasks could be performed effectively by non-physicians. 109

At the same time, the need for expanded nursing roles and the recognition that many nurses were capable of assuming these new roles were contradicted by the then-prevailing, restrictive scope-of-practice definitions included in most state nursing laws. This legal tension was reflected in a 1971 federal report:

We believe that the future of nursing must encompass a substantially larger place within the community of the health professions. Moreover, we believe that extending the scope of nursing practice is essential if this nation is to achieve the goal of equal access to health services for all its citizens. . . . There is an ever-widening area of independent nursing practice entailing nursing judgment, procedures, and techniques. . . . Concomitant with increasingly complex nursing practice is the continual realignment of the functions of the professional nurse and physician. The boundaries of responsibility for nurses are not shifting more rapidly simply because of increased demands for health services. The functions of nurses are changing primarily because nurses have demonstrated their competence to perform a greater variety of functions. . . . 110

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In the same year, Idaho became the first state to recognize statutorily diagnosis and treatment as part of the scope of practice of advanced practice or specialty nurses. As pathbreaking as the statute was, however, it was still rather restrictive in that any acts of diagnosis and treatment had to be "authorized by rules and regulations jointly promulgated by the Idaho State Board of Medicine and the Idaho State Board of Nursing. . ." That is, the statute required that each permissible act of diagnosis and treatment be specifically enumerated and jointly agreed upon by two separate state administrative agencies. The implementing rules directed every institution that employed NPs to develop guidelines and policies for their practices in those settings.

Since Idaho's first small step twenty-one years ago, almost all states have legally acknowledged in varying degrees the expanded roles of NPs and CNMs, as well as other APNs such as Certified Registered Nurse Anesthetists and Clinical Nurse Specialists. The forms of acknowledgment have included specific designation in statutes or agency rules, statutory interpretations by attorneys general and courts, and declaratory rulings by agencies. A detailed, state-by-state description of specific provisions and their interpretation is beyond the scope of this article, and would in any case not serve any useful purpose here. Rather, I wish to assume what an exhaustive review of the state provisions on scope of practice would clearly demonstrate—that they are both unduly restrictive and endlessly contradictory—and, using some more general categories, analyze the resulting problems.

3. Defects in the Current System

States have used a variety of approaches to extend the scope of practice of nursing. Some have revised their Nurse Practice Acts [NPAs] to delete the absolute prohibition on diagnosis and treatment, or to add "nursing diagnosis." Some have added an "additional acts" clause to the NPA, authorizing some specially trained nurses to "perform acts of medical diagnosis and treatment"
as specified by rules of the state nursing and/or medical boards or as "agreed upon by the professions of nursing and medicine." Some have added a generic category, or specific categories, of advanced practice nurses and have either defined their scope of practice or have authorized state nursing and/or medical boards to promulgate rules that do so. Some have revised their Medical Practice Acts [MPAs] to authorize physicians to "delegate" diagnosis and treatment tasks to nurses who have the necessary additional training.

Each of these approaches has its problems, which are compounded when a state combines two or more of the mechanisms described. I will briefly review some of the most pronounced of these defects and offer a proposal, drawn in part from some existing provisions, that would help to alleviate many of them.

a. Roles and Titles

An initial problem is the multiplicity of roles and titles for advanced practice nurses [APNs] designated by statutes and regulations. The labels currently in use describing roles include Specialty Practice, Extended Nursing Practice, Expanded Role, Specialty Areas in the Advanced Registered Nurse Practitioner Role, Nursing Performing Medical Acts, Expanded Role in Practice Disciplines, Nursing Specialties, and Certified Registered Nurse. The various titles include a wide array of NP specialty practice areas—Family, Pediatric, School, Adult, Geriatric, Women's Health, Psychiatric and Mental Health, Obstetrical and Gynecological, among others. Additional APN practice roles include CNMs, Certified Registered Nurse Anesthetists, and Clinical Nurse Specialists. When viewed from a national perspective, the resulting nomenclature begins to resemble the rubble of the Tower of Babel. Even the most sophisticated health care consumer or policymaker can easily be confused. Such confusion becomes especially problematic when state, federal, or private insurance provisions for reimbursement mention specific titles, while the titles appertaining to the intended roles actually vary widely across the states. This latter problem becomes even more acute when there is no specific reference to advanced practice nursing in the applicable laws, even though APNs are in fact practicing in those roles.116

116. An example of this problem was recently encountered in Hawaii concerning medicaid reimbursement. Section 6405 of the federal Omnibus Budget Reconciliation Act of 1989 (OBRA) requires Medicaid coverage of services provided by certified pediatric NPs and certified family NPs, "to the extent that these providers are authorized to practice under State law." Many NPs in Hawaii are both licensed by the state as RNs and certified as pediatric or family NPs by national certifying organizations; however, Hawaii's Nurse Practice Act contains no language which defines, recognizes or certifies "NPs." Therefore, serious questions arose concerning both the state's ability to continue to receive its federal share of reimbursement for the services of these NPs (most of whom were staffing the community and public health clinics in the state), and the requirement of reimbursement for these NPs.
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Especially in an era of increasing national uniformity in educational preparation, competence examinations, and practice settings, it is counterproductive to continue the use of different, legislatively designated titles for practitioners who are similarly educated, who pass the same examinations, and who practice in the same ways. The easiest solution would be to have a single statutory designation—Advanced Practice Nurse, or APN—in each state, and to leave any subsequent regulatory or professional designation to the state Boards of Nursing [BONs] and the national professional associations. Like the use of the generic term "physician" in analogous statutes, this approach would bring needed regulatory symmetry to the states' statutory provisions. This symmetry would be especially helpful when federal policymakers focus on advanced practice nursing.

b. Composition of Regulatory Bodies

NPs' and CNMs' scope of practice can also be significantly affected and potentially restricted, albeit indirectly, by the nature of the agency or agencies authorized to regulate their practice. Since it is advanced nursing practice that is being regulated, one would assume that the appropriate state agency would be the BON. In over a dozen states, however, these providers are regulated in whole or in substantial part by joint action of the BON and the Board of Medicine [BOM], by the BOM alone, or by Joint Committees (advisory or not) comprising NPs and/or CNMs and MDs and/or pharmacists. Such a multi-professional approach is unique in the regulatory arena.

Both intuition and experience suggest the shortcomings of this "mixed regulators" scheme. First, why should one assume that physicians, simply because they are medically educated and licensed, know enough about advanced practice nursing to accurately and authoritatively define its permissible limits? They are not trained in nursing, they do not practice nursing, and—given the relatively recent development of advanced practice nursing—they have typically

In an opinion issued January 31, 1991, the Hawaii Attorney General's Office concluded that, although there was no specific recognition of NPs in the statute, the Nurse Practice Act did not preclude registered nurses from practicing as NPs. It based its opinion on the broad legislative definition of nursing, including "performance of professional services commensurate with the educational preparation and demonstrated competency of the individual...", as well as on its interpretation of the legislature's intent that the law "accurately reflect what is actually being currently practiced." Further, the opinion noted that the Board of Nursing, acting upon its implicit "authority to determine whether a particular practice falls within or outside the scope of legitimate nursing practice or service," had recently interpreted the Nurse Practice Act to allow the advanced nursing practice of qualified RNs. The opinion concluded, therefore, that RNs who were certified as pediatric and family NPs by Medicaid-specified professional organizations and who were practicing within the scope of the Hawaii nurse practice act were required to be reimbursed by Medicaid. Opinion from Paul S.K. Yuen, Deputy Attorney General of Hawaii, to The Honorable John C. Lewin, Director of Health, State of Hawaii, January 31, 1991 (on file with author).

117. See Survey Results, supra note 113, at 1, 13-14; AMERICAN NURSES ASSOCIATION, LEGAL TITLES & STATE REQUIREMENTS FOR ADVANCED NURSING PRACTICE, Table 2 (1992).
never experienced sustained practice with these providers in a variety of practice settings. In short, the working assumption should be that physicians are ignorant of, rather than knowledgeable about, appropriate competencies and resulting roles for these APNs.

One could, of course, argue that physicians know what APNs do—and therefore that they should be able to determine what and how APNs practice—because what APNs are now doing in part used to be called medicine. This argument ignores the dynamic nature of health and health care, and it attempts to perpetuate the dominant position of the physician as the all-knowing, authoritative definer of all aspects of health care delivery. To demonstrate its fallacy, one need only note that what many general practitioner physicians now do was done only by medical specialists until a few years ago. Yet no changes in medical practice acts or regulations were even contemplated as necessary to accommodate the general practitioners’ expanded practice. If they did not have to gain the permission of medical specialists, who share at least the commonality of basic medical education, why should APNs have to seek permission from physicians, who do not even share the same education?

One could argue equally as forcefully that what some physicians do now, especially given the disease and illness framework embedded in the medical practice acts, is in reality nursing, at least in regard to preventive and wellness care.

In addition to resting on ignorance, the mixed-regulators approach increases the operative potential for biased policy-making. “Bias” is used here to mean professional territoriality, as well as financial or competitive opposition. Long before the formal recognition of expanded nursing practice, nurses were carrying out many functions technically reserved to physicians. These widespread unofficial arrangements were accepted by MDs, both because they were necessary and because they were efficacious. Their acceptance in significant part also resulted from their unofficial status: the physicians’ publicly acknowledged professional domain was not threatened because they retained ultimate authority and control. The enactment of advanced practice nursing provisions, however, officially has conveyed that some of the territory traditionally controlled exclusively by physicians must now be shared with NPs, CNMs, and other providers. This shift from the informal arrangements controlled by

118. This argument is especially inappropriate for CNMs, since they are trained in and practice nursing and midwifery, not medical obstetrics.

119. See, for example, the definition of the “practice of medicine” defined in the Hawaii medical practice act: “For the purposes of this chapter, the practice of medicine includes the use of drugs and medicines, water, electricity, hypnotism, or any means or method, or any agent, either tangible or intangible, for the treatment of disease in the human subject. . . .” HAW. REV. STAT. §453-1 (1991) (emphasis added).

Given this statutory definition, physicians who care for normal pregnancies and deliveries arguably are practicing nursing, which is defined to include care of individuals “in any stage of health or illness,” since these conditions and events are not a disease, but rather part of the normal lifecycle.
individual physicians to the formal arrangements controlled by regulatory agencies can result in a real or perceived threat to the physicians' professional territory and status. In states with mixed-regulators schemes, a predictable response by an MD-regulator might be: "Enough already! The state may have acknowledged APNs' legal status, but I as an MD will determine what they can actually do (and thereby regain some professional and personal control over the territory traditionally reserved to medicine)." Such a scenario does not necessarily presuppose conscious animus; rather, it can easily result from the residual "role" effects of medical training and professional acculturation, which emphasize hierarchy and physician autonomy in decision-making.

Another form of bias—financial or competitive opposition—can also emerge when one profession is empowered to define the practice boundaries of other related professions, and the latter provide services still offered by the former. That is, since NPs and CNMs are legally recognized as competent to substitute for physicians in the performance of many tasks, perhaps the only legal way to dampen the competitive effects of their substitutive practice is to use the regulatory power to constrain as much as possible the definition of their scope of practice. Even when a legislature has sanctioned advanced practice nursing, much depends upon the body charged with subsequently elaborating the scope of practice. If this task is delegated to mixed-regulators, there is a strong possibility that anti-competitive motives will dictate restrictions that are not justified on public safety grounds. For example, with respect to essentially normal newborns and women, CNMs have repeatedly been proven to be complete substitutes for obstetrician/gynecologists and general practitioner MDs in the independent management of obstetrical and gynecological care. Nevertheless, a regulation animated by anti-competitive rather than public safety motives could require direct physician supervision of CNMs in their practices. Such a regulation would dramatically restrict CNMs' nationally recognized role in providing safe and effective independent management, thereby reducing their competitive threat. In an era when cost-consciousness is increasing, consumers have access to more information and participate more actively in their care, and pregnancy is perceived as a normal condition rather than a disability or illness, this competitive threat is real, and it could result in costly and unnecessary restrictions on these providers. Indeed, the very fact that APNs offer a cost-effective alternative to our present system suggests that the potential for anti-competitive regulation will grow more intense as time goes on.

In sum, the restraints on APNs that may result from both ignorance of their abilities and bias based on rigid notions of professional role and turf protection suggest that physicians and other health care providers should not be included

120. For a compelling analysis of the unwillingness, or inability, of physicians to meaningfully include even patients within the decision-making process, see JAY KATZ, THE SILENT WORLD OF DOCTOR AND PATIENT (1984).
on regulatory boards that define these practitioners' scope of practice. Instead, consistent with other professional licensing systems, the regulation of nursing in all its aspects should be carried out by each state's BON. Full interdisciplinary practice should surely be the norm in health care, but in defining the legal contours of each discipline, legislatures should rely principally upon those who are educated and practice in that discipline.

4. Direct Restrictions on Scope of Practice

Many APNs face not only the unnecessary complications resulting from varying designations of titles and roles and the inappropriate inclusion of other providers in central regulatory mechanisms, but also significant restrictions on their scope of practice embodied specifically in their states' statutes. While these restrictions were no doubt thought to be either politically necessary or professionally advisable when the first expanded practice acts were drafted, their continuation is unwarranted and unwise now that APNs have repeatedly demonstrated their capability to provide safe and effective care in independent practice.

A multitude of restrictions, varying from state to state, are reflected in statutory and regulatory scope-of-practice statements for ANPs. They are generally of two interrelated kinds: requirements for formalized practice relationships with MDs, for written practice agreements, protocols, and collaboration guidelines, and for MD direction and/or supervision; and restrictions of practice to certain sites or facilities, such as family planning clinics, or certain geographic areas, such as rural areas.

Some provisions, for example, require mutually agreed-upon APN/MD written protocols that are to be reviewed annually, submitted to the BON or a joint BON/BOM committee for approval and recording, and amended and resubmitted with every change of personnel or practice or setting. In addition, elaborate definitions distinguish between and among "general," "direct," or "immediate" physician collaboration, direction, and/or supervision vis-a-vis APN activity. Respectively, these terms have been used to mean that the physician need not be on the premises when the APN practices; that the physician must be available on the premises and within vocal communication range, either directly or by a communications device; and that the physician must be physically present in the room and either performing the actions or guiding and directing the APN's performance. Other definitions surpass the elaborate and border on the absurd. For example, "collaboration" generally

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121. In addition to the general problems which can result from binding practice to these "decision-tree" type protocols, specific problems can arise if even minor changes in practice are made which are not simultaneously accommodated in a revision of the written agreements or protocols.
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connotes joint effort, people working together as equals. In the health care arena, it commonly means referrals to and from other health care providers and joint consultation and treatment. However, one proposed definition of the "collaboration" required for NP practice is as follows:

the 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 protocols as defined by law and regulation. ... 123

Equality of contribution is totally eliminated in this approach, and the degree of mandatory direction and supervision makes a mockery of the reference to the NP's professional expertise.

Provisions such as these are both needless and detrimental. They are unnecessary because APNs, like physicians, are trained to use independent professional judgment in providing care. Like other professionals (such as physicians), they know the boundaries of their competence, they know when to consult with and refer to other health care providers, and they know that they have both an ethical and a legal duty to do so when appropriate. Even apart from the detrimental consequences described below, legislative specification of such professional norms is unnecessarily duplicative.

These provisions are more than benignly redundant, however; they are also harmful and costly. Mandatory physician direction and supervision intrudes unduly upon the professional judgment and recognized expertise of APNs. Instead of encouraging them to practice fully within the bounds of their competence—a goal in which all of society has a stake—this restriction forces them to constantly question, and to seek authoritative affirmation of, their practice boundaries. Furthermore, it requires physicians to supervise tasks that are undeniably within the scope of nursing practice competencies. Thus, in addition to its corrosive effect on APNs' sense of professionalism, this restriction also forces physicians into one of two undesirable positions. They must either wink at the legal requirements, acting upon their judgment that such supervision is unnecessary, or they must spend time and energy checking with, supervising, and directing APNs, whether or not they think such superintending is appropri-


Compare this definition of "collaboration" with that proposed by the American Nurses Association's Congress of Nursing Practice: "A collegial, working relationship with another health care provider in the provision of patient care. Collaborative practice requires the discussion of patient diagnosis and cooperation in the management and delivery of care..." AMERICAN NURSES ASSOCIATION, PRESCRIPTIVE PRACTICE REGULATION, REPORT TO THE CONGRESS OF NURSING PRACTICE (Jan. 1992) (on file with author).
ate. The resulting situation belittles MDs and APNs alike. It also damages the patient-provider relationship: the patient, faced with either the winking or the pro forma supervision, begins to question not only the authority, and hence the competence, of the APN, but also the real professional involvement of the MD. A patient who undergoes a twenty-minute examination and assessment conducted by an APN, only to be told that, "I have to check with the doctor; it will only take a second," is unlikely to feel much confidence in either provider's skill or commitment.

An additional problem caused by these "supervision/direction/collaboration" requirements is that they effectively delegate unilateral control over an APN's practice to a single physician. Once the state has legally recognized the APN as a competent provider, it is odd indeed to condition practice upon the agreement or permission of a private individual. This arrangement goes far beyond the notion of employment, or of finding a job; rather, it conditions an APN's employability or fitness to practice upon the consent of a willing physician. Admittedly, there are many situations in which states require a preceptorship or apprenticeship as a prerequisite to full professional licensure. For example, after completing their Ph.D.s, clinical psychologists are often required to work under the supervision of a practicing clinical psychologist for a year before applying for full licensure. However, in the case of APNs, states that require the ongoing supervision or direction of a physician in effect mandate a life-long apprenticeship. That is, no matter how skilled and experienced the APN, or how utterly inexperienced the MD, physician oversight is a statutorily imposed condition of competence for APN practice.

Behind the obvious problems intrinsic in such a scheme—such as the unnecessary duplication of effort and the heightened potential for the exercise of anti-competitive animus by MDs—lurks a more subtle yet compelling flaw. Any state that adopts such a mechanism has in effect yielded its governmental power to one private individual, the physician, who is given almost complete discretion to assess the competence of another licensed health care provider. An MD's decision to enter into a direction/supervision agreement with an APN is governed by no identifiable objective standards and limited by no procedural guarantees. Thus, the APN's ability to practice under her license, which depends upon this governmentally mandated prerequisite, turns ultimately upon one private individual's "willingness." At best, such schemes demean APNs' professional role and ability, and further retard their full utilization in our health care system. At worst, they constitute a wholesale privatization of a core governmental function: assessing competence for licensed practice.

As earlier noted, these restrictions are often combined with provisions related to practice locations. Such provisions are remarkably illustrative of the regulatory and policymaking quagmire through which many APNs must trudge. Many states that condition APN practice upon MD supervision routinely exempt...
those APNs who practice in certain settings, such as rural areas or inner-city community health centers. The rationale for such exemptions is that these areas are "medically underserved"\textsuperscript{124} that is, physicians will not or do not practice there, and there may be no physician available to supervise or direct the APN's practice. Thus, the rationale continues, it is better that the residents of these areas have some rather than no health care, even if it is provided by an unsupervised APN.

The mere statement of the situation reveals its inherent hypocrisy. APNs have a long and distinguished track record of providing a full range of care to people in rural and poor, inner-city areas. From the Frontier Nursing Service's origins in the hills of eastern Kentucky to the first NP educational program's beginnings in Colorado, one of the most sustained goals of APN training and deployment has been the provision of basic health care to populations that would otherwise have had none. There were at first too few physicians, and then too many specialists and subspecialists; the resulting supply and distribution, or maldistribution, of physicians meant that many areas of our country had no health care providers of any sort. APNs, unsupervised by physicians, stepped in to fill this void, and succeeded in increasing the availability of basic health care for many people.

Why then, are statutory affirmations of this unsupervised practice role hypocritical and fundamentally indefensible? Because policy makers are necessarily embracing one or both of the following propositions: (1) the competence of APNs is determined by where they practice, not by what or how they practice, at least relative to MD supervision; and (2) poor people and residents of rural areas are entitled only to care legislatively deemed to be "second class" or less-than-minimally competent. Both of these propositions are patently false. However, they are the only possible bases (apart from anti-competitive motivation, discussed below) upon which those states that require MD supervision can exempt specific geographic or practice settings. These states must therefore admit one of two things. First, if unsupervised APNs are competent to practice there, where MDs do not or will not, they are competent to practice here, where MDs do practice, and it follows that the MD supervision mandated by the state is unnecessary to competent APN practice anywhere. In the alternative, although MD supervision is legislatively deemed to be a necessary element of

\textsuperscript{124} Both the federal and state governments utilize varying definitions to identify populations or areas with inadequate access to health care. The formal underserved designation can trigger federal eligibility for placement of National Health Service Corps personnel; funding for community health clinics, migrant health centers, and rural health clinics; and funding for health professions training. Similarly, states use underserved designations to promote the placement of health care professionals in these areas through the provision of educational and practice funding or preceptorships and training opportunities. Most, if not all, of the definitions of the medically underserved turn, in part, upon the availability of physicians specifically, not health care providers generally. For an extensive discussion of the characteristics and uses of these designations, see RURAL HEALTH, supra note 9, at 287-311.
APN competence, the state permits unsupervised and therefore less-than-competent APNs to deliver care to the mostly poor residents of rural and inner-city areas. Stripped to their barest form, these are the only rational explanations for the common scheme of varying APNs’ scope of practice by geographic or practice setting.

Of course, no legislators will acknowledge either of these possibilities, and most have not even thought of them. If they did reflect upon the situation objectively, reason would perhaps suggest something like the following analysis: if APNs, practicing autonomously, can effectively care for rural and poor inner-city patients, relatively high-health-risk populations whose economic or social status often results in poor nutrition, low birth-weight babies and the like, why cannot these same providers practice in suburban or urban areas without MD supervision? Similarly, if APNs can provide unsupervised care in community health or family planning clinics, why can’t they provide it in other practice settings? The simple fact is that they are so capable, yet some states persist in varying their scope of practice by geographic and/or practice setting criteria.

One is left with the disquieting, but compelling, conclusion that the continuation of these restrictions has more to do with protecting the competitive position of physicians than with protecting the public health. It might be argued that these variations encourage APNs to practice in these “medically underserved” areas, but, while the goal is laudable, the use of the licensure mechanism is totally inappropriate. If licensure means minimum competence to perform the licensed activity, it should mean the same thing throughout the geographic boundaries of the state as is the case with physicians. If a state wants to encourage health care providers to move to and practice in underserved areas, it should follow the lead of the federal government and offer financial or other incentives. A gerrymandered scope-of-practice definition, however, is reminiscent of involuntary servitude.

5. Conclusion

In evaluating the present situation of APNs, and how it might be changed, it is worthwhile to ask how we arrived at the current national crazyquilt of APN regulation, with all of its confusing and disabling provisions. How did we come up with a scheme that encompasses diverse statutory articulations of APNs’ role, a regulatory mechanism involving mixed-regulator boards of differently licensed practitioners, variously defined mandates for physician participation in practice, and internally inconsistent scope of practice variations determined by practice settings? Perhaps the answer is two-fold. First, many of the practice acts that

125. See supra note 124.
were revised to include advanced practice nursing pre-dated many of the now-voluminous studies demonstrating that APNs are fully competent autonomous providers. At the same time, the relative newness of their professional identity hampered a widespread understanding and acceptance of their role and their competence. Lack of familiarity and caution therefore counselled that legislatures err on the side of over-regulation. Second, regulators may have relied unduly upon the advice of the medical profession in fashioning the original legal authorizations of advanced practice nursing, many of which reflect the various restrictions on scope of practice noted above. After all, many MDs knew no more about APNs' abilities than did legislators. In many ways, of course, physicians would have been especially cautious in advocating an expansive scope of practice for these new providers, due to the traditional centrality of their own profession, their lack of extensive practice with APNs, and their uncertainty over the long-range structural impact of these new providers on medical practice.\textsuperscript{126} These factors, and doubtless others as well, may

\textsuperscript{126} The AMA continues to be concerned about the effects of expanded nursing practice, especially "independent" practice. A report and recommendations on Independent Nursing Practice Models by the AMA Board of Trustees were adopted by the AMA House of Delegates in 1990. The report defined any nursing model of care as "independent" if it met any one of the following three criteria:

1. impedes access to physician involvement in the decision-making process for medical care of patients with potential or known medical diagnosis within 24 hours of contact, or
2. admits patients to facilities or assigns medical services before contact and consultation with physicians or uses the medical model of practice, or
3. requires or is assigned direct reimbursement for [nursing] services.

As thus defined, an "independent" nursing practice is one in which the physician is replaced or supplanted as the paid "gatekeeper" to health care. The following comments were included in the report's summary and recommendations:

Models of nursing practice may be collaborative or independent. Collaborative practice between medicine and nursing is defined in a moral context where the autonomy of nursing practice respects and supports the autonomy of medical practice and vice versa. This contrasts sharply with models of independent nursing practice that frequently adopt a medical model, compete for services that are delivered by physicians, actively seek to increase the hegemony of the nursing profession, and empower nursing within the health care system. . . . Direct reimbursement is a major prerequisite for independent nurse practice. . . .

Based on this review of the current status of collaborative and independent nursing models, the Board of Trustees recommends that:

1. The AMA continue to monitor federal and state legislation for direct reimbursement of nonphysicians, so that statutory guidelines for physician supervision as a qualification for reimbursement may be maintained.
2. The AMA continue to monitor federal and state legislation for independent nursing practice models and encourage statutory changes so that physicians may retain their intermediary responsibilities and advocacy for direct, quality patient care.
4. The AMA . . . oppose any attempt at empowering nonphysicians to become unsupervised primary medical care providers and be directly reimbursed for case management activities.

help to explain the many limitations on APNs’ current legal authority as licensed practitioners. Nevertheless, at a historical moment when public policy should promote the widest possible utilization of these cost-effective providers of high-quality health care, the restrictions embedded in many state laws are not only limiting effective solutions, but exacerbating the problems.

B. The Authority to Prescribe Drugs, Devises, and Treatments

The diagnosis and treatment capabilities of APNs, and the various restrictions imposed upon them by many states, have already been reviewed. Prescription authority, however, merits separate discussion because it is central to APNs’ effective practice and because it exemplifies the continued need to carve out their effective legal authority state-by-state. Indeed, except for reimbursement, no other aspect of APNs’ authority is as volatile and controversial as their power to prescribe drugs and devices for patient use. Since the first state recognition of limited prescriptive authority for NPs in 1975 and CNMs in 1977, legislative proposals for creating or expanding such authority, for these and other APNs, have been introduced in almost every state. Currently, there are explicit statutory or regulatory provisions for APN prescribing in approximately forty jurisdictions, and proposals are pending in several others. These authorizations vary enormously in the degree of independence they afford, as well as in the types of drugs and devices they permit APNs to use. As was suggested in the last section, describing the authority of APNs to diagnose and treat, many states severely limit prescriptive authority by imposing requirements for written protocols and physician supervision or direction, and laying out formularies specifying which drugs may be prescribed. Some states also restrict or vary prescribing authority to certain geographic or practice settings. In addressing the regulatory schemes governing APN prescriptive authority, I will set out the policy issues involved, summarize the most prevalent statutory patterns, and analyze the problems that most often result.

1. Policy Issues

The range of policy considerations inherent in any authorization of prescriptive authority for NPs and CNMs is extensive, but not infinite. Oddly enough, the first question is not whether these providers can and do prescribe, but

Interestingly, the AMA defines “collaborative” nursing practice as respectful, supportive, and moral, whereas “independent” nursing practice is competitive, empowering, and hegemonic.

128. 1977 Me. Laws 395 (codified at ME. REV. STAT. ANN. tit. 32 § 2101(2)(B)).
rather, whether the state will **acknowledge and authorize** their prescribing practices. Why is this? If "prescribing" is defined, as it typically is, as the giving of "directions, either orally or in writing, for the preparation and administration of a remedy to be used in the treatment of any disease"$^{130}$ or abnormal condition, then APNs (and other nurses) have prescribed in the past and continue to do so, even in the absence of specific legal authority. They do this in a variety of ways: calling in a prescription to a pharmacy using a physician’s name; using blank prescription pads presigned by a physician; asking a physician to write and sign a specific prescription; writing the prescription and signing the physician’s name; prescribing pursuant to protocols jointly agreed to by the APN and the cooperating physician and pharmacist; and co-signing a physician’s prescription pad.$^{131}$ Although many of these practices are problematic and of questionable legality,$^{132}$ the fact remains that they are both common and, in many settings, necessary given the limited availability of authorized prescribers such as physicians. Therefore, the central question is not whether these providers “can” prescribe, but rather what legal authority for prescribing they will be granted.

In answering this latter question, regulators must make the following policy decisions. First, which providers will be authorized to prescribe: NPs? CNMs? clinical nurse specialists? nurse anesthetists? APNs with advanced training and education? others? Second, what drugs and devices may be prescribed: only those listed in a formulary?$^{133}$ any except those listed in a formulary? controlled substances?$^{134}$ legend drugs?$^{135}$ only those drugs and devices related to the APN’s scope of specialty practice? Third, what is the extent of the authority conferred: is the APN independent? dependent upon physician supervision, direction, or delegation, pursuant to written collaboration agreements

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132. See Hadley, *supra* note 97, at 263, and citations therein, for prohibitions on the use of pre-signed prescription pads.
133. “Formulary” generally means a list of drugs and therapeutic agents.
134. The Controlled Substance Act of 1970, 21 U.S.C. §801 (1988), requires that dangerous drugs (those that have no accepted use, significant potential for abuse because of their addictive properties, or drugs that have major psychoactive properties) be included in a list of “schedules” prepared by the Federal Drug Administration. The schedules, I-V, rank the included drugs by their potential for addiction and abuse. For example, Schedule I drugs have a high potential for abuse and no currently accepted medical or therapeutic use; these include mescaline, heroin, and LSD. Schedule II includes drugs for which there is a high potential for abuse, and which have accepted therapeutic value; examples include morphine and phenobarbital. Schedules III-V include drugs which have descending potential for abuse and which have accepted therapeutic applications.
135. The term “legend drug” means drugs which can only be dispensed upon prescription and which are not classified as a narcotic or a controlled substance. “Prescription drugs” include (a) legend drugs and (b) narcotics or controlled substances listed on various schedules established by the federal and state governments. Examples of legend drugs include anti-hypertensive medications, antibiotics, nonsteroidal anti-inflammatory drugs, and steroid hormones.
or protocols? Fourth, how, if at all, should the scope of the authority be varied: should it be limited to certain geographical areas, such as rural areas? to certain practice settings, such as community health clinics, or skilled-care facilities, or patients’ homes? Fifth, which state agency should regulate the prescriptive authority: the BON? a specially created committee comprising APNs, MDs, and pharmacists? a joint committee of the BON and the BOM? Sixth, what qualifications, in addition to licensure as an RN, should be required for the grant and renewal of prescriptive authority: completion of academic or continuing education units in pharmacology? current certification in a specialty area by a nationally recognized certification body? Finally, what form should the authorization take: separate licensure? certification? acknowledgment? registration? a letter of recognition?

2. Patterns of Prescriptive Authority

These specific issues have been resolved by the states in richly textured and endlessly varied ways. However, two predominant patterns emerge from the current provisions for APN prescriptive authority, differing principally with respect to the degree of autonomy afforded APNs and the range of drugs from which they are permitted to select.

The degree of autonomy, or professional independence in decisionmaking, varies widely from state to state. At one end of the spectrum are states like Alaska, Oregon, and Washington, which authorize the greatest independence in that APNs may prescribe without any physician involvement. Oregon, for example, defines an NP as "a registered nurse who has been certified by the board [of Nursing] as qualified to practice in an expanded specialty role within the practice of nursing" and specifically authorizes the NP "to prescribe drugs for the use of and administration to other persons if approval has been given" by the BON. The drugs that may be prescribed "shall be included within the certified nurse practitioner's scope of practice as defined by rules of the board [of Nursing]" and consist of drugs and medicines listed in a "formulary, ... including controlled substances" listed in schedules

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136. "Protocol" has been used in a variety of ways in the health care system. For purposes of this discussion, it means a more-or-less specific "decision-tree." That is, it sets forth various steps to be followed in the assessment or diagnosis of a condition, and, depending upon the results for each step or the aggregate process, specifies what treatments or drug therapies are to be implemented. For a review of the multiple definitions and usages of "protocols", see Hadley, supra note 97, at 262, n.74.

137. One commentator, in an extensive analysis of the prescriptive authority of nurses, has characterized the independent model as "substitutive authority", and the dependent model as "complementary authority", in that the latter requires nurses to function in conjunction with physicians, rather than as substitutes for them. See Hadley, supra note 97, at 250-253, 265-284.


140. Id.
The BON rules setting forth the NP's scope of practice specify that the NP "is independently responsible" for the provision of patient care, and that management or provision of care encompasses diagnosis and intervention, including "the prescription of medications or other therapies. . ." The BON rules further provide that NPs may prescribe over-the-counter drugs and medical appliances and devices, in addition to those drugs named in the formulary.

Oregon thus exemplifies the "independent" model of APN scope of practice, especially including prescriptive authority. The statutory recognition of APNs' prescribing authority is not in any way conditioned upon physician oversight. Rather, since 1979, the Oregon legislature has authorized these providers to select drug therapies, based upon their own professional judgment and individual patient health needs, from among those included in the extensive formulary. The BON has been vested with the ongoing regulatory oversight of qualifications, including certification by a national certifying organization; scope of practice, including prescriptive authority; continuing competence; and certification of prescriptive privileges.

This independence model has also been adopted by Washington and Alaska, among other states. The principal variation in Washington's law is that there is no official formulary. APNs may prescribe anything within their scope of practice except for controlled substances contained in schedules I through IV of the Uniform Controlled Substances Act. Alaska also does not have an official formulary, and the BON may authorize APNs to prescribe legend drugs and controlled substances contained in schedules II through V. Each of these states conditions both initial and renewed certification as an APN upon advanced training and continuing education, and each requires education in pharmacology and clinical management of drug therapy as a condition of prescriptive authority. What none of them requires is physician control of APN practice, including diagnosing, treating, and prescribing.

Sharply contrasting with this model are several state schemes that restrict APNs' prescribing abilities in varying ways. The restrictive provisions result

141. OR. REV. STAT. § 678.385(5) (1991). The formulary is determined by the "Council on nurse practitioners' privileges of writing prescriptions", comprising seven members appointed by the Board of Nursing. The members include one nurse member of the BON who chairs the Council, two physicians (one of whom practices in a rural area), two nurse practitioners (one of whom practices in a rural area), and two pharmacists. OR. REV. STAT. § 678.385(1) (1991). The Council's sole function is to devise, and revise as necessary, the formulary which lists the drugs which NPs can prescribe.


in a dependent APN practice; that is, physician involvement and supervision are central requirements. A statute recently enacted in Virginia illustrates the multiple conditions that some states place upon APN prescribing.

In Virginia, the medical practice act specifies that the "Board of Medicine and the Board of Nursing shall jointly prescribe the regulations governing the licensure of nurse practitioners."\(^ {146} \) The act further authorizes NPs to "prescribe Schedule VI controlled substances and devices" if satisfactory evidence has been presented to the BOM and the BON that the NP has entered into and is, at the time of writing a prescription, a party to a written agreement with a licensed physician which provides for the direction and supervision by such physician of the prescriptive practices of the nurse practitioner.\(^ {147} \)

The BOM and BON, in consultation with the Board of Pharmacy, are required to promulgate regulations governing prescriptive authority. In addition, aided by an advisory committee,\(^ {148} \) they must promulgate, at a minimum,

(i) the formulary of the specific Schedule VI drugs and devices that nurse practitioners are eligible to prescribe pursuant to this section to the extent, and in the manner, authorized in a written protocol between the nurse practitioner and the supervising physician, and (ii) requirements for periodic site visits by physicians who supervise and direct nurse practitioners who provide services at a location other than where the physician regularly practices.\(^ {149} \)

Additional restrictions limit the number of NPs a physician may supervise (four if the physician is employed in a local health department, nonprofit health clinic and the like, and two if the physician is not employed in a governmental or nonprofit practice). Also, the statute specifically prohibits the establishment of a separate office for a NP who is supervised by a physician in private practice, although it does acknowledge that CNMs may have separate established offices. In the latter situation, the "supervising physician shall be required to make periodic site visits." Similar periodic site visits to governmental or nonprofit

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147. VA. CODE ANN. § 54.1-2957.01 (Michie 1991). The Virginia Drug Control Act defines Schedule VI controlled drugs and devices to include mild stimulants and depressants, as well as legend drugs. See VA. CODE ANN. § 54.1-3455 (Michie 1991).
148. The advisory committee comprises two BON representatives, one NP appointed by the BON, three physician members of the BOM, and one additional physician jointly appointed by the BOM and the BON. VA. CODE ANN. § 54.2957.01(C) (Michie 1991).
149. Id.

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clinics are required by supervising physicians who do not regularly practice in those settings.\textsuperscript{150}

The dependent nature of the APN’s scope of practice in relation to prescribing is obvious. Constraints include requirements for written agreements and written protocols, a limited selection of drugs listed in an official formulary that is itself limited to schedule VI substances and devices, and supervision and direction by a physician. Furthermore, the nature and extent of the required supervision, including the number of APNs a physician may supervise, depends upon the governmental/nonprofit or private nature of the physician’s practice setting. The resulting prescriptive authority for the APN is minimal, when measured by the degree or range of professional judgment left to be exercised by the individual provider.

Other states whose regulations result in a dependent or complementary role for APN prescribing have adopted some, but not all, of the restrictions embodied in Virginia’s statute. For example, Connecticut requires physician direction and written protocols, and prohibits NP prescription of schedules II and III controlled substances.\textsuperscript{151} Furthermore, NPs may prescribe only in certain statutorily specified practice settings, such as licensed institutions and governmentally operated clinics and facilities, unless additional settings are designated in subsequently promulgated state regulations.\textsuperscript{152} The state also requires that CNMs be directed\textsuperscript{153} by, and in a clinical practice relationship with, an obstetrician-gynecologist. They may prescribe legend drugs and schedules II through V controlled substances, and a list of the medications that a CNM may prescribe must be included in the mutually agreed-upon protocols of each provider.\textsuperscript{154}

Although not meant to be exhaustive, this summary of different states’ approaches illustrates the wide variations in scope of practice permitted APNs in the exercise of their prescriptive function. Again, the primary differences center on the degree of professional autonomy or independence recognized by each state, and the range of drugs from which APNs are permitted to select.

It should be noted that organized medicine has played a central role in shaping the states’ current provisions for APN prescriptive authority. Consistently, individual physicians and medical associations have lobbied against any legislative efforts to acknowledge prescriptive authority as part of the APN’s scope of practice. Organized medicine’s position on this issue is reflected in

\begin{itemize}
  \item \textsuperscript{150}VA. CODE ANN. § 54.1-2957.01(E)(2)(3) (Michie 1991).
  \item \textsuperscript{151}CONN. GEN. STAT. § 20-94b (1991). Under a narrowly drawn statutory provision, NPs can prescribe Schedules II and III substances for inpatients in short-term hospitals, provided that the directing physician co-signs the order within twenty-four hours. \textit{Id.} CONN. GEN. STAT. § 21a-252(f) (1991).
  \item \textsuperscript{152}CONN. GEN. STAT. § 20-87a(b) (1991).
  \item \textsuperscript{153}Direction is defined to “not necessarily imply the physical presence of” the physician while the CNM provides care to a patient. CONN. GEN. STAT. § 20-86b (1991).
  \item \textsuperscript{154}CONN. GEN. STAT. § 21a-252(g) (1991).
\end{itemize}
the recently adopted AMA state model legislation on the "Regulation of Prescription-Writing Authority of Nurse Practitioners." The model legislation defines prescribing as a "medical function," and defines a prescribing NP as one who has "agreed to practice under protocols and under an agreement with a delegating physician." The required "protocol" limits the drugs available to those listed in an approved formulary; limits the patients for whom the NP may prescribe to those in long term care facilities, chronic patients in home care settings where the individual would otherwise require institutionalization, and patients in medically underserved populations or areas; and requires a specification of conditions under which the NP must refer patients to a delegating physician. Furthermore, the delegating physician must "certify[ ] the nurse practitioner as qualified by giving direction and review on a continuing basis . . . ." Thus, the model legislation envisions direct physician supervision of the NP, as well as limitations upon the types of drugs the NP may select and the types of patients the NP may prescribe for. Limitations of this type, long advocated by organized physicians' groups, create and perpetuate the problems noted in the following section.

3. Problems in the Regulation of Prescriptive Authority

Since prescriptive authority is only one, albeit one very important, facet of APNs' scope of practice, it should not be surprising that many of the problems caused by restrictions on their diagnosis and treatment functions should also arise from similar restrictions on their ability to prescribe. The professional role these providers are trained to perform is subject to unwarranted diminution. Physicians are unnecessarily involved in more or less attenuated supervisory roles. The potential for increased deployment of safe and effective care providers is reduced. Finally, the states abdicate to individual physicians the licensure authority to define the scope of practice competencies, creating a very real potential for anti-competitive action.

The detrimental consequences that flow from these restrictions affect not only APNs' professional stature but also the public's access to health care. Even

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155. American Medical Association, State Legislation, Legislative Activities, "An Act To Grant Prescription-Writing Authority to Nurse Practitioners and to Regulate Such Prescription Practices" (February 1991) (distributed to the executive directors of State Medical Societies and National Medical Speciality Organizations by James S. Todd, M.D., Executive Vice President of the AMA, on April 29, 1991).

156. The model legislation includes a "Disclaimer" which reads as follows:

AMA is not encouraging states to enact, or endorsing, legislation allowing nurse practitioner prescribing. This model bill suggests that, when such legislation is considered and enacted, it is critical that it be allowed only with these conditions and limitations, in order to best protect the health and safety of patients.

Id. at 1.
the most basic common illness, a sore throat or an ear-ache, for example, often requires medication of some type, such as a simple antibiotic. An NP is well-qualified to diagnose such a condition and treat it through the use of medication. In many states, however, even this most basic task would require that the NP act in a very circumscribed way dictated by physician supervision and specific provisions in written protocols, or—worse yet—that she refer the patient to a physician, if the state has conferred no prescriptive authority at all. This not only results in an inefficient utilization of health care resources, but also increases the direct and indirect costs, in money and time, imposed on patients seeking access to care.

Two additional points should be noted. First, APNs’ rapidly expanding educational preparation, including pharmacology, and the dynamic nature of pharmacological intervention itself, counsel against rigid statutory restrictions on the medications they may prescribe. As is true for all health care professionals, APNs’ practice capabilities are continually growing; it makes no sense to artificially restrict their scope of practice, including prescribing, through multi-level, multi-professional bureaucratic regulatory mechanisms.

Second, needless restrictions on prescriptive authority can pose serious obstacles for APNs who need to secure federal Drug Enforcement Administration [DEA] registration to prescribe, administer or dispense controlled substances as defined by the Federal Controlled Substances Act. The DEA issues registration numbers to physicians, dentists, researchers, and others who are authorized to prescribe, dispense, administer or conduct research with controlled substances under the laws of the state in which they practice. Prescriptions for controlled substances must include the prescriber’s DEA number, which both assures the pharmacist that the provider has the authority to prescribe such drugs, and aids in the tracking of illegally diverted drugs.

For a number of years before 1990, many APNs had applied for and received DEA registration numbers. In that year, however, the DEA began to question such applications, based upon its interpretation that registration is available only to those “practitioners who, by virtue of the statutory authority vested in their professions, have plenary authority to prescribe, dispense and administer controlled substances without supervision, control, or oversight by another kind of professional.” The DEA noted that the degree to which

160. Letter from Stephen E. Stone, Associate Chief Counsel of the DEA to James Cole, Assistant Attorney General for New York (Aug. 2, 1990) (on file with the author) (emphasis added). The New York Attorney General’s Office was asked to provide a definitive opinion on the nature—plenary or limited—of NPs’ prescriptive authority as provided in New York law.
an APN "can exercise the statutorily defined functions of his or her profession" often "depends upon any restrictions contained in, or any authority granted by, the protocol with the supervisory or collaborating physician." Furthermore, the agency added, "[t]hese restrictions on scope of practice are known only to the parties, and cannot be easily determined by" the DEA or others who "depend upon the authority conveyed by a DEA registration." The DEA therefore began to deny registration numbers to APNs whom it deemed not to have plenary authority to prescribe, and instead allowed the supervisory or collaborating physicians to assign to their "affiliated practitioners" a suffix to be used in conjunction with their own DEA numbers.

This practice was formalized in a DEA notice of proposed rulemaking in 1991. The proposed rule, which has yet to be finally promulgated, specifies that individual DEA numbers will be issued only to practitioners who have "independent controlled substance prescriptive authorization granted by state legislation." Other providers, who derive their authority from a "protocol, collaborative practice agreement or utilization plan with a registered practitioner," or who act as agents or employees of such a practitioner, are defined as "affiliated practitioners." As such, they are exempt from DEA registration, although they must use the suffix to the registered practitioner's number as previously noted.

The difficulties resulting from the DEA's interpretation and proposed rule, even though it is not formally promulgated, are significant. In any state requiring physician supervision, no matter how loosely defined, DEA registra-

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"Agent[s]" and "employee[s]" of registered practitioners are exempt from the registration requirements for their dispensing and administering actions. 21 C.F.R. § 1301.24 (1991).

161. Stone, supra note 160.


163. Even though not yet finally promulgated, the policy embodied in the proposed rulemaking is being implemented by the DEA. Since the publication of the notice of proposed rulemaking, the DEA has formally notified four states (Alaska, Washington, Oregon, and New Hampshire) that the DEA deemed their laws to grant APNs plenary authority to prescribe, dispense or administer controlled substances, and thus, those practitioners must be individually registered with the DEA. APNs in Oregon and New Hampshire are required to enter into a Memorandum of Agreement with the DEA which specifically limits their registration to those controlled substances which are listed in those states' required formularies. Furthermore, while acknowledging that New Hampshire Senate Bill 158 (effective September 8, 1991) granted NPs "plenary authority to prescribe medications from the official formulary," the DEA raised the following cautionary note:

However, the statute also states that controlled and non-controlled substances shall be prescribed from the formulary according to certain protocol guidelines, which guidelines are not included in the statute. Should those protocol guidelines require some sort of supervision for any reason, the authority of the advanced registered nurse practitioner may be interpreted as derivative.

Letter from James M. Sheahan, Chief, Registration Unit of DEA, to Doris G. Nuttleman, Executive Director, New Hampshire Board of Nursing (Oct. 24, 1991).
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tion numbers will be denied to APNs. Even more damaging to APNs’ practice would be a possible, though erroneous, DEA equation of collaboration with control. Many states, as well as national APN professional organizations\(^\text{164}\), encourage or require as a practice standard collaboration with other health care providers. By this, most do not necessarily mean that the APNs are controlled by these providers; rather, they most often mean that they cooperate and coordinate with others as appropriate in the provision of health care to their patient\(^\text{165}\). A faulty DEA interpretation of collaboration could thus retard rather than promote interdisciplinary health care. Furthermore, in those states that specifically condition APNs’ prescribing upon physician supervision or control (or collaboration, if specifically defined to mean control), it is clear that the DEA’s proposed rule, and current practice, will prevent APNs from obtaining their own DEA registration numbers. They will thus be further restricted in their ability to provide direct patient care. And their efforts to obtain reimbursement for their services will become even more difficult, since some insurance companies (albeit inappropriately) use DEA numbers as provider identifiers for reimbursement purposes.\(^\text{166}\)

Even without the additional complication of the DEA’s registration limitations, states that limit APNs to a physician-dependent scope of practice, including prescriptive authority, actively impede the public’s access to safe and effective health care. In contrast, states which allow independent APN practice are much better positioned to respond to pressing and ever-changing public health demands by utilizing the full scope of these providers’ professional skills.

C. Third-Party Reimbursement

Even if APNs are able to lower the barriers to prescriptive authority and scope of practice, they will be able neither to practice independently nor to work on a collegial footing with physicians if they are not reimbursed adequately. In addressing the question of reimbursement, three questions must be

\(^{164}\) For example, see the definition of collaboration adopted by the American Nurses Association Congress of Nursing Practice in January, 1992, and recommended to the ANA House of Delegates for adoption at its 1992 annual meeting:

Collaboration: A collegial, working relationship with another health care provider in the provision of [to supply] patient care. Collaborative practice requires [may include] the discussion of patient diagnosis and cooperation in the management and delivery of care. Each collaborator is available to the other for consultation either in person or by communication device, but need not be physically present on the premises at the time the actions are performed . . .


\(^{165}\) Consider, for example, the definition of collaboration contained in Oregon’s regulations: “‘Collaboration’ means working with another health care provider to jointly provide client care.” OR. ADMIN. R. 851-50-000(3)(b) (1991).

\(^{166}\) Pearson, supra note 113, at 14.
discussed. First, for what services will the NP or CNM be reimbursed? This relates to the provider’s scope of practice, and whether the services for which reimbursement is allowed are coextensive with the scope of practice. Second, at what level will reimbursable services be paid? Are the services considered the same as or different from those provided by physicians? Third, will reimbursement be made directly to the provider, or must the NP/CNM bill through a physician, thus limiting or eliminating the opportunity to practice independently?\footnote{167}

At both the state and federal levels, reimbursement laws discriminate unjustly against NPs and CNMs with respect to all three criteria set out above. NPs and CNMs are reimbursed at a significantly reduced rate for a narrow range of services, and in most instances they are not eligible for direct reimbursement.\footnote{168} Thus the viability of independent practice for these primary care providers is restricted, while the health needs of a large segment of the population go unmet.

1. **State-Level Reimbursement Provisions**

Because states regulate the insurance industry, availability to APNs of third-party private reimbursement depends in large part on state statute.\footnote{169} In order to successfully enter private practice, an APN requires direct access to these third-party payers.\footnote{170} Although NPs and CNMs are technically eligible to receive direct, third-party reimbursement in all fifty states, until very recently very few APNs or their patients were able to convince private insurance companies to expand coverage to include NP or CNM services.\footnote{171}

The most common mechanism through which NPs and CNMs have acquired access to direct payment are mandated benefits laws and nondiscrimination provisions.\footnote{172} Currently twenty-five states provide by statute for some man-
This is a substantial increase from the fifteen states that required insurers to directly reimburse services by these providers in 1988. The majority of states that require reimbursement for NP or CNM services do so by mandating that any service covered for any other providers shall be covered for APNs operating within their state-defined scope of practice.

One might argue that expanding direct reimbursement to NPs and CNMs will increase the costs to the system through a greater utilization of services. If a substantial number of NPs and CNMs choose to practice independently, they may well provide access to care for a substantial number of people now without care. Particularly because NPs and CNMs focus their energies on primary and preventive care, including prenatal care, gynecological care and routine physicals, a substantial improvement in the health status of the population may be possible by expanding opportunities for reimbursement. The principal question, however, is not whether it might cost somewhat more, but whether the benefits of the improved health status outweigh the potential marginal cost increase.

174. Mary T. Caraher, The Importance of Third Party Reimbursement for NPs, NURSE PRACTITIONER, April 1988, at 50.
175. These are sometimes called free choice laws. See Hershey, supra note 170, at 253. These laws can take a number of forms. For example, Arizona provides that:

If a disability insurance contract provides or offers reimbursement for any service which is within the scope of the practice of a registered nurse practitioner or a certified registered nurse qualified under the rules adopted by the state board of nursing... the contract benefits shall not be denied to a subscriber who receives the services of the [NP]... [t]he cost of the service may be reimbursed directly to the [NP].

20 ARIZ. REV. STAT. ANN. § 1376.03 (1991). Although this statute refers to disability insurance, there are similar statutory provisions in Arizona which include other types of insurance.

An example of a more general nondiscrimination statute may be found in West Virginia:

Notwithstanding any other provisions of law, when any health insurance policy, health care services plan or other contract provides for the payment of medical expenses, benefits or procedures, such policy, plan or contract shall be construed to include payment to all health care providers including medical physicians, midwives and nurse practitioners who provide medical services, benefits or procedures which are within the scope of each respective provider's license. Any limitation... shall apply equally to all types of licensed providers without unfair discrimination as to the usual and customary treatment procedures of any of the aforesaid providers.

176. As noted above, many services of NPs and CNMs currently are billed through a physician at the MD rate. More data would need to be gathered to determine whether independent practice would actually lead to increased billing, or whether the billing would simply shift from the physician to the APN.
2. Federal Reimbursement Programs

While the states play the preeminent role in licensing and scope of practice issues, and control many aspects of insurance, the presence of the Medicare and Medicaid programs, and the tendency of both states and private insurers to follow the federal government's lead, make federal reimbursement policy critically important to understanding the future of advanced practice nursing. The first major federal program, Medicaid, is actually a collaborative effort between state and federal governments. It is designed to provide payment for medical services to certain low-income persons.\footnote{177} The state must provide a uniform plan of benefits, and pay at least forty percent of the non-Federal share of the plan expenditures.\footnote{178}

The second major program is Medicare, which is a federally administered health insurance program designed to cover the cost of hospitalization, medical care, and some related services for its elderly and disabled beneficiaries.\footnote{179} In 1989, Congress reformed the system of compensating physicians under Medicare.\footnote{180} The impact of this reform on APNs will be discussed below.

a. The Medicaid Program

APNs were initially envisioned as a significant part of the effort to alleviate the impact of physician shortages in disadvantaged populations. Medicaid serves one of the populations most in need of better health care.\footnote{181} Federal law currently mandates direct Medicaid reimbursement for CNMs, pediatric NPs and family NPs.\footnote{182} The federal statutory scheme makes a series of distinctions between CNMs and NPs, therefore each provider will be discussed individually below.

i. Coverage of CNM Services

Some services of CNMs have been covered under Medicaid since 1980.\footnote{183} Federal law currently maintains that "services provided by a nurse-midwife . . . which the nurse-midwife is legally authorized to perform under state law," will be reimbursed, whether or not the midwife works with a physician.\footnote{184}
This provision effectively mandates direct reimbursement for CNM services. However, this apparent broad grant of authority is restricted by a reference to another statutory provision limiting CNMs to the performance of "services in the area of management of the care of mothers and babies throughout the maternity cycle." The statute defines maternity cycle as "a period limited to (1) Pregnancy; (2) Labor; (3) Birth; and (4) The immediate postpartum period . . ." Thus the current federal Medicaid program coverage does not extend to CNM services in family planning or gynecological care.

ii. Coverage of NP Services

CNMs were successful much earlier than were NPs in obtaining federal Medicaid reimbursement. Although many states had opted to provide Medicaid reimbursement for NPs earlier than for CNMs, it was not until 1989 that Congress mandated reimbursement for some NP-provided services. The statute requires states to reimburse for "services furnished [to categorically needy Medicaid recipients] by a certified pediatric nurse practitioner or certified family nurse practitioner (as defined by the Secretary) which the [CPNP or CFNP] is legally authorized to perform under state law . . . whether or not . . . under the supervision of . . . a physician." The restrictive language of the statute causes some concern, for in some states there is no pediatric NP designation, the functions being performed instead by school NPs. The statute leaves the potential, therefore, for discriminatory reimbursement based on minor semantic differences in state practice acts.

The Health Care Financing Administration (HCFA), however, in a rule currently in the notice and comment process, offers a fairly expansive definition of which NPs will qualify for reimbursement under the new provision. In

185. 42 U.S.C.A. § 1395x(gg)(2) (1992). Restriction of reimbursement to the maternity cycle has been an element of the statutory scheme since the 1980 allowance of CNM reimbursement. See 42 U.S.C.A. § 1396d(m) (1992). However, some state Medicaid programs have chosen to expand benefits coverage to include gynecological care provided by CNMs.
187. Omnibus Budget Reconciliation Act of 1989, Pub. L. No. 101-239 § 6405(a), 103 Stat. 2265 (1989) (effective July 1, 1990), added 42 U.S.C.A. § 1396d(a)(21) (1992) (providing reimbursement for certain NPs). Although OBRA 1989 required that the services of family NPs and pediatric NPs be covered under Medicaid, the states have been slow to enact legislation adding the compensation of NPs to their Medicaid programs. It is estimated, however, that by the end of 1992, 48 states and the District of Columbia will be in compliance. Pearson, supra note 113, at 16.
188. 42 U.S.C.A. § 1396a(10)(A) (1992) provides that all categorically needy individuals (see 42 U.S.C.A. § 1396a(10)(A)(i)) (1992), must have medical assistance available "including at least the care and services listed in paragraphs (1) through (5), (17) and (21) of § 1396d(a)." Paragraphs (1) - (5) of 1396d(a) include inpatient and outpatient hospital services, laboratory and X-ray, nursing facility services, and physicians services. Paragraph (17) covers CNM services, while paragraph (21) deals with pediatric NP and family NP services.
189. See supra note 187.
the proposed rule, HCFA notes that "the purpose of the amendments is to ensure that nurse practitioner services are made available to all or most Medi-
caid recipients." With this mandate in mind, HCFA allows the states to "tailor the definition to suit their individual needs" by requiring only that the NPs be licensed as such and be engaged in either a pediatric or a family practice within the scope of state law. HCFA does not set out a series of educational or certification requirements that must be met by providers seeking reimbursement for their services, relying instead upon the state's general licensure power to regulate the provider's qualifications. It seems logical that an individual certified as an Adult NP could be reimbursed for performing tasks within the zone of overlap between Adult NP and Family NP scopes of practice.

Thus, the statute defines which services are covered, then the combination of statute and proposed regulation defines who may be paid, and finally, the statute, as interpreted by HCFA, defines how payment shall be made. HCFA stated that, in its judgement, the explicit statutory statement that physician supervision is not required has the effect of requiring the states to directly pay CPNPs and CFNPs for covered services.

The combination of broadly defined coverage and direct reimbursement under this proposed regulation actually puts some NPs in a significantly more advantageous position than CNMs, whose reimbursement is severely limited by the statutory provision that only those services in the maternity cycle be covered.

### iii. Reimbursement Levels

Finally, the states have broad discretion in determining both fee levels and payment methodology for Medicaid. The main federal requirements are that the state payments be "consistent with efficiency, economy, and quality of care and are sufficient to enlist enough providers so that care and services are available under the plan at least to the extent that such care and services are available to the general population in the geographic area." Most states use either fee schedules or reasonable charge reimbursement.

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191. Id.
192. Id. at 66393.
193. Id. at 66395 (to be codified at 42 C.F.R. § 440.166).
194. The "logic" of this assumption will depend upon an assessment of whether particular services or particular providers are intended to be covered.
195. 56 Fed. Reg., at 66393.
197. PPRC, PHYSICIAN PAYMENT UNDER MEDICAID at 18. In 1989, 42 states used fee schedules. The fee schedules ranged from those reflecting previous year charge data to those based on relative value
b. **The Medicare Program**

Medicare, created in 1965, comprises two insurance programs. Medicare Part A is hospital insurance, and is available without additional charge to all eligible Social Security recipients. Primary and ambulatory care is provided under Medicare Part B, which covers a range of health services provided outside a hospital. Because this article focuses on primary care or ambulatory care, the reform of Medicare Part A through the institution of diagnosis related groups (DRGs) need not be addressed.

i. **Historic Reimbursement Provisions**

Historically, Medicare Part B services have been reimbursed based on the concept of "reasonable charge payment." Beginning in 1985, rising Medicare expenses prompted Congress to examine ways to overhaul the system. In 1989, following the recommendations of the Physicians Payment Review Commission (PPRC), Congress mandated the development of a fee schedule based the Hsiao/Harvard Resource-Based Relative Value Scale (RBRVS) to...
replace the reasonable charge system then in place. Congress further directed the PPRC to study the implications of including nonphysician providers (NPPs) in the fee schedule.

ii. NPs and CNMs Under Medicare

Before it is possible to discuss the implications of the RBRVS on NPPs, it is necessary to untangle the statutory provisions governing reimbursement for NPs and CNMs. Unlike physicians, who are reimbursed for all Medicare-covered services, whatever their practice settings, both NPs and CNMs are limited in their ability to be reimbursed under the Act. Although this appears to be an area in which there is a significant divergence of treatment between NPs and CNMs, careful analysis shows that both must work under severe restrictions.

CNM services have been covered under Medicare since 1988. Nomially, CNM services are covered whether the CNM works in collaboration with a physician or in independent practice, as long as the services provided are within the CNM’s scope of practice. As under Medicaid, CNMs may be directly reimbursed for their services. However, two specific statutory provisions impair their practice potential. First, just as with Medicaid, payment for CNM services are limited to those provided throughout the maternity cycle. Thus, gynecological care for Medicare beneficiaries is not covered if provided by a CNM. If CNMs are successful in expanding beyond the maternity cycle, the scope of covered services which they may offer could have a significant positive impact on screening and preventive care for elderly women and for those women receiving Medicare Part B as part of their Social Security disability payments. Second, CNMs reimbursement for maternity cycle services is limited to sixty-five percent of the physician fee schedule amount.

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203. 101 Pub. L. No. 239 requires that beginning in 1992, physicians are to be paid the lesser of the actual charge or the “amount determined under the fee schedule established under subsection (b).” Pub. L. No. 101-239, § 6102, 103 Stat. 2106, 2169 (codified at 42 U.S.C.A. § 1395w-4(a)(1)(B) (1992)). The Act then delegates the task of establishing the fee schedule to the Secretary of HHS. Id. at § 1395w-4(b).

204. Pub. L. No. 101-239 § 6102(d)(7), 103 Stat. 2186 (1989), providing that “the PPRC shall conduct a study of the implications of a resource-based fee schedule for physicians’ services for non-physician practitioners, such as physician assistants, clinical psychologists, nurse-midwives, and other health practitioners whose services can be billed under the medicare program on a fee for service basis.” In particular, Congress was interested in what the proper level of payment for these practitioners would be.


207. See 42 U.S.C.A. § 1395x(gg) (1992), and supra text accompanying notes 183-186 (federal Medicaid reimbursement limited by same provision).


209. 42 U.S.C.A. § 1395f(l)(K) (1992). This section authorizes the Secretary to promulgate a separate fee schedule for CNMs. The new Medicare RBRVS Fee Schedule refers also to such a separate schedule, 42 C.F.R. § 415.54 (1991), but it does not appear to have been promulgated at this time. Currently, CNMs
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There are four basic situations in which NPs' services are covered under Medicare, each of which requires that the NP work in collaboration with a physician. Additionally, the services provided must be within the NP's scope of practice: services furnished incident to a physician's services; services under a contract to an HMO; services in a skilled nursing facility; and services in a rural area.

Further restricting NPs are a set of limits on reimbursement amounts for those few instances in which their services are covered. These amounts are linked to the physicians' fee schedule by "capping" NP reimbursement at a particular percentage of the amount paid to physicians. In the case of services provided in a rural area, the reimbursement amount is limited to the lower of the actual charge, or seventy-five percent of the physician fee schedule for services furnished in a hospital and eighty-five percent of the schedule for services furnished in all other settings. The same limits apply in the case of charges for services in nursing facilities. Only in the case of health care services in a rural area can an NP be directly reimbursed.

iii. The Resource-Based Relative Value Scale

In order to understand the potential problems which the future holds for APNs seeking federal reimbursement, it is necessary briefly to analyze the Resource Based Relative Value Scale (RBRVS). The RBRVS is designed more accurately to reimburse physicians by reflecting their actual costs of train-

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210. Collaboration is explicitly 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 defined by the law of the State in which the services are performed." 42 U.S.C.A. § 1395x(aa)(6) (1992).
215. Id.
218. 42 U.S.C.A. § 1395u(b)(12)(A) (1992); 42 U.S.C.A. § 1395l(1)(r)(1) (1992). In all other cases, reimbursement must be made to the employer or the clinic in which the NP works.
219. Medicare is somewhat idiosyncratic in its definition of "physician." As will become clear, the physician/not-physician distinction is crucial to an understanding of the difficult task facing NPs and CNMs seeking expanded reimbursement under Medicare. The statute provides that:

The term "physician", when used in connection with the performance of any function or action, means (1) a doctor of medicine or osteopathy legally authorized to practice medicine and surgery by the State in which he performs such function . . . . (2) a doctor of dental surgery or dental medicine . . . . (3) a doctor of podiatric medicine . . . . but only with respect to the functions which he is legally authorized to perform as such by the State in which he performs them, (4) a doctor of optometry, but only with respect to the provision of items or services . . . . which he is legally authorized to perform as a doctor of optometry . . . . or (5) a chiropractor who is licensed as such.
ing and practice, rather than their historical pay. Although a detailed analysis of the intricacies of this payment system is beyond the scope of this Article, the basic concept is that it is possible to design a system that accurately reflects the inputs to health care services and therefore allows a more logical payment system. Eventually, each separate medical procedure will be given its own relative value (estimated value in relation to all other services). To arrive at a payment schedule, the relative value of any given procedure will first be adjusted to take account of geographical variations in cost. It will then be converted into a monetary payment through the use of a conversion factor.

The three components which make up a "Relative Value Unit" (RVU) are: physician work; practice expenses or overhead, such as rent, staff salaries, supplies, etc; and professional liability insurance or malpractice costs. The RVU sum of the three components is then multiplied by a Geographic Adjustment Factor (GAF) to arrive at a regional value, before being multiplied by a uniform national Conversion Factor (CF). The end result of this manipulation is the payment amount.

iv. Equal pay for Equal Services

Earlier sections of this article have demonstrated that NPs and CNMs have proven their ability to provide primary care comparable in outcome to that provided by physicians. In effect, they provide equivalent services. It is therefore highly relevant that, at the core of Medicare fee reform is the concept of paying the same amount to all physicians who provide a service, regardless of specialty. When the PPRC first set forth its agenda, one of its major goals was by the State... and only with respect to treatment by means of manual manipulation of the spine.


220. Defined in 42 U.S.C.A. § 1395w-4(c)(1) (1992). The "work RVUs" are to be based on "the relative resources incorporating physician time and intensity required in furnishing the service." 42 U.S.C.A. § 1395w-4(c)(3)(C) Z (1992). "Practice expense RVUs" are to be based on historical data, as are liability RVUs. Id.

221. For the mathematical among you, the simplified algebraic formula is:

\[ \text{Payments} = \text{RVU} \times \text{GAF} \times \text{CF} \]

The conversion factor is the multiplier that transforms the relative value scale into a payment schedule. The CF is a single national value applied to all services paid under the fee schedule. In the first year of the fee schedule, 1992, a CF must be chosen that will produce a budget-neutral result relative to 1991 Medicare expenditure levels. 42 U.S.C.A. § 1395w-4(d)(1)(B) (1992).

The conversion factor is extremely important in determining exactly how much a provider will be compensated. It is also important because it is the factor that will allow private third-party insurers to adapt the RBRVS to their own use. An insurance company or HMO could determine its total desired budget for the year, estimate the number of procedures to be provided, and derive a conversion factor for compensation. Thus, the potential impact of the RBRVS extends far beyond the Medicare program.

222. As HCFA notes in its final implementation rule, the actual payment to the physician provider will be 80% of the relative value payment amount. 56 Fed. Reg., at 59507 (1991). See 42 U.S.C. § 1395f(1)(N) (1992). NP and CNM payments are reduced by a further percentage, described below.
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to "increase equity among physicians, so that similar payments are made for
similar services among similarly qualified physicians." \(^{223}\) The PPRC later
refined this goal further, stating that "physicians should be paid the same when
they provide the same services." \(^{224}\) Thus, all those defined as physicians
under the Medicare Act will be paid the same amounts for the same services.

The original Harvard/Hsiao study, which formed the basis for these RBRVS
reform measures, contemplated some variation in payment among physicians
based on the opportunity cost of their training. \(^{226}\) The PPRC, however, in its
influential 1989 report to Congress, explicitly rejected the use of a differential
based on differing training costs, stating that

The RVS should not include an additional factor for the opportunity
costs of specialty training. Incorporating a factor for specialty training
into the RVS, as proposed by Professor Hsiao, would in many cases
violate the principle that physicians should be paid the same when the
service is the same. \(^{227}\)

There are other potential sources of payment differentials, such as the health
outcomes achieved by individual practitioners, or differences in quality or
competence among practitioners. The Harvard study explicitly stated that
"[m]ethods have not yet been developed to measure these dimensions satisfac-
torily." \(^{228}\) Thus, after the PPRC rejected the suggestion that training opportuni-
cy costs be accounted for, there is no longer any basis for establishing differential
pay for the same service.

Once the issue of non-physician providers (NPPs) came to the fore, however, the PPRC appeared to either ignore or forget its earlier insistence on
equality of payment for the same services. In fact, the PPRC's most recent
report states that "[f]or the work component, the differential [between physician
and NPP reimbursement] should reflect differences in investments in human
capital: tuition expense and foregone earnings." \(^{229}\)

\(^{223}\) PPRC, MEDICARE PHYSICIAN PAYMENT: AN AGENDA FOR REFORM, at x (1987).
\(^{225}\) See supra note 219.
\(^{226}\) See Hsiao, supra note 202, at 2348. Professor Hsiao proposed that the Relative Value unit be
composed of 1) physician work, including measures of both time and intensity of work; 2) practice costs;
and 3) opportunity cost of training. The opportunity cost of training represents income foregone when
additional training is pursued rather than entering practice.
\(^{227}\) PHYSICIAN PAYMENT REVIEW COMMISSION, 1989 ANNUAL REPORT TO CONGRESS, at xviii (1989).
\(^{228}\) Hsiao, supra note 226, at 2348.
\(^{229}\) PPRC 1991 REPORT, supra note 15, at xx. As noted above, foregone income is what economists
call "opportunity costs." The PPRC rejected the Hsiao recommendation that physician specialists' opportuni-
cy costs be taken into account in the fee schedule. It makes no sense to differentiate based on opportunity
costs for one group, but not another. If the PPRC wishes the work component of the RVU to reflect different
costs of human capital, then all RVUs for all practitioners should be so modified.

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The PPRC states that when recommending payment levels for "limited license practitioners," (LLPs) it "looked for convincing evidence that the services of these practitioners are either the same as or different from the services of doctors of medicine or osteopathy." Because it was not able to find convincing evidence of their difference, the PPRC concluded that they should be paid the same.

When approaching the question of NPPs (primarily NPs and CNMs), however, the PPRC looked for convincing evidence of the sameness of services provided. It acknowledged that the current system is based on a series of political decisions, but insisted that,

"the body of literature on NPPs and unpublished information provided by professional organizations do not produce definitive evidence that the CPT-defined services of NPPs and physicians are the same." An often-cited Office of Technology Assessment report concludes that the care provided by NPs, PAs, and CNMs is of equivalent quality to physician care when these NPPs are practicing within their scope of practice. But this report stops short of saying that the services are the same.

The PPRC declined, therefore, to recommend elimination of the payment differentials for NPPs, including NPs and CNMs. It did, however, recommend that the same bonus payment incentives received by physicians practicing in Health Personnel Shortage Areas be similarly extended to NPPs, based on their recognized importance as "providers of primary care services in underserved areas." HCFA, however, in its final rules issued in November,

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230. LLPs are those practitioners defined as physicians in 42 U.S.C.A. § 1395x(r) (1992) who are not MDs or osteopaths. Thus, the term includes dentists, podiatrists, optometrists and chiropractors.
232. See id. at 179-82.
233. Id. at 184.
234. "CPT-defined" refers to a coding system, the Current Procedural Terminology manual, developed by the American Medical Association. It is used by both public and private payers to define and classify the reimbursable activities of physicians. AM. MED. ASS’N, PHYSICIAN’S CURRENT PROCEDURAL TERMINOL-ogy (1990). It has become clear, however, that many of the activities listed as physician services are in fact carried out by nurses and APNs. Jim Towers & Hurdis Griffith, Corner on Issues: Nurse Practitioners and Physician Payment Review, 2 J. AM. ACAD. NURSE PRACTITIONERS 35 (1990).
236. HPSAs are defined in terms of primary care services, and, not surprisingly, the availability of “physicians” and “medical” care. See id. at 197, n.13.
237. Id. at 197.

Ironically, one basis for the recommendation that the “bonus payments” be extended to NPPs was that it would “encourage more NPP collaboration with physicians and, in turn, enhance the viability of medical practices, particularly in rural areas.” Id. at 198. This rationale perpetuates the primacy of “medicine” over “health”, while it simultaneously acknowledges that NPPs, especially NPs and CNMs, are cost-effective providers of quality care.

237. Id. at 197.
1991, rejected this recommendation, noting that the Social Security Act provisions allowed “bonus payments” incentives only for physicians.238

One commentator who has followed the reimbursement issue noted that PPRC commissioners were openly critical at public meetings of the general quality of research describing NP performance. [They] used hearings to soundly scold NPs for failing to answer basic questions, such as “What do NPs actually do?” “How is their care the same as or different from physicians?”239

Seemingly, the research deficiency which troubled the PPRC was formalistic. That is, the studies of APN performance did not document in minute detail “how” or “what” they did; they merely documented that the quality of the services they provided is equal to that of physicians providing the same service.

Congress asked the PPRC to study the problem of differential payment under Medicare and to provide recommendations. The PPRC’s study of LLPs and NPPs was methodologically flawed, however, by the assumption that the status quo was correct absent definitive evidence to the contrary. This allowed the PPRC to avoid the difficult question of whether the status quo is actually equitable and efficient. More accurate research is needed on the actual services of various provider groups in order objectively to assess the ways in which they are the same, and the ways in which they are different. The PPRC expressed reservations about the continued use of the term “physician” for those providers it considers LLPs.240 It may be that further study will indicate that APNs should indeed be paid some slightly smaller amount than MDs for comparable services; if that is the case, however, so should those other providers who are also less extensively trained than MDs. By merging the categories of LLP and NPP, a more equitable solution may result. In any event, APNs should be explicitly reimbursed on the basis of the fee schedule, rather than being relegated to a hybrid category of reasonable charge plus RBRVS cap.

Changing the differentials between physician and NPP reimbursement can be accomplished only through congressional amendment of the Social Security Act. Although the courts have not ruled on the validity of paying APNs at a

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238. 56 Fed. Reg. 59607 (1991). The HCFA did authorize, however, a continuation of an overpayment of physicians, in that “services of non-physicians [including APNs] that are covered incident to a physician’s service [will] be paid [to the physician] under the fee schedule as if the physician had furnished the services.” Id. at 59523.


different level than physicians, other provider groups who have challenged similar provisions have been unsuccessful.²⁴¹

3. Conclusion

For NPs and CNMs, the question of whether to seek equal reimbursement with physicians is a difficult one. Financially, it is clearly desirable. In addition, because Congress and the PPRC have embraced the equity argument that the same services should be paid at the same rate, it would seem logical to extend this idea to all providers. On the other hand, in this time of cost control one of the most persuasive arguments for expanding reimbursement coverage for APN services has been the potential cost savings of using such providers to furnish primary and preventive care. To seek equal reimbursement seems at first to weaken or eliminate this justification. On balance, however, the principle of equity is powerful enough to override the cost-saving argument. It does not seem fair, or economically sound, to ignore the differing opportunity costs of various physician groups, and then to require careful analysis of the opportunity costs of NPPs.

Perhaps more important than the actual level of reimbursement is the problem at the state and federal level of the very limited range of procedures for which NPs and CNMs are reimbursed. To restrict federal reimbursement of CNM services to those in the maternity cycle is to leave out a large portion of the gynecological and family planning care which they are well qualified to provide. Likewise, limiting direct reimbursement for NPs to rural health clinics dramatically impairs their ability to provide high quality care to diverse populations. Broad spectrum change is required in order to solve these many problems.

IV. Proposals for Change

States and the federal government, for reimbursement purposes, should move quickly and decisively to remove existing barriers to effective APN utilization. In so doing, legislatures should focus on the following principles.

A. Scope of Practice

First, in defining scope of practice, states should eliminate all reference to mixed-regulator entities, and vest sole governmental authority over advanced practice nursing in the BON. That body, in addition to consulting continually

²⁴¹ Bussey v. Harris, 611 F.2d 1001 (5th Cir. 1980) (physician’s assistant not eligible for reimbursement under existing regulations); Physicians’ Education Network v. Department of HEW, 653 F.2d 621 (D.C. Cir. 1981) (Congress has power to define scope of reimbursement for optometrists).
and informally with other health care providers’ regulatory agencies, might find it useful to create an advisory committee, comprising representatives from other health care disciplines, to assist it in developing particular policy positions. However, consistent with the licensure mechanisms governing the other professions, the direct regulation of APNs would be carried out by the Board of Nursing alone.

Second, legislatures should amend their Nurse Practice Acts to include both a specific acknowledgement of advanced practice nursing and a basic definition of an APN. In this regard, the fewer references made to specific categories of advanced practice, the better. For example, NPs, CNMs, certified registered nurse anesthetists242 and clinical nurse specialists could all be covered by the following definition of an APN:

a registered nurse licensed to practice in this state who, because of specialized education and experience, is authorized [certified]243 to perform acts of prevention, [medical] diagnosis and the prescription of [medical], therapeutic, or corrective measures under regulations adopted by the BON.244

Such a definition legally recognizes the APN role and empowers the BON to develop and implement regulations specifically applicable to APNs. The inclusion of the two references to “medical” are bracketed to indicate their optional nature. Ideally, no qualifying language for diagnosis and treatment is necessary. APNs, based on their education, training and individual professional judgment, will diagnosis and treat only those conditions as to which they are competent. And the shared or overlapping roles of nursing and medicine, which will continue to expand as health and health care evolve, make it difficult to distinguish neatly between nursing and medical diagnosis. On the other hand,

242. While the practice of nurse anesthetists in the administration of anesthetics is not commonly thought of as acts of diagnosis and treatment of illness or pathology, their scope of practice may require elements of diagnosis and treatment in the management of the patient during anesthesia related to the prevention and/or treatment of complications that may arise from the anesthetic, the concurrent medical intervention, or the patient’s previous physical status. While their services are provided on the basis of a physician referral and/or in emergencies, their scope of practice entails selecting, obtaining, administering, and in some instances the causing of another health provider to administer controlled substances and the application of restricted medical devices. While a variety of state appellate court decisions have confirmed CRNAs’ authority to make these selections (usually on the basis of common practice), statutory and/or regulatory authority for prescriptive authority within their scope of practice (anesthesia management, emergency resuscitation, airway management and ventilatory/respiratory support, and pain management) would significantly clarify the professional role that has characterized CRNA practice for over 100 years. Further, it would obviate attempts by malpractice attorneys to allege surgeon liability for the acts of CRNAs, due to the latter’s lack of prescriptive authority.

243. “Certified” could be used to mean certification by the state as a form of official acknowledgement, or certification by a national certification body recognized by the state BON.

244. See the nearly identical statutory language in the Alaska Nurse Practice Act, ALASKA STAT. § 08.68.410(1) (1991).
the disabilities of history remain. The continued carving out of nursing practice from the traditionally all-inclusive domain of medical practice, and the continued existence of “unauthorized practice of medicine” prohibitions in most states, suggest the wisdom of including the word “medical” in the Nurse Practice Act itself.

Third, legislatures should modify their statutory definitions of the practice of registered or professional nursing to include those acts of APNs authorized under regulations adopted by the BON, and they should further specify that the BON is empowered to promulgate such regulations for APNs. These revisions would clearly express the legislature’s intent to recognize officially the advanced practice role and specifically to confer regulatory authority upon the BON. Such a step would forestall the challenges that have been brought in some states to vaguely worded statutory provisions concerning the BON’s authority to adopt such rules.

Finally, in keeping with the spirit of the previous suggestions, legislatures should eliminate any statutory requirements for formalized APN/MD collaboration or practice agreements, as well as for physician supervision or direction. As recognized health care professionals who are fully competent within their own scope of practice, APNs routinely collaborate with other providers. Their professional ethics and their judgment require them to do so. Legislative efforts to mandate such actions are therefore unnecessary, and hence somewhat insulting. Similarly, mandating physician supervision or direction is unwise. Such requirements not only represent an inappropriate intrusion into APNs’ professional judgement and expertise, they also result in unrealistic strictures that are either widely ignored or all too rigidly adhered to in practice. Furthermore, they often create the intolerable situation of “privatizing” the state licensing function by conditioning an APN’s scope of practice upon the dictates of one physician. This unfettered delegation of governmental power to private actors poses fundamental legal and significant policy questions.

B. *Prescriptive Authority*

These steps to redefine APNs’ role, and their scope of practice, will not only clarify their authority to diagnose and treat, but will also eliminate the multiple problems they encounter in prescribing. Freed from requirements for physician supervision, however defined, APNs will be recognized as “independent” practitioners, a status that will avoid any confusion on the part of the DEA or others as to their “plenary” authority to prescribe controlled substances within their scope of practice. In this regard, legislatures may choose either to statutorily acknowledge that APNs may prescribe drugs contained in schedules II through V of the Controlled Substances Act, or to leave such specification to their BONs. In either case, APNs’ prescriptive authority, as one aspect of
the scope of practice, would be defined by and conditioned upon compliance with the regulations promulgated by the BON.

C. Reimbursement Reform

Reform is also urgently needed, on both the state and federal levels, in provisions for APN reimbursement. While revising states' scope-of-practice authorizations to acknowledge APNs' proven practice competencies will significantly enhance the public's access to quality care, much of this potential will be lost unless these providers can be appropriately compensated for their services.

States that have not done so already should enact non-discrimination requirements for health insurance or health care service plans and contracts. This step would ensure that any service covered when performed by any other practitioner would be covered when provided by APNs acting within their legally authorized scope of practice. These nondiscrimination requirements would extend to forms of payment, so that if direct reimbursement is available to one type of provider it is available to all, at their option. Finally, all states should extend their Medicaid regulations to reimburse APNs' services. This would assure their compliance with federal Medicaid requirements for reimbursement for CNMs' services and Family and Pediatric NPs' services, and at the same time allow them to take advantage of the current federal option, or proposed federal requirement, of including care provided by other NPs within their Medicaid reimbursable services.

In addition to these proposed state actions, significant reform is necessary at the federal level in the Medicare and Medicaid provisions for APN care. Although the federal government has made some progress in recognizing and rewarding the valuable role of these providers, the current reimbursement schemes reflect many of the same problems previously identified in the states' regulatory approaches to APNs. For example, some Medicaid and Medicare reimbursement is limited to a narrow range of services within the APN's scope of practice, and/or to services provided in specified geographic or practice settings, such as rural areas and skilled nursing facilities. Also, eligibility for coverage is often dependent upon physician collaboration or supervision, so that the possibility of independent practice is, in fact, limited, even when state laws technically allow it. Similarly, direct reimbursement is often narrowly circumscribed, resulting in only indirect payment for APN services furnished as incidental to a physician's services. Finally, the current federal provisions dis-

245. Currently, Medicaid requires states to reimburse CNMs, even if they are not supervised by a physician. However, as noted previously, some states' licensure requirements impose physician supervision, thereby frustrating the opportunities of CNMs both to practice independently and to receive direct reimbursement for their services. See RURAL HEALTH, supra note 9, at 24.
criminate between and among different specialty categories of APNs, allowing payment for Pediatric NPs’ care, for example, while not allowing for that of School Health NPs.

Congress should continue to promote the most effective use of APNs by revising the Medicaid and Medicare laws to cover those services provided within their scope of practice. Furthermore, direct reimbursement for APNs should be the norm, rather than indirect payment through the billing physicians. Specific provisions could be enacted, as appropriate, for payment for hospital or institution-based APN services, thus accommodating the current policy goal of “bundling” health care services. These steps would help alleviate the public’s lack of access to quality care, and they would also encourage or reinforce the state reforms recommended above to remove the barriers to safe and effective APN practice.

One final, and no doubt controversial, reimbursement proposal should be noted, and that concerns the amount that APNs should be paid for their services under governmental health care programs such as Medicare and Medicaid. The current federal activity concerning reimbursement generally makes this an especially appropriate time for APN payment reform.

Assisted by the HCFA, the PPRC and the Department of Health and Human Services, Congress has undertaken a major restructuring of its payment system for physicians. Although detailed refinement and implementation of the reforms will continue for some time, at least three guiding principles have emerged. One is that the previous unfettered, retrospective fee-for-service payment system is unworkable. It is blind to overall costs, and hence immune to cost-containment efforts, and in some ways it actually “ratchets up” the amount of care given to each patient by paying for each additional service, regardless of the need for it. Second, the previous payment scheme discounted the value of primary or basic care, and surely of preventive care. Instead, it valued highly, and thus encouraged, the delivery of episodic, invasive and technologically sophisticated health care procedures. As a result, the current reforms are designed to set a pre-determined value for each service and to correct for the previous undervaluation of primary care services.

The third principle is one of equity: the same service should result in the same payment, regardless of the specialty of the provider. As currently proposed, this equity-of-payment rationale extends only to physician providers (MDs and DOs), including “limited license physicians” such as dentists and optometrists. It does not apply to “non-physician providers” such as APNs.246 Thus, under the current federal policy proposal, a general practitioner or

246. See discussion of the PPRC rationale for this distinction, noted at text accompanying notes 223-241 supra. This “different pay for different providers who perform the same service” pattern is not new. See Clark C. Havighurst & Nancy M. P. King, Private Credentialing of Health Care Personnel: An Antitrust Perspective—Part Two, 9 AM. J.L. & MED. 263, 275 (1983).
obstetrical physician who delivers a baby will be paid $X$, and a CNM who
delivers a baby will be paid less-than-$X$, most probably some percentage (65%)
of $X$-payment available to the MD.

This example posits in its most basic form the question of what level of
payment should be provided for APN services. It also highlights the tensions
between providing the public with increased access to quality care and containing
the overall costs of care. There are no simple resolutions to these questions,
but there are some distinctly bad solutions that appeal specifically because of
their illusory simplicity. Chief among them is the propensity to use the physi-
cian and physician-provided care as the benchmarks for valuation of and
payment for all health care providers' services. This freezes in place and
perpetuates the now-discredited assumption that medicine and medical doctors
are intrinsically the norm for the kind and quantity of care delivered. They are
not the most numerous providers of care, nor is the care they give the only
effective care available. They are no doubt valuable practitioners, greatly adding
to the health status of our population. But so, too, are many other health care
providers, including APNs, whose care overlaps with that of physicians and,
in some ways, extends beyond it. Any scheme that uses medical services as the
starting point for valuation will necessarily treat as "other" the care provided
by non-physicians, and in the process it will unduly constrain the potential
universe of ways of thinking about health. The present is at best an amalgam-
ation of past political, economic, ideological and other influences. No where
is this truism more pronounced than in our current health care system. Genuine
reform, which is urgently needed, cannot succeed unless those who are shaping
its contours are clearly cognizant of the reasons for and limitations of the status
quo. Setting out to change the status quo, without questioning its underlying
norms, is futile. Therefore, changing the payment system for physicians, while
using the status quo ante physician-based model for valuation of non-physician
providers, is inherently inconsistent.

Until Congress devises a sophisticated payment/valuation scheme that takes
into account the new diversity of practitioners who provide the same, as well
as different, services, it should adhere to its previously identified principles in
specifying the payment levels for APNs. Consistent with its increased valuation
of primary care, and in keeping with its equal-pay-for-equal-services commit-
ment, the assumption should be that APNs providing services within their scope
of practice should be paid the same as physicians providing the same services.
APNs, after all, have been shown to deliver equivalent, and sometimes better
care than that of physicians in those activities that fall within both providers’
scopes of practice. Refusing to acknowledge and factor this into the payment
formula elevates the form of care, and the status of the provider, to the preemi-
nent values, with a corresponding devaluation of the substantive concern for
quality of outcome or health status.
At the very least, there is no logical basis for accepting the disparate treatment proposed by the PPRC for APNs and "limited license physicians" [LLPs] who are "physicians" only in the strained statutory sense resulting from a definition in the Social Security Act. Ironically, their usual scope of practice is more narrowly defined than that of APNs, limited to treating conditions related to only one part of the body, such as teeth and gums, feet, or eyes. The value of their skills and treatment is not in question; what should be questioned is the basis for treating them like physicians, when their scopes of practice, and the covered services within those scopes, are so limited. At a minimum, if distinctions are to be made at all between and among these various providers, it would seem more defensible to group APNs and LLPs together in one category and physicians (MDs and DOs) in another. The mere act of categorizing, of course, does not address the basic question of how to value services, but at least the APN/LLP and MD/DO groupings make more sense.

Some may argue that paying APNs on a par with physicians (however defined) for similar services would be counterproductive in that it would lead to an increase in overall health care expenditures. The concerns embodied in such an argument are not trivial nor easily allayed. The most that can be said in response are the following observations.

First, "on a par" could mean that payment for physicians' services would decrease. That is, instead of raising APNs' payment to the current level of physicians' reimbursement for the same services, both types of providers could be paid for the same services at a somewhat lower rate than physicians receive now. While this may be a unpalatable prospect for some, it would help to contain costs while simultaneously enhancing both the availability of quality care to larger numbers of our population as well as allegiance to the principle of equitable pay for providers' services.

Second, it must be acknowledged that no matter how efficiently our health care resources are managed and restructured, providing increased health care to the thirty-four million or so people who currently have little or no access to care will increase costs. Savings at the margin can be achieved by more rational and innovative delivery systems, but total expenditures will rise nonetheless. In addition, one should be careful to distinguish costs from cost-effectiveness. For example, if two different providers are paid the same amount for an identical additional service, the cost of care will increase by an identical amount. However, cost-effectiveness cannot be determined until a relative assessment is made of patient outcomes or changes in health status. If one patient's outcome is better than the other's, although the costs were identical, the cost-effectiveness of the services would differ. In short, cost is only one, albeit an important, factor in the larger cost-effectiveness equation.

Furthermore, it is obvious that the costs of heroic, acute health interventions exceed the costs of primary, preventive care, at least on a per-patient basis and
perhaps for the entire patient population. Having said this, however, one must quickly add that preventive, basic care is neither free nor intrinsically cheap. It is only "cheap" in relation to the expenses incurred by delayed care, if that delay allows or fosters increased morbidity. It is cheaper yet if one factors in the increased costs usually attendant upon acute intervention, such as hospitalization, extended therapy and the like. And these are only direct, money factors; the personal "costs" of the patient's suffering and anxiety only add to the true calculus. Primary care, then, may be less costly per patient, and the social costs of prevention or early treatment may be less, but such services are not cost-free. However, the real or potential cost-effectiveness of primary, preventive care should lead either to a redistribution of the fixed amount of health care dollars to enhance such care, or an acknowledgment that, even though such care will result in a net increase in costs, the results are worth it.

What, then, does this mean for ANPs and their enhanced role in the delivery of health care? Simply this: ANPs (including clinical nurse specialists and nurse anesthetists) have repeatedly been shown to provide high-quality care that is at least equivalent to that provided by physicians for similar services. The actual costs of their care traditionally have been lower than those of MDs' care for two principal reasons: APNs are paid less than MDs for similar services, and they use less invasive treatment modalities than do MDs. Even if payment for their services were increased to that of MDs, their overall costs would still be lower because of their less-expensive treatment preferences. Therefore, the net dollar increase resulting from a parity of payment would be less than one might first think. Furthermore, in many instances the patient health status or outcome resulting from APN care is better than that derived from physician-provided care. This results in lower social costs by reducing both the need for follow-up care and the time of continued patient impairment. Thus, even if APNs were paid the same as physicians for similar services, both the direct cost and the indirect costs for health and health care would be lower.

In many ways the promising results just described form the "worst case" scenario that could emerge from a policy decision to compensate APNs and physicians at equivalent levels. That is, there would be a net increase in expenditures, but the greater cost- and care-effectiveness of APNs would result in lower marginal cost for increased health status. And that is the bad news! The good news or "best case" scenario is equally likely: freed from unnecessary restrictions on their practice, and encouraged by compensation that appropriately reflects their true value, APNs could truly lead the way in bringing about fundamental changes in our health care delivery system. Their care integrates the physical and the psycho/social aspects of patient health status, thus correcting for an all too prevalent fragmentation of care that is both expensive and less than effective. And their experienced emphasis upon early intervention and ongoing management of patient health status perfectly positions them to attend
to the significant needs of large segments of our population, such as the elderly, the chronically ill, and adolescent girls whose social and economic conditions accentuate the risk of early and complicated pregnancies. Similarly, their innovative implementation of home health care programs and nurse-managed community clinics can be models for the necessary restructuring of our delivery systems.

If state and federal governments implement the specific proposals enumerated above, and especially if they understand and embrace the vision of advanced practice nursing that animates these proposals, they will effectively carry out their mandate both to protect the public and to enhance the availability of high-quality, cost-effective health services. APNs are proven providers, and removing the many barriers to their practice will only increase their ability to respond to the pressing need for basic health care in our country.

Conclusion

The potential of advanced practice nurses to increase access to good care at a reasonable cost is nicely summarized in a 1991 study of physician and NP clinical decision making. The providers, drawn from a stratified random sample of internists, family practitioners, and general practitioners listed in the AMA census files and from a list provided by the American Academy of Nurse Practitioners, included 501 physicians and 298 NPs. During telephone interviews, these practitioners were presented with the following case vignette of a patient with abdominal pain:

A man you have never seen before comes to your office seeking help for intermittent sharp epigastric pains that are relieved by meals but are worse on an empty stomach. The patient has just moved from out of state and brings along a report of an endoscopy performed a month ago showing diffuse gastritis of moderate severity, but no ulcer. Is there a particular therapy you would choose at this point, or would you need additional information?248

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248. Id. at 694. To assess any difference in clinical decision-making depending upon the age of the hypothetical patient, one-third of the physicians were told that the patient was in his late thirties, and two-thirds of the physicians were told that the patient was in his late seventies. All of the NPs were told that the patient was in his late seventies. The results noted herein reflect the responses to the vignette for the elderly patient, since only that data present points of comparison for physicians and NPs.
During the interviews, participants were repeatedly asked if there was any additional patient information they would want before formulating a treatment plan. If they asked, standardized responses to questions revealed the following:

medications currently used: two aspirin tablets four times daily for stomach pain; social or psychological history: the patient’s son was killed in a car accident 8 weeks ago; diet: five cups of coffee per day, one large meal (at lunch); smoking: two packs per day; alcohol: two cocktails with lunch and two glasses of wine in the evening; and other previous medical history and review of systems: unremarkable.\(^\text{249}\)

As noted in the study results, “[s]triking differences were found in the diagnostic and therapeutic style of nurse practitioners when compared with physicians.”\(^\text{250}\) For example, twice as many physicians as NPs chose to initiate treatment without seeking any additional information about the patient. When additional information was sought, NPs were “far more likely to ask about the patient’s diet and psychosocial situation.”\(^\text{251}\) When a therapeutic intervention was proposed, 63% of the physicians opted to write a prescription,\(^\text{252}\) whereas only 20% of the NPs chose to do so. Rather, the NPs more often recommended “a change in diet or counseling to help the patient deal with stress... which would have been more appropriate in the case of a patient with gastritis and high aspirin, caffeine, alcohol, and tobacco intake.”\(^\text{253}\)

The fact that “[f]ar more nurses than physicians elicited the basic historical information necessary to make an intelligent treatment plan for the patients presented”\(^\text{254}\) has inescapable implications for both the quality of care and its cost. As the study authors observed, “Many have argued that the health care system must find a way to provide reimbursement for the time spent in history taking and patient counseling. While this is probably true, it is interesting to note that in this instance nurse practitioners, who are reimbursed at a lower level, appear to have performed these tasks more completely.”\(^\text{255}\)

This study captures, in a nutshell, both the promise of advanced practice nursing, as well as the shortcomings of the present health care delivery system. Much of that promise can be realized if state and federal governments implement the specific proposals enumerated above. Especially if they understand and embrace the vision of advanced practice nursing that animates these

\(^{249}\) Id. at 694.
\(^{250}\) Id. at 696.
\(^{251}\) Id.
\(^{252}\) The study’s authors noted that the physicians’ prescription of choice, a histamine antagonist, is of unproved efficacy when used to treat abdominal pain without an ulcer, as in the case vignette presented.
\(^{253}\) Id. at 697.
\(^{254}\) Id.
\(^{255}\) Id.
proposals, they will effectively carry out their mandate both to protect the public and to enhance the availability of high-quality, cost-effective health services. APNs are proven providers, and removing the many barriers to their practice will only increase their ability to respond to the pressing need for basic health care in our country.