Nursing and the Privilege of Prescription, 1893-2000

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CHAPTER 6

Nurse Practitioners and the Prescription Pad, 1965–1980

This was what I had been waiting for, the chance to return to my birthplace and work among my people. . . . It was a challenge—one I wanted to be prepared for—and as a condition of acceptance, I asked to be sent for pediatric nurse practitioner training at the University of Colorado Medical Center. The four-month intensive course gave me skills and knowledge which proved a tremendous help in managing conditions for patients of all age groups on the reservation.

Lorraine M. Durran, RN, PNP, Indian Health Service

Pediatric nurse practitioner Lorraine M. Durran, an Indian by birth, was describing the opportunity presented to her in 1970. Her mother, who had been in charge of the Indian Health Service (IHS) health center on the Southern Ute Reservation in Colorado, had just retired. For Lorraine Durran, it was her chance to “make life better” for her people. Her Navajo father had worked with the Bureau of Indian Affairs, and Durran had grown up in Gallup, New Mexico, near the Navajo Reservation. Durran was familiar with the Indians’ poverty and poor health, and as a teenager she had been determined to become a nurse. After graduating from a government boarding school and then the University of Colorado School of Nursing, Durran had joined the Colorado Department of Health as a public health nurse in 1967. When she was assigned to work with the Navajos in Shiprock, New Mexico, Durran again realized the Indians’ desperate need for early preventive care, particularly noticing that numerous clinics were cancelled because of the “dwindling number of doctors” in the Navajo region. According to her, “My visits to patients’ homes, where I recognized health problems and had definite ideas on how they should be managed, reinforced my conviction that
the nurse was an untapped resource for the physician-short Federal agency.”4

Durran was also aware that she needed more than her bachelor’s degree in nursing if she were to be adequately prepared to care for patients in the remote desert region. So, when faced with the opportunity to succeed her mother as head of the IHS clinic on the Southern Ute reservation in 1970, she requested nurse-practitioner training at the University of Colorado Medical Center. It was an excellent choice.

The four-month-long program had been in existence since 1965, when assistant professor of nursing Loretta Ford and pediatrician Henry Silver opened it, seeking “to bridge the gap between health care needs of children and families’ ability to access and afford primary health care.”5 Their intent was to educate graduate pediatric nurses to provide health care services in rural clinics, essentially expanding the nurse’s role in well-child care.6 According to Ford, an experienced public health nurse who served as the co-director of the project, “I was well aware of the unmet health needs of people of all ages in the community and confident that nurses could be prepared to meet those needs by facilitating access and promoting continuity and coordination of care.”7

The demonstration project, the first of its kind, was funded by the Commonwealth Foundation and was designed to prepare professional nurses to provide comprehensive well-child care and to manage common childhood health problems. The idea was that the nurse practitioner (NP) would work in a collaborative, collegial relationship with the physicians, not as a physician substitute.8 The program, which certified RNs as pediatric nurse practitioners (PNPs) without requiring a master’s degree, emphasized health promotion and the inclusion of the family in pediatric care.

The Colorado PNP curriculum prepared Durran for the various clinical procedures she would need to perform when she saw patients on her own in the field or when she worked alongside physicians in a clinic. Nurse-practitioner students learned to take health histories and complete physical examinations. They also learned how to devise a list of differential diagnoses and to order laboratory tests, x-rays, and electrocardiograms (ECGs) to “rule out” certain conditions in order to determine a diagnosis. Based on their assessments, PNPs made treatment plans that included medicines.

Pediatric nurse practitioners were to work with physician supervision. In Durran’s case, Indian Health Services’ (IHS) contract physicians David Grenoble, MD, and Chester Wigton, MD, served as her backup. She could also call Frederick Pintz, MD, the IHS director of the Sante Fe unit, for consultation. According to Durran, she was also given “wide latitude in making referrals to specialists in Durango.”9
Specialization and the Shortage of “General Practice” Physicians

Pediatric nurse practitioners’ skills could be used in a variety of settings, not only on Indian reservations. PNPs were prepared to work in any pediatric practice; however, the original intent of the Colorado program was to prepare NPs to work in underserved rural areas of the country. There were simply not enough general practice physicians in the country, and they were especially scarce in small towns and villages in rural America.

Coinciding with the rise of specialization in medicine and the spread of intensive and coronary care units in the late 1960s, fewer physicians were choosing to enter general practice. Instead, increasing numbers of doctors were choosing to work in specialties such as cardiology, neurosurgery, and nephrology and were clustering near medical centers in cities and suburbs. Meanwhile, as the trend drew increasing numbers of physicians away from primary care, “report after report issued by the American Medical Association (AMA) and the Association of American Medical Colleges . . . decried the shortage of physicians in poor rural and urban areas.”10 At the same time, consumers across the nation were demanding accessible, affordable, and sensitive health care, while health care delivery costs were increasing at an annual rate of 10 percent to 14 percent.11 Indeed, many considered the US health care system to be “too specialized, too centralized and inaccessible, too impersonal and too disease oriented.”12 The problem was that incentives in income, status, and lifestyle for physicians favored specialization.13

Concurrent with these trends, in 1965, federal funds made available under President Lyndon B. Johnson’s “Great Society” ensured financial support for programs designed to reach the poor. Part of that funding, begun a year earlier, included the Nurse Training Act of 1964 (HB 10042), which authorized millions of dollars over five years for nursing school construction, special projects and planning grants, student loans and scholarships, and professional nurse traineeships. Its purpose was to strengthen and coordinate “existing programs aiding nurses’ education with a major new nationwide effort to alleviate critical shortages of nurses required for the health care of all citizens.”14

The funding came at a time when the nursing profession was struggling over two major issues: (1) educational preparation for entry-level practice, and (2) the purpose and focus of graduate nursing education. In 1965, the American Nurses’ Association (ANA) had unilaterally declared the Bachelor of Science in Nursing (BSN) the “entry into practice” degree,15 a decision that was “by no means universally accepted by the profession.”16 In fact, many nurse educators favored associate degree (two-year) and diploma school (three-year) preparation instead of the ANA’s proposed four-year collegiate education. At the graduate level, nursing faculty were
opening clinical nurse specialist programs in such areas as cardiac, neurosurgical, and nephrology nursing. Professors of nursing were also interested in identifying the nature of nursing and scope of practice, its theoretical frameworks, and “the differentiation between ‘caring’ and ‘curing.’”

So, when Ford and Silver introduced the idea of the pediatric nurse practitioner—a nurse who would diagnose and prescribe in addition to promoting well-child care—nurse faculty were concerned.

Controversy in Academia

For nearly a century, the nursing profession had been working to define its identity—separate from medicine. Now, faced with the concept of a nurse practitioner, “the great majority of America’s nursing deans were outraged. . . . To [them], the concept meant that the nurses would become ‘physician extenders,’ and that the profession would lose ground in its struggle to escape subordination to medicine.”

Tenured graduate faculty, “the power bloc in most schools,” supported the emerging clinical nurse specialist (CNS) role instead. Introduced by Frances Reiter in 1943 in an effort to return expert nurses to direct patient care, the CNS role epitomized clinical expertise in the profession. Many faculty wanted to reserve that title for nurses with a master’s education. Despite the opposition, other members of the faculty forged ahead with the establishment of NP programs (outside master’s programs) within their schools. Based on the Colorado project, post-BSN certificate programs sprang up throughout the country. According to Ford:

Although the initial goal . . . was to prepare nurses on the master’s level for expert practice, teaching and clinical research, that intent was altered in order to accommodate the pressing societal demands for health care. Shortly thereafter, came an explosion of quickly generated, short-term continuing education programs (some of which were devoid of academic standards) and products of variable quality. All of these programs used the name “practitioner.” Hence, adult nurse practitioners, school nurse practitioners, family nurse practitioners and others came into being before the first pediatric nurse practitioner project was completely evaluated.

In short, many programs awarded students an NP certificate after a few months of training. Students were not required to complete a master’s degree in nursing (MSN), yet they would work in an expanded, “advanced” role after they received the certificate.
Faculty concern over the focus of graduate education in nursing masked
the underlying issue—the separation of the discipline of nursing from that
of medicine. This issue manifested itself in the controversy over the fact
that nurse practitioners made “medical” diagnoses and prescribed medica-
tions, blurring the boundaries between medicine and nursing. Professor
and theorist Martha Rogers, RN, PhD, was one of the most outspoken
opponents of the NP concept, arguing that the NP role undermined nurs-
ing’s unique role in health care.24

While nursing professors addressed these issues—debating them in the
literature, in national conferences, and in endless faculty meetings—pro-
fessional groups and policy makers saw the possibilities of using NPs to
solve the “access to care” problems in rural America.25 Health policy
groups, such as the National Advisory Commission on Health Manpower,
issuéd statements in support of the NP concept.26 All agreed that an ideal
system would be staffed by “a mix of health care providers whose roles were
different from the traditional roles of the 1960s.”27 Shortly thereafter, three
innovations were introduced into the health care system: the nurse practi-
tioner, “family medicine” as a new medical specialty, and the physician’s
assistant.”28

If nurses in academe were upset about NPs, they were even more reac-
tive to the role of the physician’s assistant (PA) when Dr. Eugene Stead
introduced it at Duke University in North Carolina in 1965. Senior nurs-
ing faculty at Duke refused to consider a nurse-practitioner program. In
addition, the NLN refused to accredit an NP program. According to
Stead: “The idea of having an NP program for medical surgical nursing at
Duke, modeled after the PNP program established at Colorado, collapsed
because the National League of Nursing (NLN) refused to accredit a pro-
gram in which physicians would teach much of the curriculum.29
Frustrated by the nursing community’s refusal to collaborate to create this
new medical-surgical nurse practitioner, the physicians who conceived of
the idea concluded that the nurse leaders were “antagonistic to innovation
and change” and initiated a physician’s assistant (PA) program instead.30
Physician’s assistants (often experienced medical corpsmen who had just
returned from Vietnam) would share the knowledge base formerly
“owned” by medicine, but they would work under the license of the sup-
ervising physician.31 Relationships between PAs and NPs, at least at the aca-
demic level, continued to be fraught with tension as more programs de-
veloped. By contrast, at the grassroots level, physician’s assistants and nurse
practitioners began to work together.

Practicing physicians accepted both the PA and the NP. In Lorraine
Durran’s case, the local physicians “welcomed her assignment” to the area,
aware that she would improve health services to the Indians in Colorado.32
Educators might continue to argue over whether or not to prepare NPs in master’s programs, and whether or not the NPs could diagnose and prescribe, but it was too late. Across the nation, in individual practices, nurse practitioners and physicians were already working together in what would be called “primary care” in the future.\footnote{33}

Furthermore, studies were already being done to evaluate PNP’s effectiveness. In 1967, one study determined that PNP’s were highly competent in assessing and managing 75 percent of well and ill children in community health settings. In addition, PNP’s increased the number of clients served in private pediatric practice by 33 percent.\footnote{34}

An Idea Takes Hold

By the 1970s, Ford and Silver’s idea took hold. It seemed logical to use the two major health care professions, medicine and nursing, together to expand primary care. People living in rural areas needed health care providers, and local physicians were interested. So was the federal government. In the early 1970s, Health, Education, and Welfare Secretary Elliot Richardson established the Committee to Study Extended Roles for Nurses and charged it with evaluating the feasibility of expanding nursing practice.\footnote{35}

The committee concluded that extending the scope of the nurse’s role was essential to providing equal access to health care for all Americans. According to a 1971 editorial on the topic in the \textit{American Journal of Nursing}: “The kind of health care Lillian Wald began preaching and practicing in 1893 is the kind the people of this country are still crying for. . . .”\footnote{36} The committee’s report, published in November 1971, urged the establishment of innovative curricular designs for NP education in health science centers and increased financial support for nursing education.\footnote{37} It also urged national certification for nurse practitioners and developed a model nurse practice law that could be applied throughout the nation. In response, with mounting concern over the restrictive 1955 ANA definition of nursing practice, the ANA council suggested the following addendum to state nurse practice acts:

A professional nurse may also perform such additional acts, under emergency or other special conditions, which may include special training, as are recognized by the medical and nursing professions as proper to be performed by a professional nurse under such condition, even though such acts might otherwise be considered diagnoses and prescription.\footnote{38}
Despite the cumbersome language, the addendum’s meaning was clear: Intensive care nurses (including CCU nurses) could interpret electrocardiograms, defibrillate, start IVs, and give life-saving drugs according to standing orders. Nurse practitioners could diagnose and prescribe—as long as these acts were done under “special” conditions.

The Committee to Study Extended Roles for Nurses also called for further research related to cost-benefit analyses of the new role, as well as attitudinal surveys to assess its impact. The result was increased federal support for training programs for the preparation of several types of nurse practitioners, including family nurse practitioners (FNPs), adult nurse practitioners (ANPs), and emergency nurse practitioners (ENPs), among others.39

Private Funding and Demonstration Projects

Funding these programs was another matter altogether, and much of that funding came from private foundations. One such, the Robert Wood Johnson (RWJ) Foundation, was aware of the resistance of the NLN and the nursing professors. Nonetheless, committed to supporting the NP movement, the Foundation initiated a series of regional demonstration projects focused on the training and deployment of nurse practitioners. Begun in the early 1970s, the programs were “intended to move [the NP-physician team] from an experimental, single-site stage [in Colorado] to patient care networks covering many sites.”40 The University of California, Davis; the Utah Valley Hospital, Provo; the Tuskegee Institute, Montgomery, Alabama; the University of Tennessee Medical Center, Memphis; and the Frontier Nursing Service in Hyden, Kentucky were among those funded. Their purpose was to implement broad-based community networks of primary care clinics using nurse practitioners.41

All of the sites had special characteristics that made them excellent choices for demonstration projects. The University of California–Davis was a “land-grant institution that embodied the tradition of community service” and had a medical school specifically to prepare physicians for rural practice; Utah Valley Hospital had already organized a network of rural clinics; and Tuskegee, “under the leadership of Dr. Cornelius Hopper, became the base for a three-county rural health system employing state of the art communications technology.”42 However, the Robert Wood Johnson Foundation couldn’t have made a better choice for a model project than the Frontier Nursing Service. The FNS had a long history of meeting the health care needs of rural families in Appalachia using an established network of clinics. (See chapter 3.) Besides, the FNS was interested. According to the
RWJ Foundation: “With the advent of the nurse practitioner movement, the FNS decided that it would be advantageous for its staff and students to have dual training as family nurse practitioners.”

The FNS Opens a Family Nurse-Practitioner Program

During the winter of 1969, the management consultant firm Booz, Allen, and Hamilton evaluated the “health manpower situation in Kentucky (particularly in the Eastern portion of the state)” as well as “the present and future” role of the Frontier Nursing Service. After an extensive study, the firm concluded that (1) there was “a serious shortage of physicians and professional nurses in Kentucky, particularly in low income rural areas of the state”; (2) the FNS service had “demonstrated for nearly half a century the value of using a specially trained health worker to provide primary health care under the supervision of the physician”; and (3) the FNS had “proven its effectiveness in training nurse-midwives” for over 30 years.

Based on their findings, the management consultants recommended that the “FNS Graduate School of Midwifery be ‘expanded and modified . . . as part of a master’s degree program in comprehensive family nursing . . . through university affiliation, preferably with the University of Kentucky’ and that the FNS should establish a ‘graduate program in comprehensive family nursing’ and graduate ‘about 25 family nurse practitioners per year’.”

With financial backing from Robert Wood Johnson, the FNS family nurse-practitioner certificate program (FNP) opened in 1970. “The first class entered in June of that year, and the school changed its name to the ‘Frontier School of Midwifery and Family Nursing (FSMFN)’ to reflect its broadening educational role.” According to the school catalog, the “FNP would be a blending of nursing with selected medical and public health functions.” The traditional nursing role would be expanded to include basic diagnostic, treatment and preventive skills so that FNPs would be “able to provide assistance to families, whether they be living in Appalachia, inner cities or developing countries. . . .” With support from a three-year Primex Grant (1972–75), the program graduated over eighty students by 1974. By 1975 the FNS staff included “four physicians, 7 nurse midwives, 7 family nurse practitioners, 9 nurse-midwives/FNPs, 19 RNs and 5 LPNs. Of the 16 family nurse practitioners, nine were on the district clinic staff and seven were on the hospital outpatient clinic staff.” Together they served a population base of 15,000 and had over 66,000 patient care encounters in one year.
Guided by *Medical Directives* (formerly *Medical Routines*), as they had been in the past, the newly certified FNS nurse practitioners (along with the midwives and RNs) managed approximately 80 percent of the ambulatory care patients, “providing comparable patterns of care” to that of physicians.\(^{50}\) They also dispensed, furnished, and quasi-“prescribed” medicines—this time under a new system for the “Distribution of Drugs.”\(^{51}\)

Since the inception of the FNS in the 1920s, the FNS pharmacy had supplied each district clinic with stock quantities of the drugs authorized by the *Medical Routines*. The nurse would pour, label, and dispense the medicines according to the standing orders (in legal terms, doing so was both “dispensing” and “furnishing drugs”). However, the procedure was getting especially complicated now, because the FNS pharmacist needed copies of the prescriptions that the nurses were writing. The nurses could not simply hand the patient a packet of pills or a bottle of medicine, as they had in the past. The system was cumbersome and the process time consuming. Besides, errors were occurring, and keeping an accurate inventory was difficult. According to one description:

> . . . In her clinic, the nurse would have as many as 1000 Potassium Penicillin G 250 mg tablets, 2000 Ferrous Sulfate [iron] tablets, several pints of Gantrisin pediatric suspension [antibiotic sulfa drug], and in some cases, one or more gallons of elixir of Benadryl [antihistamine for colds and allergies]. After examining a patient and making a diagnosis, she had to count tablets, put [them] in containers, and write out and label a prescription. . . . The nurses were spending too much time . . . on the simple procedures of counting, pouring and labeling prescriptions . . . and errors were being made—such as inadequate labels of prescriptions . . . like . . . ‘shake well.’ . . . And the pharmacy had a difficult time . . . keeping an inventory.\(^{52}\)

To address these problems, the FNS pharmacist developed a new system for distributing medications. It consisted of “pre-typed prescriptions and prepackaged medications with proper labels attached.”\(^{53}\) The nurse in each district determined the number of prepackaged units she needed to stock her clinic. Except for “controlled drugs” (narcotics), which the nurse had to pick up herself, the prepackaged medicines were delivered to the clinics by couriers.\(^{54}\)

Some procedures in the new system were just like those in the past. The nurse saw the patient, diagnosed the condition, and consulted the medical directives. In the new system, however, instead of pouring medicines out
of large bottles into smaller ones and labeling the bottles, the FNP used the prepackaged drugs. According to the protocol, she pulled “the proper prescription and corresponding medications,” dispensed the drugs, and returned a second copy of “the prescriptions to the pharmacy each week by courier rounds.” As one pharmacist described the procedure:

Prescriptions themselves were pre-typed with blanks for certain pieces of information the nurse would complete before dispensing the medication. On the prescription there is the name of the drug, strength and quantity dispensed, directions to the patient, and the international disease code number. On the label are the directions, name and strength of drug, lot number and expiration date. The second prescription is the prescription [that is returned to us] after the nurse practitioner or midwife has dispensed the drug. . . . They must indicate the name of the patient, age, address, and circle the appropriate disease code number. . . . When the pharmacists and physicians review the prescription, they first check to see that the prescription is filled out accurately. They then determine the disease by looking at the disease code and check to see if the proper medications have been dispensed. For example, [on one prescription] the nurse has written for Gantrisin Pediatric suspension. The disease circle is 381. We look up 381 and find that the number represents acute otitis media [ear infection]. The patient being four ears old, the Medical Directives recommend Gantrisin, Penicillin and a decongestant. . . . We [then check] to see if the nurse has given the patient the other two drugs. . . . In this case, the Directives were followed and the physician “then” [sic] signs the prescriptions. Had there been a question, the nurse would have been asked to explain.

The new system was tidy. The NP saw the patient, diagnosed the condition, chose the appropriate drug from a list of possibilities, computed the dose, and wrote two prescriptions, one for the patient and one to be returned to the pharmacy. She then discussed with the mother the administration of the drug, the times it was to be given, the side effects that might occur, and any other special instructions. The supervising physician reviewed her decisions and signed the prescriptions “once a week.”

Academia Comes Along

While some of these early programs (like the Frontier Nursing Service) were graduating students and implementing new protocols for practice, university faculty continued to debate whether or not the NP concept was a good idea
and whether or not NP education should take place in master’s programs. In the late 1960s through the mid-1970s, most NP programs were the four-month, certificate-awarding variety.57 Most were not housed in master’s programs. However, there were a few exceptions. A “handful of leaders on graduate nursing faculties” envisioned primary care as an important new scholarly focus and supported the idea of incorporating the role into their master’s degree programs. These faculty members, some of whom were deans, applied for funding from Robert Wood Johnson or supported other faculty in doing so. Among these deans and faculty members were Claire Fagin at the University of Pennsylvania; Ingeborg Mauksch at the University of Missouri at Columbia; Loretta Ford, who was now at Rochester University; and Rheba de Tornyay at the University of Washington. With their advice, the Foundation provided funds to Indiana University, Pace University, the University of Pennsylvania, the University of Rochester, Seton Hall University, and the University of Washington.58

In the late 1960s and through the 1970s, other schools applied for funding to the Division of Nursing, The United States Public Health Service (USPHS). The federal government was awarding grants under the Nurse Training Acts of 1965 and later of 1975 (P.L. 94–63). Title VIII, Section 822 of the 1975 Training Act specifically designated funds for NP education.59

Figure 6.1: Sample prescription of gantrisin pediatric suspension. FNS, UK-SC
The University of Pennsylvania was one institution that received funding from the RWJ Foundation. The program there, under the direction of Associate Professor Joan Lynaugh, graduated 136 students between 1978 and 1982. Faculty at The University of Virginia (UVa) sought federal funding. Internist Dr. Reginia McCormick developed an adult NP program at UVa in 1970 (later administered by Dr. Robert Reed and Susan Lynch, RN). In 1972, Assistant Professor of Nursing Barbara Brodie and pediatrician Jake Lohr received Division of Nursing funding to open a PNP program within the nursing school’s master’s program. The University of Virginia later opened an emergency nurse-practitioner program, the first in the nation, directed by Denise Geolot, RN, MSN, and Richard Edlich, MD, director of emergency medical services at UVa. All were supported by the Division of Nursing. By the end of 1978, the Division of Nursing was supporting eleven nurse-practitioner programs. An increasing number of these were master’s programs—the majority of which were in the specialty areas of family and pediatric nursing. Academia had come along after “ten years of intra-disciplinary argument.” In 1974, a group of faculty met in Chapel Hill, North Carolina, in the hopes of standardizing NP educational programs at the master’s level.

Grassroots Collaboration and Negotiation

Individual physicians increasingly accepted NPs in their medical practices. Working together in offices and clinics, nurse practitioners and physicians established collegial relationships, negotiating with each other to construct work boundaries and define the terms of their collaborative practice. Nurse practitioners shared clinical decision-making skills with physicians, “collecting data through physical examination and history taking, ordering diagnostic laboratory tests and x-rays, formulating diagnoses and prescribing treatments”—tasks that had defined the practice of medicine for centuries—or at least since the founding of the AMA.

According to historian Julie Fairman, “In the NP-MD dyad, negotiations centered on the NP’s right to practice an essential part of traditional medicine: the process or skill set of clinical thinking . . . to perform a physical examination, elicit patient symptoms . . . create a diagnosis, formulate treatment options, prescribe treatment and make decisions about prognosis.” In these negotiations, NPs repeatedly explained “their role, education and experience, scope of practice, knowledge and skills.” The nurses (mostly young women) also had to maintain a “delicate balance between autonomy/control, paternalism, sexism, and supervision and
were continually challenged to insist on their bottom-line autonomy of the NP role.” Close proximity of the NP and physician was thought to be necessary, and “on-site” supervision was the norm (that is, if the practice setting was not in Appalachia or on a remote Indian reservation). According to early nurse practitioner Corene Johnson, “initially, we had to always have a physician on site. . . . I didn’t resent that. Actually, I needed the backup.”

Interprofessional Conflict over Prescriptive Authority

Although nurse practitioners and physicians were working together at the local level, conflict over the NP’s scope of practice began to emerge at the organizational and state levels. One of the most contentious areas of interprofessional conflict involved prescriptive authority for nursing. Physicians did not want to give up control of the privilege of prescription. As a result, even when they were working together in close partnerships, both nurse practitioners and physicians danced around the issue of NPs writing prescriptions, just as they were doing in the Frontier Nursing Service. Nurse practitioners were, in fact, writing prescriptions, but both parties denied it by having physicians sign them—either all at once (as in the FNS protocol of having the doctor sign them at the end of the week) or one by one, in
which case the physician hastily scribbled his signature on the prescription placed before him. When it was impossible to be “on-site” when the NP saw patients, or if it was simply more convenient to do so, the supervising physician sometimes handed the NP a pad of signed blank prescriptions for her use.\textsuperscript{70} Much depended on whether or not the physician trusted the nurse’s judgment. In other instances, physicians wrote and signed a specific prescription whenever NPs requested them to do so.\textsuperscript{71} Except for the last, “all of these methods” were “of questionable legality.”\textsuperscript{72}

How prescriptions were handled depended on the availability of the physician, the negotiated boundaries of the individual physician-NP team, and the state in which practice occurred. In 1971, Idaho became the first state to recognize diagnosis and treatment as part of the scope of practice of specialty nurses but did not specifically recognize NPs or authorize them to write prescriptions.\textsuperscript{73} According to law professor Barbara Safriet’s later analysis, “as path-breaking as the statute was, it was still rather restrictive in that any acts of diagnosis and treatment had to be authorized by rules and regulations promulgated by the Idaho State Boards of Medicine and Nursing.”\textsuperscript{74} In other words, the practice of nursing by nurse practitioners would not be regulated by the Idaho State Board of Nursing, the usual body governing the practice of nursing. Instead, because NPs practiced in an expanded new role, the board of medicine joined with the board of nursing to regulate their practice. The situation was less than ideal, but it was a start. Getting state legislators to pass laws recognizing nurse practitioners would take time. In 1972, seven years after Ford and Silver opened the first formal NP program, only four state practice acts specifically mentioned the role. State by state, nurse practitioners would have to fight for the privilege of prescription. In 1975, North Carolina would be the first state to grant it.\textsuperscript{75}

Another Hurdle: Financial Reimbursement

Getting reimbursed by “third-party payers” for their services was another problem the nurse practitioners would have to face.\textsuperscript{76} For years, NPs simply did not bill for their services but were paid instead by the physician (or institution) for whom they worked. There was no process that allowed the nurses to be reimbursed by insurance companies or other “third-party payers.” The exception was the federal government, which could subsidize costs for the elderly and the poor, using the mechanism of Medicare and Medicaid, which were established in 1965. Later, the federal government subsidized care in rural and underserved areas. In 1976, the Indian Health Care Improvement Act was passed, with the goal of providing the highest possible health status to Indians. Comprehensive in scope, the Act author-
ized a number of programs that would serve as models for national health planning. In 1977, Congress passed the Rural Health Clinicians Act (PL 95–210), allowing NPs (and physician assistants) who practiced in freestanding, physician-directed rural clinics located in areas with a shortage of health professionals to receive Medicare and Medicaid reimbursement for their services through payment to their physician employers.

The Frontier Nursing Service took advantage of these funds, and other nursing leaders expressed their interest in doing so. Writing in her April 1979 report, Marlene Heffer, medical director of the Northern Arizona Indian Health Service, noted:

The theme of the National Nursing Branch Chiefs meeting . . . was the “Rural Health Initiative.” Nancy Lane, who helped to get the Rural Health Care Act passed through Congress, was the guest speaker. We discussed the desirability of developing some major initiatives for nursing and did propose three: home-health care, the use of nurse practitioners and discharge planning/coordination of services.

Despite these advancements, the problem of reimbursement for NP services persisted. In fact, it got worse when the Reagan administration cut federal funding in the 1980s.

**Nurse Anesthetists, circa 1970s**

While the nursing profession was preoccupied with the new nurse-practitioner role, nurse anesthetists continued to pursue their right to practice as part of an anesthesia team. In 1972, after years of negotiation, the American Association of Nurse Anesthetists (AANA) and the American Society of Anesthesiologists (ASA) issued the Joint Statement on Anesthesia Practice, promoting the concept of the anesthesia team. This statement coincided with the decision to place nurse anesthesia educational preparation in graduate programs for nursing. Nurse anesthesia met the requirements. It was an “expanded and advanced practice role” that required in-depth knowledge of pathophysiology, physical diagnosis, and advanced pharmacology, along with hundreds of hours of clinical practice. Moreover, the competencies that nurse anesthetists needed were much the same as those for the roles of nurse practitioner, clinical nurse specialist, and nurse-midwife, all of which would later be labeled “advanced practice” roles by the profession. To achieve these, graduate training was deemed essential. In 1973, the University of Hawaii opened the first master’s degree program for nurse anesthesia.
Because of the new requirements that nurse anesthetists have a master’s degree in order to sit for national certification, many small certificate programs closed. Physician pressure, inadequate financial support, limited clinical facilities, and lack of accessible universities for affiliation also contributed to these closures.81

The economic implications of third-party payment would affect nurse anesthetists just as it did nurse practitioners. Beginning in 1977, the AANA led a long and complex effort to secure third-party reimbursement under Medicare so that nurse anesthetists could bill for their services.82

**Evaluating NP Practice**

In order to get state legislators to vote for NP prescriptive authority, the nurses would have to document the safety and efficacy of their practice. In Colorado, Ford and Silver were already reporting on their results. In Philadelphia and Charlottesville, NP faculty were collecting data. In particular, nurse practitioners had to prove that their practice was safe. In a study reported in the *New England Journal of Medicine* in 1974, Repicky and colleagues reported “no difference between NPs and physicians in the ‘adequacy’ of their prescribing practices.” In other words, the NPs’ practice in prescribing medications was just as safe as that of the physicians.83 Between 1970 and 1979, seventeen reports were published evaluating the NP role. These reports confirmed that NPs could be successfully integrated into various health care settings, provided “primary care services on a level with physicians,” and were cost effective and acceptable to patients.84 The studies reported on NP practice in a wide variety of settings and with different supervisory procedures. A study conducted by the NP faculty at the University of Virginia in 1978, for example, noted that the NPs rarely viewed x-rays, read EKGs, or prescribed medications independently.85 However, another report noted that the medical needs of inner-city poor were “effectively and efficiently met by on-site nurse practitioners in telephone and television contact with supervising physicians.”86 All of the reports would be needed to convince state legislatures of the safety of NP practice. The most important one would come from the federal government in 1986.

**Changes in State Nurse Practice Acts**

Using the reports of their safety and efficacy, nurse practitioners lobbied their states for changes to their practice acts to include the right to diagnose and prescribe. Because Idaho had been the first state to deal with the
issue (albeit indirectly), and it had not given separate licensure to nurse practitioners, other states also did not. Instead, state legislatures instructed boards of medicine and nursing to draw up rules allowing nurse practitioners to practice.87 Most determined that NPs should practice according to local protocols, much like those that the FNS nurses had been using for years. Others expanded their state’s basic definition of all registered professional nurse practice, by either omitting or limiting the disclaimer in state practice acts against diagnosis and treatment by registered nurses. New York adopted this approach in 1972. The problem was that the states that did this sometimes did not mention nurse practitioners. Nurse practitioners would have to turn to the courts for clarification and support whenever their practice was questioned. A third approach to facilitating nurse practitioners’ practice was to give more delegating powers to physicians through the state’s medical practice act. Both Arizona and Colorado were among states using this tactic. Arizona also added an “additional acts” provision to give nurses permission to dispense drugs. According to that provision, the nurse was permitted to dispense

prepackaged labeled drugs for a single medical episode under the direct order of a physician if (1) the nurse dispensing is employed or under contract with a county health officer, and (2) the dispensing is in rural areas of exceptional medical needs as defined by the board of medical examiners.88

Covered by law, a physician in Arizona could delegate responsibilities to an Indian Health Service nurse practitioner, and a pediatrician in Colorado could delegate specific medical acts to one of the newly employed pediatric nurse practitioners. The process worked. However, the NP’s practice occurred under the physician’s license instead of under that of the NP. And Arizona law’s specific comments made the practice act more opaque. In striving for clarity, the legislators created ambiguity: what was a “single medical episode”? And did standing orders qualify as direct orders? These comments were actually undermining the intent of the law (i.e., recognizing the nurse practitioner’s expanded role and permitting a nurse to act in this role only when there was no one else to perform it, for example, in areas of exceptional need).89 The situation would become more complicated in 1984, when the American Medical Association House of Delegates passed a resolution to combat “any attempt at empowering non-physicians to become unsupervised primary care providers and be directly reimbursed.”90