Nursing and the Privilege of Prescription, 1893-2000

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CHAPTER 3

Providing Care in the “Hoot Owl Hollers”

Nursing, Medicine, and the Law in the Frontier Nursing Service, 1925–1950

See we nurses don't prescribe and we don't diagnose. We can make a tentative diagnosis and we can give that to the doctor, and if there's anything wrong then he'll tell us how to treat it. So they [the doctors] gave us this Routine of things that we could use and the things we could do—and the things we couldn't do.

Betty Lester, RN

During an oral interview in 1978, Betty Lester, a certified nurse-midwife, reflected on her work as assistant field supervisor in the Frontier Nursing Service (FNS) in the early 1920s and 1930s. In those years, Lester had had unprecedented freedom to manage patients in the remote, mountainous region of Leslie County, Kentucky. Recounting that experience years later, Lester denied the extent of the freedom she had actually had. Like other registered nurses in the first half of the twentieth century, Lester had been socialized to defer to physicians’ judgment and orders. So, when recalling her experiences in the FNS later in her life, Lester did not take ownership of the clinical decision-making process she had used. Instead, Lester acknowledged only that she and other Frontier nurses made “tentative diagnoses,” reporting those to a physician associated with the FNS. In reality, she had often practiced on her own, as there were few phones in the isolated community during the 1920s and 1930s, and physicians were rarely available to consult in person. In contrast to Lester’s perceptions, for all practical purposes, the diagnoses made by the FNS nurses were the only diagnoses, and their treatment was the only treatment.
The “Routines” to which Lester referred were physicians’ standing orders that legally covered the nurses’ actions. Because of these, no one ever questioned the nurses’ practice among the isolated highland people. In their correspondence with Mary Breckenridge, the founder of the FNS, it is quite clear that several of the doctors who practiced in the Appalachian community had a collegial relationship with the nurses and trusted both Mary Breckenridge’s expertise and the nurses’ judgment. Moreover, in each of the editions of the Medical Routines, the physicians recognized that without the FNS nurses, the inhabitants of Leslie County would not receive care. Indeed, just as the Henry Street visiting nurses provided access to care for poverty-stricken immigrants in New York City, the Frontier Nursing Service provided access to medical and nursing care for numerous poverty-stricken Scots-Irish, English, and Welsh descendants in the extreme southeastern section of Kentucky.
Origins of the Frontier Nursing Service

For decades, attracting physicians to the remote mountainous area of Kentucky, twenty-four miles from Hazard, the nearest town, had been practically impossible. Leslie County, an area of 373 square miles with a population of fewer than 11,000, was one of the poorest and most inaccessible areas in the United States.\(^6\) The few doctors who worked there resided in small towns some distance from the highlanders, who lived in the hollows and on the branches and headwaters of the creeks that wound through the valleys of the mountain belt.\(^7\)

Since the early 1900s, Leslie County had also had one of the highest maternal and infant mortality rates in the United States, 124.0 deaths per 10,000 live births—whereas the national maternal death rate was 7.0 per 1,000 live births in 1929. (This rate was almost double that in England and Wales, where maternal mortality was 4.3 per 1,000 live births.)\(^8\) Faced with this unacceptable situation, the Kentucky State Board of Health formed the Bureau of Maternal and Child Health in 1922 and charged it with the protection and promotion of the health of mothers and children in the state. Kentucky physicians, long aware of the problem, took a particular interest in addressing it.\(^9\)

Mary Breckenridge, a member of a distinguished and well-connected Kentucky family,\(^10\) was also interested in the problem. Breckenridge, a graduate of St. Luke’s Hospital School of Nursing, had lost two children to childhood diseases; as a result, she resolved to improve maternal and child care in the United States. After obtaining training in Public Health Nursing in Boston, serving in World War I as director of child hygiene and public health nursing from 1919 to 1922, and then studying public health at Teachers College in New York City, Breckenridge went to Appalachia to work with Dr. Arthur McCormack, the state health officer for Kentucky. Once there, Breckenridge traveled the area on horseback, studying the state of obstetrical services in three mountain counties. She found that most of the highland women used uneducated, elderly Anglo-Saxon midwives to attend their babies’ births, and that the untrained midwives’ care was inconsistent and often of poor quality owing to practices based on superstition rather than fact.\(^11\) According to Breckenridge:

> When I asked those of more limited practice what they would do if they had certain complication to meet I found that rarely had they decided beforehand on a plan of action. “Never had hit happen yit,” [sic] was the usual answer and with it they appeared satisfied. . . . Of all obstetrical complications a hemorrhage was the most frequent . . . concerning which there seemed to be the greatest variety of supersti-
Breckenridge also found that the distances and road conditions in the highland region were formidable, making it almost impossible for patients to access the few state-licensed physicians who worked in nearby towns.13 Given these conditions, Breckenridge concluded that the creation of a decentralized nurse-midwifery service would be necessary to reach the mountain people and provide them with a higher quality of care. She soon set about preparing herself to establish this service. After obtaining midwifery training at the British Hospital for Mothers and Babies in London to qualify herself to see patients, and seeing for herself the effectiveness of nurse-midwives in the Scottish Highlands, Breckinridge returned to Leslie County in 1925 and founded the Frontier Nursing Service, intending to showcase nurse-midwives.14 Using her extensive family and political connections for both fund raising and political support, Breckenridge engaged members of the Appalachian community to help build Wendover, the log house that would serve as the main headquarters for the FNS in Hyden (population 300).15 The house overlooked Hurricane Creek, a wide, shallow stream that the nurses used in the absence of roads as a route of transportation to reach the hollows.

Over the next ten years, Breckenridge established the decentralized services she had envisioned. Frontier Nursing Service nurses worked out of eight clinics: the main one at Wendover, Beech Fork, Red Bird, Flat Creek, Brutus, Oneida, Bob Fork, and Wooton. All these clinics were accessible by creek beds. Serving families in three counties altogether, each clinic provided services to an area covering seventy-eight square miles of the rugged Appalachian territory.16

National and State Initiatives

Breckenridge’s project coincided with the national initiative to provide medical and nursing services to mothers and babies in an attempt to decrease overall maternal and infant mortality in the United States. In 1912, in response to high national infant and maternal mortality rates and other social problems pertaining to children, President William Howard Taft created a federal Children’s Bureau and charged it with investigating and reporting on “all matters pertaining to the welfare of children and child life among all classes of people.”17 The Bureau’s first assignment was to study why so many American infants died. Part of this investigation led
to a national discussion of issues related to lay midwife licensing and control, as well as the question of the safety of their practice. Of concern was the lack of prenatal services provided by lay midwives, inconsistencies in their hygienic practices and their level of competence, and particularly their lack of formal training. One solution, proposed by Chicago physician Frederick J. Taussig at a 1914 meeting of the National Organization of Public Health Nurses, was that the creation of nurse-midwives rather than granny midwives might solve the “midwife question.”18 In that speech, Taussig recommended that nurse-midwifery schools be established to train graduate nurses in midwifery skills.19 Later in the decade, under Director Julia Lathrop, the Children’s Bureau recommended that public health nurses teach principles of hygiene and prenatal care to the granny midwives.20 Then, in 1921, Congress passed the Sheppard Towner Maternity and Infant Protection Act, appropriating federal financial aid to each state ($10,000 in matching funds) for “the purpose of reducing the maternal and infant mortality and protecting the health of mothers and infants.”21 Indeed, maternal and infant mortality had the nation’s attention.

In fact, the concern for safe deliveries and the public’s growing acceptance of hospitals led to a decline in the use of lay midwives for deliveries. During the 1920s increasing numbers of upper- and middle-class urban white women began to use obstetricians to deliver their babies in hospitals.22
In contrast, poor, urban European immigrants, like those on the Lower East Side of New York City, continued to turn to midwives and continued to deliver their babies at home. Likewise, in rural southern states like Mississippi, where half the population was black, the majority of women continued to rely on African American granny midwives to deliver their babies. In Leslie County, Kentucky, most women turned to untrained Anglo-Saxon granny midwives, many of whom were illiterate, to attend their babies’ births. As one woman recalled: “The granny woman just came and done what she could—and she hardly ever come back. . . . Back before the [FNS] nurses came, that’s all they had—just them old women.” It was increasingly clear: physician-assisted, hospital births were for patients of higher socioeconomic status; lay midwives attended the poor. In Leslie County, the result was high maternal and infant mortality.

Mindful of this problem, the Kentucky State Board of Health formed the Bureau of Maternal and Child Health in 1922 and charged it with the protection and promotion of the health of mothers and children in the state. Kentucky physicians, long aware of the problem of high maternal and infant mortality statistics, took a “particular interest” in addressing the matter. In 1926, the state medical society and the Louisville Obstetrical Society requested a “thorough study of every maternal death,” after which they concluded that every pregnant woman should place herself “under the care of a competent physician at once.”

The recommendation was unrealistic. In fact, in Leslie County there were only five “state-registered physicians who could see patients and all of them (with the exception of one employed by the mission settlement school) charged $1.00 per mile for every mile spent in travel to the case, as well as an additional basic charge of $5.00.” Needless to say, families with an average income of $183.53 a year could not afford these prices. Moreover, the treacherous mountain terrain and the lack of roads and bridges made access to physicians difficult, even for those who could afford the fees. According to one report:

In most instances, there is no telephone service available, some one must ride the entire distance, varying from 4 to 20 miles, to summon the doctor, who usually lives in some small village or town where he maintains a practice. It is often impossible for him to leave his patients for the length of time necessary to make a trip into the mountains. . . . If time and weather conditions permit, they will in an emergency visit those on the outskirts of their own territory. . . . In winter, when snow covers the ground and the creek beds are frozen, it is difficult if not impossible for the mountaineer to go for the doctor and equally out of the question for the doctor to come to the patient.
The physician shortage in Kentucky, the difficulties of the mountainous terrain, and the national and state campaigns to reduce maternal and infant mortality, coupled with growing concerns about lay midwives, all influenced local physicians to consider the idea that using nurse-midwives might be a solution. In fact, by 1925, when Breckenridge introduced the idea of a nurse-run service, the medical community was ready to support it. Besides, Breckenridge arranged to pay half of the salary ($1,500.00) for Dr. Capps, the health officer of Leslie County, so that he would serve as “general consultant” to the nurses and treat any patients they admitted to the hospital in the small town of Hyden, only a few miles from Wendover.28

Assuring Physician Supervision and Collaboration

Breckenridge was careful to observe the law in establishing the FNS, stating: “the nurse-midwives [originally British nurse-midwives and American
public health nurses whom she had sent to England for midwifery training were to work under supervision, in compliance with the regulations for midwives of the State Board of Health and the law governing the registration of nurses, and in cooperation with the nearest medical service. The legal climate in Kentucky, particularly the statutes governing the practice of nursing during the first half of the twentieth century, supported Breckenridge’s ideas. A decade earlier, the Kentucky Act of 1914 had established a State Board of Examiners of Trained Nurses and required all nurses in Kentucky to be registered. The law further dictated that all applicants furnish satisfactory evidence that he or she is at least 21 years of age, of good moral character and has been graduated from a school for nurses . . . approved by the board. . . . Such person shall be required to undergo an examination . . . and shall pass the same to the satisfaction of the majority of said board.

Nowhere did the 1914 Kentucky law specify exactly what the practice of nursing encompassed. In fact, like many of the original registration acts passed by other states, from their inception until 1955, the Kentucky laws regulating nursing practice were vague. As historian Bonnie Bullough argued: “None of the original registration acts included a definition of nursing in terms of the scope of professional practice; thus these acts are more accurately called nurse registration acts rather than nurse practice acts.”

Federal drug laws, equally unclear with regard to the practice of nursing, also supported Breckenridge’s vision for a nurse-run service. In 1914, the United States Congress had enacted the Harrison Narcotic Act, limiting the amount of morphine, heroin, and opium in over-the-counter remedies and reinforcing the fact that physicians, dentists, and veterinary surgeons could dispense and distribute “the aforesaid drugs only within the practice of their professional duties.” Nowhere in the narcotic act was the nurse’s role with regard to narcotics specifically delineated. Relevant to the Frontier Nurses’ work, the law did not restrict nurses from carrying narcotics in their bags, nor did it prohibit them from administering narcotics according to physicians’ standing orders.

Another law, regulating the practice of nurse anesthesia (as noted in chapter 2), also helped lay the groundwork for the Frontier Nursing Service. In 1917, almost a decade prior to Breckenridge’s work in Appalachia, Kentucky had been the scene of the interprofessional conflict between the Jefferson County Medical Society and Dr. Lewis Frank. In fact, the society had sued Frank for having his nurse anesthetist deliver
anesthesia. The case was decided in favor of Frank and the nurse anesthetist, however. In the landmark decision of *Frank v. South*, the Kentucky appellate court ruled that anesthesia provided by nurse anesthetist Margaret Hatfield did not constitute the practice of medicine *if it was given under the orders and supervision of a licensed physician*. Of particular importance to the Frontier Nursing Service in the 1920s, in that decision the court had also noted:

> The usual practice, in this state, in cases where graduate or trained nurses are in attendance, has been for such nurses to administer hypodermics of morphia, atropia, ergo, and other drugs, when same were directed to be given by the physician in charge, in definite doses and at definite intervals, and frequently such is done by the nurses in the absence of the physician, but in accordance with his directions. . . . ³⁴

In order to comply with Kentucky law, Breckenridge had to do only one thing—set up an advisory committee of physicians who would write “directions” for the FNS nurses, be available for consultation, and accept referrals. In this mission Breckenridge was particularly fortunate, as her family had numerous political connections in the area. In addition, Mary Breckenridge had a cousin, Scott Breckenridge, MD, who practiced medicine in Lexington. She was also a close friend of Josephine Hunt, MD, who also practiced in the area. In 1925, Breckenridge appointed both of these doctors to the Kentucky Committee for Mothers and Babies, the same committee that three years later would become the medical advisory committee to the Frontier Nursing Service. The 1928 committee would include not only Scott Breckenridge and Josephine Hunt, but also seven other physicians,³⁵ all of whom were located in Lexington, about 165 miles from Wendover. Despite the distance, these physicians supervised the FNS nurses in delivering not only midwifery services, but also in providing essential medical care. Sometimes contact was made by telephone; more frequently, consultation was requested and provided through handwritten notes carried by a messenger. In most instances, however, the nurses saw patients on their own. To cover the nurses’ actions in those situations, the doctors wrote “standing orders”—called *Routines* or *Medical Routines*—for the nurses to follow in their absence. In the preface to the 1928 manual, the physicians acknowledged the realities of the nurses’ practice, recognizing that they worked “under extremely difficult conditions in very remote areas . . . in many instances when physicians can never be had, owing to impossible seasons of ice and ‘tides,’ as well as great distances and heavy mileage costs.”³⁶ Because there were few roads in the remote Appalachian region, the nurses traveled by horseback along creek beds and mountain
trails to attend births and care for the sick, carrying their manuals everywhere. Writing in the *American Journal of Nursing* in 1938, British nurse-midwife Vanda Summers recounted how the FNS nurses worked:

The whole of the district work of the FNS in the Kentucky mountains is done with the aid of two pairs of saddle-bags. . . . In these bags we have everything needed for a home delivery. . . . In one of the pockets we carry our *Medical Routines* which tells us what we may—and may not—do. . . . 37

Another FNS nurse commented on the contents of the saddle-bags, noting:

The delivery bags were set aside for delivery . . . the general bags had medicines in them of all sorts. And ointments and things . . . enough that you could give them out to people along the way if you were either called into a house or stopped on the road. . . . We carried cough medicine . . . and that kind of thing. 38

“That kind of thing” was actually a great deal more than cough medicine. According to lists of the contents, the nurses’ midwifery bags “weighed almost 42 pounds when packed” 39 and contained numerous items, as well as a wide variety of drugs. Among the items contained in the bag were “kidney basins, rubber sheets and aprons, newspapers, a cotton apron, cap and gown, sterile gloves, Lysol, alcohol, hypodermic syringe, catheters, clamps and scissors”—everything needed for a delivery.

Drugs included in the saddlebag pack were “morphine, codeine, quinine, cascara, aspirin, chloral hydrate, brandy, castor oil, magnesium sulphate, silver nitrate, ergotrate, caffeine, and sodium benzoate”—all medicines that the FNS nurses were authorized to give according to the *Routines*. The nurses could give other medicines “at their discretion for discomfort and vague pains of all sorts.” 40 These medicines included aspirin, ichthyol, bismuth, castor oil, sulphur, unguentine, Vaseline, senna, milk of magnesia, ipecac, rhubarb and soda, boric acid, zinc, and a few others. 41

Furnishing Drugs

Much like the nurses at Henry Street, the FNS nurses dispensed and administered these over-the-counter remedies (widely used by middle-class women in their homes) to the poor families in Appalachia, some of
whom no doubt had never even heard of the medicines. In other cases, they gave proprietary medicines like morphine and codeine according to standing orders. The nurses were entrusted to carry these highly addictive, controlled drugs, limited to physicians’ and dentists’ use by the 1914 Harrison Narcotic Act, only out of necessity to provide pain relief to a patient, or to treat a patient for shock caused by pain, “when a doctor could not be had.” Because Part II of the 1917 Frank v. South Kentucky ruling stated that nurses could give drugs “in the absence of the physician but in accordance with his directions,” the FNS nurses had the legal back-up they needed to do so.

The guidelines for the use of narcotics were specific and required the nurse to carefully document their use and report the usage to the physician. For example, the 1928 edition of Routines stated that morphine sulfate should be given for shock, with doses ranging from “1/8 to 1/4 grains, depending on the weight of the patient.” It also recommended that for “acute chest conditions, codeine 1/4 to 1/2 grain doses should be administered for pain or great restlessness.” The order followed with recommendations that if codeine was ineffective, the nurse should “give morphine in small doses.” In all instances, the nurse was expected to make an accurate assessment of the patient’s condition before choosing to treat with an analgesic. Then, she was to use her own judgment to administer an appropriate dose.

Although the FNS nurses were not trained as nurse anesthetists, they carried “one can of ether” in their saddlebags. They did not carry chloroform. Nonetheless, both drugs were discussed in the standing orders. Chloroform was only to be used in critical situations or in collaboration with a physician. (The doctor would bring the drug in his bag should he want to operate in the home.) By contrast, the guidelines for using ether allowed the possibility that the nurse might give the drug on her own should a critical need arise. The 1928 Routines were clear in this regard, warning the nurse against the use of chloroform, but recognizing the fact that she might have to give it in an extreme emergency:

Warning! If a nurse is asked by a doctor to give an anesthetic, she is to go ahead and he, of course, assumes responsibility. The occasion will very rarely arise when she will be called upon to give chloroform in the absence of a doctor. Nothing short of an extreme necessity justifies her in giving even a few whiffs, because of the great danger of chloroform to the heart. Ether is a safer drug. Great care should be taken with open fires and lamps where ether is used.

The FNS nurses also used herbal remedies—once again following standing orders. For example, the 1928 Routines recommended ginseng
root, steeped into a tea, for the treatment of infant colic, and black cohosh, or “rattleweed,” for the alleviation of menstrual cramps. The *Routines* also contained recipes for homemade cough syrups. The 1936 edition authorized the FNS nurses to mix the medication as needed (essentially serving as pharmacists), directing them to:

> Put three tablespoons of dried or fresh horehound leaves and stalks in 1½ pints of water. Boil about ½ hour and strain. Add ½ pint honey. If unable to get honey, use brown sugar, ½ lb and boil ½ hour. Add ipecac in the proportion of 2 teaspoons to 1 ounce of the above mixture. Give 1 teaspoon every three hours for an adult patient. . . .

The routine outlined by the medical committee for the treatment of boils and abscesses not only reflected the physician’s attempts to place some limits on the nurses’ practice (she was not to perform any treatment remotely similar to surgery), but also reflected their sensitivity to the widespread use of home remedies in the “Hoot Owl Hollers”:

> The nurse not infrequently has to handle these [boils and abscesses] when it is not possible to get a doctor. . . . It is better for her to avoid opening [them] with a knife if this is possible. She may use such local treatments as ichthyol, antiphlogistine, home-made poultices of corn meal etc and fomentations.”

Clearly the Medical Advisory Committee preferred that the FNS nurses avoid what they considered to be surgical procedures, in this case, piercing the boil or abscess. Perhaps they had had some bad experiences in the field and were aware of the complications that could ensue should the nurse attempt to lance a boil. Perhaps they were simply defending their territory. Either way, the physicians clearly preferred that the nurse use the home remedies.

Thus, using the *Routines* to ensure that they worked “in accordance with the physician’s directions,” the Frontier nurses not only provided midwifery services but also treated everything from snake bites, gunshot wounds, sore throats, and earaches, to acute abdominal pain, diphtheria, and typhoid fever. In addition, they sutured lacerations; applied salve to boils, shingles, and burns; and treated elderly patients for such conditions as pneumonia, chest pain, and congestive heart failure.
Diagnosing

The physicians who supervised the FNS nurses expected them to make clinical diagnostic decisions and treat the patients accordingly. It did not make sense to have a manual of standing orders if the nurses couldn’t determine what illness the patient had and therefore which orders to follow. Typically physicians made a “working diagnosis”—determining the condition that was suspected to be the most likely cause of the patient’s symptoms. Working alone in the remote Appalachian Mountains, the nurse had to use the same decision-making process the physicians used. It didn’t matter to the physician advisory committee that the nurses were technically practicing medicine. The physicians were still in control, because the nurses reported to them and followed guidelines the doctors had written. Besides, the difficulties of travel and communication made it impossible for the physicians to reach patients in the isolated, backwoods area.

Whether or not the nurses called the decision-making process diagnosing, they were, in fact, making clinical assessments of the signs and symptoms they saw and acting on them. Writing to her colleague and friend Dr. Josephine Hunt, Mary Breckenridge questioned her own ability to diagnose—despite all evidence that she had already ruled out three possible diagnoses and was doing as well as the doctor she summoned in determining a fourth. Even more importantly, Breckenridge knew the limits of her abilities and when to seek further consultation.

We have another woman, [with a] seven month old baby, very aene-mic [sic], feet badly swollen, rapid pulse (122 sitting down any old time)—cannot get a diagnosis on her. Urine tested four times, no albumin. Stools sent off, no hookworms. Hazard doctor . . . examined heart and lungs and found nothing to account for her condition, but ordered digitalis to slow down the heart. Could we send her down . . . ? She can leave the baby who is flourishing. . . . 50

In this case, Breckenridge had already made three possible diagnoses: (1) that the patient may have had anemia; (2) that she may have had kidney failure as would have been evidenced by albumin in her urine; and (3) that she may have had hookworms. Acting on these differential diagnoses, Breckenridge had already sent off urine and stool for laboratory tests and received negative reports. She had subsequently ruled out two of her initial diagnoses—kidney failure and hookworms. Now, she was left with a patient, seven months postpartum, who had signs and symptoms of heart failure (probably postpartum cardiomyopathy). She knew that a heart rate of 122 “any old time” was not good. She also knew that she could not
identify the underlying diagnosis, and called in a physician. The local physician may or may not have been able to diagnose the condition, either, but he did prescribe an appropriate drug—digitalis—to slow and strengthen the heart. Breckenridge, aware that the woman needed a complete diagnostic work-up, was referring the patient to the doctors in Lexington. Her care was safe, appropriate, and competent.

Not every case was quite so dramatic. Much of what the FNS nurses handled were minor illnesses like colds and sore throats. However, in these remote mountain hollows, even a sore throat could prove lethal—especially if it turned out to be diphtheria. Accordingly, the physicians gave the FNS nurses explicit directions to treat for diphtheria if they even suspected that diagnosis. In the Routines, the physicians outlined the signs and symptoms to help the nurses make the diagnosis in their absence. The 1928 Medical Routines reflected the physicians’ awareness of both the high incidence of mortality in untreated cases of diphtheria and the reality of backwoods medical practice:

When there are membranes [in the patient’s throat], of course suspect diphtheria and when in doubt use anti-toxin. A doctor must be had if it is humanly possible, but unless he can be had almost at once, do not wait before giving not less than 10,000 units [of anti-toxin], and if the case is advanced, give 20,000 units. Diphtheria moves with such rapidity that it is better to chance giving anti-toxin to a child with tonsillitis that to wait for a diagnosis if conditions are very suggestive. . . .

Providing immediate access to treatment could save lives in this remote area of the country. Recognizing this reality, the local physicians were willing to allow nurses to expand their scope of practice to include diagnosis and treatment.

Preventive Medicine or Nursing?—Overlapping Practice Areas

Less typical of the standing orders were those ordered by the medical committee for the care of an infant with diaper rash. To treat “sore buttocks or skin,” the doctors prescribed the use of “bismuth and castor oil or zinc ointment . . . with ichthyol ointment . . . as an alternative.” Prescribing these drugs was well within the scope of medical practice. However, the physicians also ordered the nurse to “teach the family how to wash diapers.” The task of teaching hygienic practices (e.g., washing diapers and sheets, ventilating the room, etc.) had long been considered
within the purview of nursing. In writing these orders, the doctors were prescribing preventive medicine; they were also “practicing” nursing. In this situation, the scope of medical and nursing practice overlapped.

Another instance in which the physician’s work overlapped with the nurse’s responsibilities was in the orders they gave for “Care of the Baby at Delivery.” Most of these orders were reasonably within the boundaries of the medical profession, including orders to clamp and cut the cord, and to place silver nitrate in the infant’s eyes. However, other orders overlapped with nursing, and the experienced nurse-midwives knew what they should do without having physicians tell them. Certified nurse-midwives did not need medical orders telling them to “oil the baby but do not wash until next visit . . . weigh . . . dress . . . and put to the breast for five minutes.” Nor did they need orders to “give the mother at least one complete bath during the first ten days . . . and put her bed in order each day.” The nurses were well acquainted with these nursing activities. They had been taught the basics of nursing care in their training programs. They had also been taught specifics about care of the mother and the newborn in their postgraduate midwifery courses. On the one hand, the doctors were being too prescriptive, describing every detail of the care they wanted implemented in the maternity cases. On the other hand, they could not be blamed for their overly solicitous instructions. They had seen the complications and the deaths that had resulted when untrained granny midwives had delivered the mountaineers’ babies. Besides, the physicians may have been unfamiliar with the nurses’ knowledge base and expertise and had yet to trust them. Moreover, the doctors were also trying desperately to decrease maternal and infant deaths.

**Working with the Community**

According to FNS assistant director Mary Willeford, the Frontier nurses worked “through” the community and not “for” it. Each nursing center had a local committee composed of “leading citizens in the district.” The nurses met with the members twice a year, reporting on their work and discussing various problems.

In addition to working with the local committee, the nurses approached each family individually, always aware that they were guests in the highlanders’ homes. The nurse was particularly careful to establish rapport with the mother. Recounting her experiences in an article in the *American Journal of Nursing*, nurse-midwife Vanda Summers was careful to describe this process, writing:
After a quarter of an hours’ ride, we come to our next home. The baby is just six months old. We sit talking for a while in front of the fire, inquiring after the baby’s health and habits, et cetera, and then we discuss with the mother the importance of giving the baby its diphtheria “shot,” and ask her to bring it up to us on a clinic day. . . . The mother may want to get permission from the father, the grandfather, the grandmothers, the uncles, the aunts, or even the cousins beforehand.58

Part of establishing rapport with the mountain families was the nurses’ willingness to use herbal and other home remedies with which the highlanders were already familiar. After identifying the herbs and acquiring knowledge about their uses, the FNS nurses used them to alleviate symptoms of conditions such as poison ivy, toothaches, and colds. They also used various remedies to reduce inflammation, relieve constipation, and treat diarrhea and numerous other conditions.

Commonly used wild herbs included ginseng, sassafras, poke root, Indian Arrowwood, cohosh, pleurisy root, nettles, and wild ginger.59 The FNS nurses frequently used ginseng root, steeped into a tea, to treat babies for colic and girls for menstrual cramps. In the FNS Quarterly Bulletin, Mary Breckenridge noted several other herbal remedies nurses employed, including black cohosh, or “rattleweed,” to both alleviate pain and regulate flow in young girls’ menstrual periods, and “to strengthen the muscles that help in child birth” for pregnant women. In the latter case, the “whole root was boiled in water for twenty minutes, and the water was then drained off. About half a tea cup full was drunk twice a day.”60

Upper respiratory conditions were particularly responsive to homemade remedies. According to Breckenridge, another commonly used herb was nettles. “The root, steeped into a strong tea is drunk by the cupful several times a day. It is used for ‘spring nettles’ or hives, whelps, and knots.”61 The FNS nurses frequently used pleurisy root (commonly known as milkweed or butterfly weed), steeped into a tea, to treat “side pleurisy.” For coughs, they administered the bark of Indian arrowwood, skinned off, boiled, and made into cough syrup with honey.62

Grindelia and potash were used to treat poison ivy. According to the 1928 Routines, the nurse was directed to: “paint parts with fluid extract of grindelia or scrub area open with soap and water, using sterile brush and apply permanganate of potash strength 1–1,000. . . .”63 The plant “Deadly Night Shade” could also be used as a remedy for poison ivy. Preparation of the herb was the first step in the treatment process. Directions included: “Beat up the leaves with sweet milk until the mixture is ‘right green’ and apply externally for poison ivy. Wash the bad
places and then wrap them up. Never use internally because Deadly Night Shade is a poison.”

Diarrhea, called “running-off, or flux or bloody flux,” was especially prevalent among babies and young children in the poverty-stricken Appalachian region. To treat it, the nurses administered a tea of “Blue John,” made from a little vine found around barns, or “Goose Grass,” another little vine which could be “boiled until strong, then cooled and drunk three times a day.”

The FNS nurses applied poke root, an anti-inflammatory, to treat “any kind of pain,” but particularly “rheumatism.” The root was roasted, split open, and bound to the site. An alternative was to administer a drink of poke berries mixed with whiskey.

In addition to herbs, the Kentucky nurses frequently employed common household spices as medications. For example, cloves, used as a spice in cooking, were used to treat toothache. Note the following guidelines for treatment in the 1930 FNS Medical Routine: “if both heat and cold cause pain, the condition is an acute pulpitis and oil of cloves should be dropped into the cavity.” Clearly both physicians and nurses were not adverse to using whatever was available and whatever worked.
The grim realities of the Great Depression increased the need for services in Leslie County in the 1930s. The already impoverished residents were particularly devastated when a year-long, severe drought ruined local crops and the timber industry—their two main income sources. Indeed, rural communities often fared worse than towns and cities during the period of the Depression. Lack of money to pay for medical services forced many people to go without them, and the highlanders were no exception.69
Breckenridge’s nurses responded—providing food, shoes, and clothing in addition to nursing services.\(^{70}\) According to a draft of an article written for the *New York Times*, May 13, 1931, the nurses continued to make visits in the “holler” despite their dwindling sources of funding:

They [the nurses] could not refuse help to any. Last winter they found families destitute—the chickens, pigs and cow long since sacrificed, the children barefoot in the snow. They drew on their dwindling funds for four quarts of milk a week for each child and 700 pairs of shoes and charged it up to “preventive work.” . . .\(^{71}\)

Despite the economic difficulties, the FNS nurses still held clinics to provide health services, and they still visited patients in their homes. And their outreach grew. By May 1934, the FNS nurses had made 161,832 home visits and seen 115,601 in the clinics.\(^{72}\)

Since the inception of the FNS, the nurses had delivered over 2,000 infants with only 48 stillbirths and no maternal deaths owing directly to obstetrical causes. In the first 1,000 cases, the FNS nurses had two maternal deaths, both caused by chronic heart disease. In the second thousand deliveries, they had no maternal deaths “from any cause whatsoever.”\(^{73}\)

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Figure 3.6: Highlanders at FNS clinic. Caufield & Shook Collection, Ekstrom Library, University of Louisville
addition to maternity cases, the FNS nurses gave “over 68,000 inoculations and vaccination for such diseases as typhoid, diphtheria, influenza, pneumonia, smallpox, and tetanus. Three-thousand and fifty-four sick cases (not including midwifery) were cared for in their homes and all except 166 recovered.”74 At the close of the ninth fiscal year, the FNS was caring for 1,146 families, including 256 babies, 1,139 preschool children, 2,243 school-aged children, and 2,337 adults.75 Clearly the FNS nurses were providing care to thousands of patients in the impoverished community. Without a doubt, part of what they did lay within the domain of public health nursing, like giving inoculations and doing health teaching. The remainder was a combination of standard home care, primary medical care, and midwifery services.

By 1936, the FNS had a new medical director, John H. Kooser, MD, a physician who was supportive of the nurses expanding their skills and their scope of practice.76 In fact, Kooser taught the nurses how to identify various physical findings to aid in their clinical assessments, and he occasionally requested that they administer ether during complicated deliveries.77

In contrast to Kooser’s liberal approach and willingness to have the FNS nurses expand their role, the physicians who wrote the Medical Routines became gradually more conservative as the years progressed. Careful to acknowledge—albeit indirectly—that the FNS nurses were working in an expanded role, the foreword of the 1936 edition of Medical Routines reiterated the hardship under which the FNS nurses worked and authorized routines so that the nurses could “meet medical emergencies and carry on adequately until a physician can be obtained.”78 In other words, if obtaining a physician’s services was impossible, nurses could do whatever they needed to do to care for the patient. Indeed, “carrying on adequately” often meant dispensing and furnishing drugs, including narcotics as well as other medicines.

In their 1936 Routines, the FNS advisory committee made it explicitly clear that narcotics were to be controlled, writing: “As a general rule, narcotics must not be given unless ordered by a physician. However, occasions do arise for exceptions and these are given below.”79 What followed was a list of conditions in which “one dose of morphine” could be administered when a physician was not available. These included: gastric or pulmonary hemorrhage, “severe gunshot cases,” childbirth, acute abdominal pain, and shock. And in all cases, the 1936 guidelines mandated that the nurse “be in attendance for at least four hours following the administration of the narcotic.” In addition, she was required to “report in writing to the medical director her administration of narcotics for such cases.”80
Collaboration and Professional Boundary Issues

Despite the conservative trend, the FNS advisory committee continued to approve and publish new editions of their standing orders, and the FNS nurses continued to use them. The advisory committee even expanded the number of drugs the nurses could give, adding new medications to the protocols each year. By the 1940s, after the sulfonamides and penicillin were widely accepted in practice, the Medical Routine authorized the FNS nurses to give these antibiotics. The Frontier nurses had a great deal of autonomy in implementing the standing orders. In addition to specified doses of penicillin or tetracycline, the nurse could also “give symptomatic treatment, i.e.: Pyralgin for fever, aspirin for pain, phenergan for vomiting, etc. as needed.” In this case “etc.” could cover most anything else in the Routines.

In 1948, Mary Breckenridge and Alexander J. Alexander, MD (formerly chairman of the 1925 Kentucky Committee for Mothers and Babies), collaborated in writing the standing orders, as is evidenced in Alexander’s letters regarding the dosage of Trisulfain. In one letter dated 10 July, 1948, Dr. Alexander responded to Breckenridge’s request that he specify doses on a child’s age rather than on the child’s weight because the FNS nurses had no scales on which to weigh patients. After writing the new orders, Alexander added, “If this [procedure] is not entirely satisfactory, I would suggest that you blue pencil [edit] this letter . . . [and return it to me].” As reflected in the letter, the sense of trust established between these two professionals, working together to provide care to the poverty-stricken highlanders, is palpable.

Despite the growing sense of trust and collegiality between the FNS nurses and the local physicians, by the mid-twentieth century the physician advisory committee was increasingly concerned over professional boundary issues. In fact, the wording of the instructions to the nurses in the Medical Routines becomes increasingly precise with each edition. For example, the introduction to the 1948 version explicitly states that FNS nurses were to work only within the guidelines provided. According to that edition:

The routines set forth in this book are the orders given by the physicians of the Medical Advisory Committee of the FNS for the use of nurses in the service. They must be followed exactly. No other medications or treatments may be used. . . . In a grave emergency you may act according to your own judgment, but must report the case in full to the Medical Director.
The orders also became increasingly complicated. “Standing Orders” for children with “follicular tonsillitis, severe type” included:

Under 5 years:
300,000 units Procaine Penicillin IM stat, then start 125 mgm oral penicillin for ten days (Pentide, Pen-Vee K, Compocillin, TID).

5–10 years:
600,000 units Procaine Penicillin stat, then start oral penicillin as above.

Over 10 years:
600,000 units Procaine Penicillin stat, start 250 mg oral Penicillin TID x 10. If the patient has a sensitivity reaction to Penicillin, give Tetracycline as below . . . if a child is not tolerating Tetracycline, substitute Erythromycin . . . or Pediatric drops of Achromycin . . . .
When acute otitis media is also present . . . be sure to give ear drops.85

To interpret these orders, the nurse would have to be familiar with the types of penicillin and how they were given, the signs and symptoms of penicillin reaction, and the signs and symptoms of otitis media (a middle ear infection) in addition to the usual understanding of abbreviations such as “stat” (the Latin for “statim,” or immediately), “IM” for intramuscular, “TID” for three times a day, and other abbreviations.

Changes in leadership in the advisory board, an increase in medical knowledge, the rapid development of new drugs, and the changing economic climate from the depression to the war years all played a part in accounting for the stricter controls on the FNS nurses’ practice over time. Whatever the case, by mid-century the FNS medical advisory board was attempting to reinforce traditional boundaries on the nurses’ scope of practice. Nonetheless, the FNS nurse-midwives would not be deterred from their practice and their educational mission to prepare other nurse-midwives. As Assistant Director Mary Willeford noted in her annual report for 1934:

In regard to our plans for the future we have two specific aims. The first is to complete our originally planned demonstration area . . . .
Our second is to use our territory as a training field for the preparation of nurses as midwives for other isolated sections of the country. . . . There are other sections of America . . . where graduate nurses trained as midwives are needed in maternal and infant care.86
By 1939 that goal would become a reality, when the Frontier Nursing Service opened what one FNS nurse, Dorothy Buck, called its “training course in midwifery and frontier technic for graduate registered nurses,” in response to the loss of many of the British nurse-midwives who returned to England because of the war.87

By the next year, as a result of their efforts in education and in advertising, there were twenty-two nurses on staff at the Frontier Nursing Service. Moreover, Breckenridge met her goal to have the FNS showcased. In fact, visitors came from all over the world, including “Mexico, China, South Africa, Afghanistan, and Scandinavia,” to see the “pioneer demonstration service of ‘what can be done to give a country of poor people and difficult travel an inclusive nursing program.’”88 Meanwhile, concurrent with the FNS nurses’ work in the eastern United States providing access to care for poverty-stricken, rural white descendants of European immigrants, the Bureau of Indian Affairs field nurses were providing much the same medical and nursing services to the Navajo Indians in the West—a population that was not considered to be the “worthy poor.”