

## *Chapter Nine*

# Refining Quality of Care Strategies

**T**he Army Medical Department (AMEDD) dedicated even more attention to quality issues in the 1980s by building on the efforts of the 1970s.<sup>1</sup> This pursuit of quality paralleled the efforts of the Army of Excellence.<sup>2</sup> In keeping with this theme, the Army Nurse Corps introduced measures to enhance the delivery of nursing care in the 1980s.

During the 1980s, the Army Nurse Corps supported many efforts to improve the quality of Army nurses' practice. In 1981, work began to improve paper forms to document nursing care. One objective was to reduce the burden on nurses' time during personnel shortages and thus allow nurses to attend to their most important duties, direct patient care. Another objective was to prevent malpractice cases caused by deficiencies in the documentation of nursing activities.<sup>3</sup> Many Army nurses also were generally dissatisfied with available records and forms and requested approval to use overprints.<sup>4</sup>

A 1981 ad hoc committee recommended testing of newly revised forms, and the project later included scrutiny of every inpatient form in active use under the umbrella of the "Clinical Nursing Records Study." This became part of the fiscal year 1984 AMEDD Study Program, with the Health Care Studies and Clinical Investigation Activity at Fort Sam Houston, Texas, as proponent. Study questions addressed how the Army Nurse Corps could best organize its documentation of inpatient nursing activities to comply with AMEDD, Joint Commission on Accreditation of Hospitals, and quality assurance requirements, and what approaches would make inpatient nursing documentation more efficient. The gathered data, from various sources, such as practicing Army nurses, other military nursing services, the Health Services Command Inspector General Team, civilian "magnet" hospitals, and several civilian institutions recommended by a Joint Commission on Accreditation of Hospitals nurse surveyor, indicated that the Army Nurse Corps forms for documenting nursing history/assessment, problem list/nursing diagnosis, and nursing orders complied with Joint Commission on Accreditation

of Hospitals standards and were state of the art philosophically and conceptually. However, a major discrepancy emerged with progress notes. In prestigious civilian institutions, the use of progress notes was multidisciplinary. In the AMEDD, the nursing notes were separate, not integrated into the progress notes, the venue where most other health care providers recorded their observations, plans, and interventions. The working group then developed revised forms based on their findings and deliberations, pilot and field tested the forms, and made recommendations for implementation.<sup>5</sup>

The Clinical Nursing Records Study suggested adopting four of the 14 modified and tested forms, namely a revised Nursing History and Assessment form, its continuation sheet, a Nursing Care Plan with Draft Design Changes, and a Nursing Discharge Summary also with design changes. The Office of the Chief, Army Nurse Corps, then implemented the corresponding regulation changes.<sup>6</sup> In spite of difficult circumstances in the 1980s, the Army Nurse Corps successfully improved its administrative practice, documentation, and delivery of patient care.

The Corps also implemented, refined, and expanded its Standards of Nursing Practice in the 1980s. The Corps followed the lead of the American Nurses Association, which had first published generic standards in 1973.<sup>7</sup> “Standards,” the American Nurses Association explained, “provide a means by which a profession clearly describes the focus of its activities, the recipients of service, and the responsibilities for which its practitioners are accountable.”<sup>8</sup> The Army Nurse Corps identified its Standards of Nursing Practice as the fulfillment of “the profession’s obligation to assess, provide, evaluate, and improve nursing practice.” The Corps also intended the standards to “serve as a documentation tool to assist in the audit and evaluation process.”<sup>9</sup> Although the intent behind the standards was straightforward, initially many misinterpreted and rejected the document.

Considerable confusion, anger, and frustration greeted the introduction of the Army Nurse Corps Standards of Nursing Practice. General Hazel Johnson thought that some Army nurses “felt as though we were asking them to do more than they should be doing,” and reported that a handful of individuals wrote to the surgeon general to say that “we had our nerve.” Several Medical Corps officers also penned “some very nasty letters to the Surgeon General.” Semantics was one aspect of the problem. For example, the word *diagnose* set off alarms because professional nurses at this time were assuming a diagnostic role, meaning this function was no longer the exclusive domain of physicians.<sup>10</sup> Johnson mused, “What do we have here. People who own words. Who owns this word that we can’t use without having copyright on it.” However, she decided if the surgeon general asked her to delete the word *diagnose* from the standards at the behest of Medical Corps officers, she then would replace that word with *assessment*. She rationalized that it was “the same identical thing. It is exactly, precisely the same identical thing.” Johnson refused to let the criticisms upset her. Her standard reply to such disparagements was, “Fine, we’ll take that into consideration when we put the next edition out.”<sup>11</sup> The word *diagnose*, however, did disappear from the Standards of Nursing Practice. Reactions to the introduction of the standards took

many forms.

Captain Freida J. Sadler, a head nurse at Kimbrough Army Hospital, Fort Meade, Maryland, aired her response in a poem that illustrated her misgivings.

There are so many changes  
How can I adjust  
To doing SOAPIE [Subjective data, Objective data, Assessment, Plan,  
Implementation, Evaluation] charting  
On all this nursing stuff?

It seems so overwhelming  
I'm approaching it with dread  
How can I do an assessment  
With such confusion in my head?

Assessments, problem lists, etcetera  
There seems so much to do  
And I can't even tell the difference  
Between S & O and Problem #2

I must listen to the patient  
I must hear and understand  
I must palpate and auscultate  
And initiate my plan

It's almost 1430  
The 24 hour report is due  
There are two more admissions  
And, I need to assess them too

I must develop a nursing diagnosis  
And, long and short term goals  
Along with nursing orders and discharge plans  
Oh, won't you give me a hand?<sup>12</sup>

Nine months later, Sadler once again described in doggerel her total involvement in the new standards and her good-natured acceptance of them that was characteristic of many Army nurses:

The change was imminent  
The front office declared  
The first month was tough  
I was threatened and scared

Inservices were held  
Nursing articles were read  
As we learned to assess  
And plan ahead

We had to implement  
We strived to succeed  
Everyone struggled, every one asked  
Why are you doing this to me?

Several months passed by  
As we all persevered  
We began to see progress  
And our thoughts also cleared

SOAP [Subjective data, Objective data, Assessment, Plan] notes were written  
Problem lists were made  
Consults were sent  
The plan of care was laid

We followed nursing orders  
We understood the patient's needs  
We became more involved  
We were growing, indeed

It's not so overwhelming now  
I do know what to do  
What is most perplexing though  
Is that I'm never through

Taped reports have helped a lot  
Along with peer review  
Research will soon be done  
To evaluate what we do

Patients are much happier  
Care is much improved  
Staff receives more thanks  
For the efforts they pursue

It's been a good experience  
Much knowledge I have gained  
I'm glad I've had a part in it  
And imagine! I'm still sane!<sup>13</sup>

Over time, several Army Nurse Corps nursing specialties and interest groups augmented and improved the original Standards of Nursing Practice. A 1983 supplement that identified nursing quality assurance guidelines appeared in print, and the community health nurses published their practice standards as an adjunct to the Department of Army Pamphlet.<sup>14</sup> In 1986, Change 2 to the AMEDD Standards of Nursing Practice, Department of Army Pamphlet 40-5, added standards for occupational health nursing.<sup>15</sup> That same year, a group of Army nurse practitioners developed practice standards geared to their specialty issues, such as the provision of patient care, professional development, and care supervision. They devised a checklist based on the standards for use in chart audits and peer review.<sup>16</sup> By 1987, the various nurse consultants all had developed standards of practice for the Army Nurse Corps nursing specialties.<sup>17</sup>

Publication of the Army Nurse Corps Standards of Nursing Practice sparked additional reflection and other standards development. Lieutenant Colonel James D. Vail called on nurse anesthetists to develop anesthesia practice standards rela-



Lieutenant Colonel James D. Vail served as Chief, Nursing Research Service at Walter Reed in 1985. Photo courtesy of Nursing Research Service, Walter Reed Army Medical Center, Washington, DC.

tive to clinical practice in all settings. He also advocated an anesthesia-oriented compilation of process criteria and recommended testing, refinement, and implementation of the criteria as an instrument to evaluate anesthesia practice.<sup>18</sup>

The 13th Evacuation Hospital, a unit of the Wisconsin Army National Guard, saw the wisdom and need to develop standards and criteria for routine peacetime training responsibilities and wanted a template for organized review that was appropriate for a nonhospital setting. The purpose of the “Quality Assurance Plan for Nursing Service” was to improve unit level performance and efficiency. These guardsmen hoped that their work could be emulated by other Army Reserve and Army National Guard units to achieve higher levels of effectiveness and competence that in turn would improve combat readiness, contribute to individual satisfaction, and increase retention rates.<sup>19</sup>

As one relatively small but unified element in the larger civilian and military nursing cosmos, the Army Nurse Corps was in the vanguard in developing and publishing both general and specific Standards of Nursing Practice.<sup>20</sup> In part, the achievement owed much to the Corps members’ advanced educational background, the specialty nurse consultants’ keen insight, the senior leaders’ determination, and the realization of a critical mass—a large organization moving forward with virtual unity on a significant piece of work. As the world of nursing evolved, conditions in the Army also changed, and the standards were widely accepted and duplicated. With that goal accomplished, the Army Nurse Corps no longer regarded publication and dissemination of the standards as a priority.

In November 1998, the Army Nurse Corps rescinded Department of the Army Pamphlet 40-5, the Standards of Nursing Practice. The rationale determined by a team of senior officers was that the Corps then based its practice on the American Nurses Association Standards of Nursing Practice and standards of the specialty nursing organizations.<sup>21</sup> At that time, as Simmons’ assistant, Colonel Susan McCall recognized, the Department of Defense (DoD) was eliminating unnecessary regulations, pamphlets, and circulars.<sup>22</sup> Cost containment became the AMEDD watchword as the 1980s ended. In the meantime, several other innovations emerged in the pursuit of excellence.

The arduous process of developing and implementing a patient classification system was another effort initiated—in part—to improve the quality of nursing care delivered in the AMEDD.<sup>23</sup> Specific reasons for the creation of the system included the need to have a valid and reliable method to determine appropriate and adequate amounts of staff, have acuity data available for the Force Development Division to calculate safe levels of personnel, and be able to compute the correct mixture of staff—both professional and paraprofessional—to provide care in any given nursing unit.<sup>24</sup>

Before the 1980s, nursing administrators in Army hospitals staffed nursing units primarily on the basis of patient census, reasoning that units with more patients—regardless of acuity—needed more staff. In a changing health care climate characterized by “increasingly complex technology, growth in specialization, provision of more time consuming tasks, increased emphasis on health teaching, personal-

ization of service to patients, and ongoing evaluation of performance,” a better method was needed to determine staffing needs based on the aggregate number of nursing care hours required by patients on a unit.<sup>25</sup>

Early in the 1970s, the Army Nurse Corps recognized the need for such a system and considered assigning the herculean task to the Division of Nursing at Walter Reed Army Institute of Research. At the same time, however, the Army Nurse Corps leadership acknowledged that nurse researchers then assigned to that unit possessed “limited research ability” and were in a “precarious posture” in an organization that rendered them demoralized and “non-productive.” Coupled with the fact that the division’s operating budget was limited to a mere \$100 a month, leaders decided not to ask nurse researchers in the Division of Walter Reed Army Institute of Research to develop and test a patient classification instrument.<sup>26</sup> Instead, Colonel Beverly Glor, assigned at Madigan Army Medical Center, Washington, and Lieutenant Colonel Susie Sherrod, assigned at Health Care Studies Division, Fort Sam Houston, Texas, worked on projects that had comparable goals but disparate approaches.<sup>27</sup> Glor’s effort, the Madigan Army Medical Center Acuity Based Patient Classification Subsystem, quantified direct and non-direct nursing care in medical-surgical and specialty areas and included a yardstick to determine numbers and mix of personnel required.<sup>28</sup> Sherrod’s approach, the Nursing Care Hour Standards Study, measured the standard time required to complete 352 operationally defined, direct nursing care tasks in six military treatment facilities (MTFs) of differing sizes over two years. It gauged the frequency of direct nursing care tasks in various specialty areas, such as medical-surgical, intensive care, obstetrics, newborn, pediatric, and psychiatric units, and computed the ideal numbers and types of nursing personnel. To evaluate the two studies and solicit recommendations, the Army Nurse Corps hired Health Management Systems, a consulting firm. Health Management Systems recommended rejection of the weaknesses of both plans and consolidation of their best features to create one ideal system. The new plan included the Nursing Care Hour Standards System’s time standards and task frequencies and the Madigan Army Medical Center Acuity Based Patient Classification Subsystem’s instrument and nondirect care components. At approximately the same time, the Navy Nurse Corps, then working on a patient classification system for its hospitals, joined forces with the Army Nurse Corps to conduct validity and reliability studies in medical-surgical specialties. This further revised, improved, and expanded the tool, and the system’s new designation became the Workload Management System for Nurses (WMSN).

In 1983, a team of investigators used a self-tutoring program to familiarize nurses with the WMSN at five selected Army MTFs. Charge nurses and team leaders subsequently tested the system by classifying patients every day on every work shift for four months. Then the team returned to the MTFs to appraise the system, basing their evaluations on criteria of comprehensiveness, data output and input, validity and reliability, implementation, and cost. The results were used to fine-tune the WMSN.<sup>29</sup> The Army Nurse Corps required all nursing departments at all MTFs to use the WMSN beginning on 1 January 1985.<sup>30</sup> By August of

that year, the WMSN was used throughout the Army Nurse Corps. Lieutenant Colonel Jude Larkin, a nurse researcher at the Walter Reed Army Medical Center (WRAMC), pondered the implications.

The question then becomes how to use these data for increased efficiency and political gains. That is, at the local intra-departmental and departmental level, ANC [Army Nurse Corps] wide and for validating our manpower needs to others within the Army and on Capitol Hill. With automation, we would be derelict if we didn't explore full use of the WMSN. . . .<sup>31</sup>

The Army Nurse Corps continually upgraded the system. Private contractors developed commercial software to support automation for data input at the unit level. The Army Nurse Corps coordinated the interface of WMSN with Uniform Chart of Accounts for Personnel.<sup>32</sup> By 1989, all nursing units had computers for data input.<sup>33</sup> Various Army Medical Department Activities and Army Medical Centers published regulations based on the WMSN, and the Department of the Army issued a Field Manual to guide its use.<sup>34</sup> The Corps then planned to expand the WMSN to include utilization in ambulatory care clinics, labor and delivery settings, the postanesthesia care units, and emergency departments.<sup>35</sup>

The Corps did not implement any research to determine whether a relationship existed between the use of the WMSN and patient outcomes. Thus, its impact on variables such as adverse patient events, length of hospital stay, or improvements in care was unknown. Colonel Bonnie Jennings, who spent several years testing and implementing the tool, noted that, in the Army, the presumption existed that if enough staff was available, quality care would follow. However, no scientific evidence affirmed that premise. Jennings admitted that the staffing mix in the military—so heavily influenced by the demands of readiness—was another consideration. The blend of professional nurses, practical nurses, and nursing assistants differed significantly from the mix in a civilian hospital setting. Nonetheless, she considered the WMSN as good as any acuity tool available nationwide. Jennings recalled that, in her later exposure to the WMSN as a chief nurse, it served primarily as a demonstration of the process used to make staffing decisions during Joint Commission for the Accreditation of Healthcare Organizations accreditation visits. Whether those decisions were valid was yet another untested question.<sup>36</sup>

The WMSN usually justified the need for significant numbers of additional professional and paraprofessional nursing staff, a state of affairs that threatened and irritated other departments within MTFs who feared that—in the balance—they would lose staff. The outcomes were a series of bureaucratic battles for funds and people.

General Connie L. Slewitzke remembered a skeptical physician who doubted that it took 20 minutes to give a bed bath to an intensive care patient, as if a patient festooned with drainage tubes, infusion lines and pumps, ventilator systems, and other miscellaneous technological paraphernalia made bathing a simple operation. Many Medical Corps officers were suspicious of the WMSN's statistics and resisted its implementation. Slewitzke had a conversation with Major General Lewis Mologne, WRAMC commander, when he came to realize that the WMSN



Lieutenant Colonel Jude Larkin served as Nurse Researcher, Nursing Research Service at Walter Reed in 1985.

Photo courtesy of Nursing Research Service, Walter Reed Army Medical Center, Washington, DC.



Colonel Carol Reineck served as Chief Nurse, Darnall Army Community Hospital, Fort Hood, Texas in 1998.

Photo courtesy of Colonel Carol Reineck, San Antonio, TX.

was “really predicated on orders the doctors write.” His illogical conclusion was that “we can fix that. We do not need all these nurses—doctors can put in NG [nasogastric] tubes, doctors can put in IVs.” Slewitzke replied, “Yes, . . . but who watches that IV? Who continually calibrates it, who observes the patient, who charts it, who manages that NG tube, . . .?”<sup>37</sup>

Other problems surfaced when nurse staffing, as calculated by the WMSN, was unavailable, which then precipitated bed or entire ward closures. The closures affected physician internship and residency instruction, since they decreased the pool of available patients. This development, in turn, had Graduate Medical Education implications and became a serious issue for the Medical Corps. According to Colonel Carol Reineck, “doctors pooh poohed the system when they just plain wanted to fill beds and did not like to have a ‘system’ say no.”<sup>38</sup> Major General John E. Major, Health Services Command commander, may have had this situation in mind when he editorialized about the WMSN in the *HSC Mercury*. “None

of us can afford to use this tool as either a weapon or an encumbrance,” he wrote, “since the WMSN was the best way to offer quality care at reasonable cost. The AMEDD should not abdicate its long-established team spirit,” Major advised, “because a nurse-doctor schism would only hurt patients by limiting or diminishing care.”<sup>39</sup>

Several nurses also had reservations about the WMSN. They lamented the amount of time required to enter the WMSN numbers into the system, particularly during the 1980s, when staffing levels regularly fell below accepted levels and nurses’ time was a precious commodity.<sup>40</sup> Simplistic answers to the puzzle of calculating adequate staffing abounded but few if any easy solutions resolved the question. Nonetheless, the WMSN served for two decades as the best available instrument for the purpose.

Another hurdle to overcome was the Air Force Nurse Corps reluctance to accept and use the WMSN.<sup>41</sup> The Army Nurse Corps wanted the WMSN as the DoD patient classification standard so that statistics could be compared across the services and as a means for all services to demonstrate a unified need to support a claim with DoD and Congress for more personnel. The Air Force Nurse Corps, however, preferred to use its own 20-year-old patient classification system, which lacked supporting statistical documentation, as a foundation for its staffing system. Slewitzke shared the WMSN with General Carmelita Schimmenti, chief of the Air Force Nurse Corps, to convince her to adopt its use; Schimmenti remained unconvinced. She perceived the WMSN not as a means to justify more personnel but as a way to better distribute available staff. Slewitzke was disappointed, having expected Schimmenti to be excited when she learned of the system’s success. That did not happen. In 1987, Slewitzke believed it unlikely the Air Force could continue to use its own outdated system.<sup>42</sup> She was right. By 1988, implementation of the WMSN began “in several Air Force Hospitals.”<sup>43</sup> On 21 March 1989, the deputy secretary of defense signed a directive ordering the utilization of the WMSN by all services. It then became an accepted DoD-wide system.<sup>44</sup>

The use of automated information systems in both civilian and military health care institutions to improve quality and enhance efficiency began in the 1970s. However, the trend became a major force in the 1980s. Army Nurse Corps officer Major Mary Messerschmidt accepted an assignment to work in a full-time role focusing on automated hospital support systems when the information management program was in its infancy. Her involvement with this project began in 1973 with an assignment to U.S. Army Health Services Data Systems Agency at Fort Detrick, Maryland. Originally, Messerschmidt collaborated with a team to formulate the automatic data processing specifications for the new WRAMC, then under construction, which involved providing recommendations on nursing requirements, assessing technological and professional input, identifying reasonable objectives, and determining appropriate operational concepts.<sup>45</sup> By 1975, however, DoD directed that all automation efforts be jointly developed and standardized among the three military hospital systems, and the Tri-Service Medical Information System (TRIMIS) was born.<sup>46</sup>

Thus, the tri-service effort to begin using computers to improve health care and eventually nursing care in the three military services originated in the mid-1970s with the establishment of TRIMIS. The assistant secretary of defense (health affairs) charged the TRIMIS Program Office with developing functional applications to enhance health care delivery, manage medical information, and integrate functional and management applications. The purpose ultimately was to create a prototype of a replicable system to be implemented originally in a demonstration hospital and later expanded throughout the system.<sup>47</sup> The tri-services translated functional requirements into procurement packages and developed procurement contracts with commercial firms for pilot tests of automated systems to support pharmacy, laboratory, radiology, appointment, and logistics services.<sup>48</sup>

In 1982 the Army Nurse Corps assigned Captain Elizabeth Weathington as part of the two-person TRIMIS Nurse Consultant Team.<sup>49</sup> One of their projects was to survey 33 Army nurses who had some computer expertise to evaluate the current status of on-the-job computer use. Twenty-two Army nurses responded to the questionnaire, almost all answering that they had no computers or software to support their nursing roles. Most expected computers in the near future and hoped to use them for compiling staff work schedules, documenting education, preparing monthly/quarterly reports, managing laboratory data and Central Materiel Supply levels, and so forth. Most chief nurses had a positive attitude about computerization (77 percent), while 16 percent were indifferent, and 5 percent were negative. The study's sample size was too small to provide valid and reliable conclusions but it did suggest the lack of experience Army nurses as a whole had with computers. However, those surveyed had a fairly accurate understanding of the role that automated systems might play in managing nursing information in the future.

Lieutenant Colonel Gar Yip was the Army Nurse Corps consultant on the TRIMIS team in 1988. She played a major role in the development and implementation of the Composite Health Care System (CHCS). Planners conceived CHCS to facilitate the exchange of patient health information with related services like dietetics, patient administration, radiology, pharmacy, laboratory, and the patient appointment system.<sup>50</sup> The TRIMIS staff organized CHCS to support quality assurance activities, as well as managing resource, mobilization, and mass casualty requirements.

TRIMIS contracted with outside sources to process CHCS from concept to application. It awarded Stage I contracts in 1986 to three bidders to design and install their assigned CHCS components in one of three MTF locations, or alpha sites: (1) Camp Lejeune, North Carolina; (2) Fort Knox, Kentucky; and (3) Sheppard Air Force Base, Texas. After evaluating the performance of Stage I contractors, TRIMIS awarded contracts for an improved CHCS at 14 beta sites, including three Army MTFs, Eisenhower Army Medical Center, Georgia; Tripler Army Medical Center, Hawaii; and the Nürnberg Medical Department Activity, Germany. Stage II called for development of capabilities to automate nursing patient documentation, physiological monitoring, personnel scheduling, resource

management, nursing reports and minutes, and educational endeavors.<sup>51</sup>

These expectations were not fully met because serious flaws appeared in the \$1.6 billion system. Contractors were unable to complete their requirements on time or within budget. Two critical but unsolved issues were multiple files of identical patient records and difficulties with archiving patient records.<sup>52</sup> Other significant inherent problems were a nonfunctional module for entry of doctors' orders, a character-based computer user interface as opposed to the user-friendly Windows or Macintosh graphic-based operating systems, an acquisition strategy that failed to deliver a computer-based patient record, no modules for nursing documentation, and other critical system performance concerns.<sup>53</sup> *Inside the Pentagon*, a commercial publication, cited numerous other flaws in CHCS, such as "cost overruns, system development delays, slow response times and 'break-downs in medical care'." The Defense Medical Systems Support Center rebutted the charges and continued tests to solve problems and eliminate bugs.<sup>54</sup> In the final analysis, the only successful modules were those tangential to nursing and applicable to operations such as laboratory, pharmacology, radiology, and appointment scheduling.<sup>55</sup>

Another issue relating to good quality of care had to do with the requirement for all Army nurses to pass the National Council of State Boards of Nursing Licensure Examination (NCLEX) following their graduation from an accredited collegiate school of nursing. A successful score on this examination, which became the professional standard in 1978, was a requirement for professional licensure and for commissioning in the Army Nurse Corps.<sup>56</sup> By 1981, probably because of the pressing need for more nurses, the Army Nurse Corps was commissioning "by exception" both direct accessions and Reserve Officers' Training Corps graduates before they received a NCLEX passing grade.<sup>57</sup> If the newly commissioned officer subsequently failed the examination, Johnson instructed chief nurses to refer the officer to remedial courses to better prepare him or her for the next testing opportunity. She also thought it would be helpful for the officer to work in the specialty field that correlated with the section of the test that he or she failed and directed that the officer take the next NCLEX offered.<sup>58</sup> After the first failure to pass the NCLEX, Joint Commission for the Accreditation of Hospitals standards dictated that the nurse in question should not be allowed to perform professional nursing activities before retesting.<sup>59</sup> DoD Directive 6025.6 specified that any care provided by these graduate nurses *not* be given independently but only "under the direct supervision of an appropriate licensed health care provider of the same discipline."<sup>60</sup> The Army discharged direct commissioned officers who failed the NCLEX a second time. Reserve Officer Training Corps graduates who failed the examination twice were transferred from the Army Nurse Corps to another branch in the Army to fulfill their service commitment. Johnson expedited the discharge or branch transfer.<sup>61</sup> A memorandum granted Army Enlisted Commissioning Program graduates 60 days of study time to prepare for and take the NCLEX. After those first 60 days, Army Enlisted Commissioning Program participants had to work in a local military unit in enlisted status while awaiting exam results and

before attending the Officer Basic Course.<sup>62</sup>

In yet another effort to improve quality, the Army Nurse Corps conceived and implemented a novel and unique departmental-level matrix. It first developed a new Department of Nursing Organizational Model in 1988 “to prepare . . . for efficient and effective operations during the 21st century.”<sup>63</sup> In 1989, the annual Professional Development Course’s primary commission was designing the model’s prototype.<sup>64</sup> The draft model elevated Army Medical Center and Medical Department Activity chiefs, Department of Nursing, to the level of deputy commander for nursing.<sup>65</sup> This new configuration would render the deputy commander for nursing on a par with the deputy commander for clinical services, formerly the chief, professional services, and the deputy commander for administration, formerly the executive officer, and would also furnish the deputy commander for nursing with direct access to the commander. The deputy commander for nursing had the ultimate responsibility and authority for nursing services within the institution. The next subordinate echelon, referred to as the chief, nursing administration, would more closely and directly supervise all nursing activities in the MTF, such as the clinical nursing coordinators on days, evenings, and nights; the standard nursing support and productivity services; and the case managers (usually clinical nurse specialists) who established and monitored the patients’ critical paths and outcomes and coordinated the health care team group effort.

Course participants described the model as patient centered, collaborative, functional in peace and war, capable of managing both cost and quality concerns, consumer driven, outcome focused, and flexible.<sup>66</sup> Over time, several MTFs implemented some of its features. The position title of chief, Department of Nursing, for instance, virtually disappeared during the 1990s, to be replaced by variations on the deputy commander model. Yet, the ideas in the organizational model were so broad that little if any reorganization occurred based on the original prototype.<sup>67</sup> Some questioned whether the organizational reconfiguration influenced good quality care to any degree. They argued that the changes did little to improve Army nurses’ status and were a contributing factor to a loss of professional identity.<sup>68</sup> Still, it was a harbinger of future organizational configurations.

Some Army Nurse Corps leaders were simultaneously developing and testing a paradigm to clarify the delivery of nursing care in the Army. For them, the Army Nursing Practice Model was an amalgam of several “civilian practice models,” such as functional, team, primary, or case management nursing. The actual delivery model depended on variables such as patients’ acuity; numbers and mix of staffing; the practice milieu; the manner in which the organization’s values, goals, objectives, and philosophy were operationalized; and whether the care setting was a combat or a peacetime environment. Its architects envisaged an adaptable, expandable, and resilient model that was not static but instead dynamic. This meant there was no single right nursing delivery model suitable for all exigencies. The basic premise was that the chosen blend of nursing care delivery models should produce positive patient outcomes and satisfaction, retain premium staff, and improve organizational finances.<sup>69</sup> It accurately portrayed the philosophy and prac-

tice environment of contemporary Army nursing.

Five years later, after careful scrutiny and with considerable deliberation, Colonel Terris Kennedy, Major Elizabeth Hill, Brigadier General Nancy Adams, and Colonel Bonnie Jennings expanded the practice model as a “Conceptual Model of Army Nursing Practice.” In keeping with the accepted definition of a conceptual model, they proposed “a symbolic depiction in logical terms of an idealized, relatively simple . . . structure.”<sup>70</sup> They assumed Army Nurse Corps officers were unique in their readiness to provide nursing care in various contingencies. At the model’s heart were concentric triangles symbolizing Army nurses’ duty to provide care, comfort, and cure. This occurred in a framework of administration, education, and research support embellished by professional efforts in traditional nursing care, advanced practice nursing care, and clinical case management. The model’s intent was to direct nursing practice, to guide development of professional nursing, and to prepare Army Nurse Corps officers for the demands of future deployments and health care provision.<sup>71</sup> This was an example of evolving doctrine and theory development within the Army Nurse Corps whose purpose was to explain and improve Army nursing practice and to expand the professional knowledge unique to military nursing.

The Army Nurse Corps used numerous tactics to improve the knowledge base of its officers, another aspect of the movement to enhance the quality of care provided. In the 1980s, the Corps offered a variety of educational courses to improve officer professionalism. Some of these classes had existed for decades, while others were innovations. Their objectives were to enhance nursing specialty knowledge and skills, develop military acumen, and provide orientation to unfamiliar role expectations or new care settings.<sup>72</sup>

For many years, the Army Nurse Corps offered its members various types of specialty education. During the 1980s, the Corps sponsored a specialty course in Psychiatric Mental Health Nursing at Eisenhower Army Medical Center in Georgia, courses in Obstetrical and Gynecological Nursing and Pediatric Nursing at Tripler Army Medical Center in Hawaii, and courses in Operating Room Nursing at Brooke Army Medical Center, Madigan Army Medical Center, and Beaumont Army Medical Center. As a recruiting incentive, applicants for Army Nurse Corps commissions could request that they be allowed to participate in the course of their choice. They then were guaranteed enrollment at the course within their first year of service.

More experienced Army Nurse Corps officers enjoyed additional educational opportunities. They could apply for advanced studies, such as the Principles of Military Preventive Medicine Course given at Fort Sam Houston, Texas; the Critical Care Nursing Course held at Brooke and Fitzsimons Army Medical Centers; in some cases, a follow-on Renal Dialysis Course conducted at Brooke Army Medical Center; and the Nurse Practitioner Course held at Fort Ord, California. Also available were two-week Professional Management Courses, such as the Clinical Head Nurse Course, Principles of Advanced Nursing Administration, and the Preventive Medicine Program Management Course.<sup>73</sup> In 1984, the Army

Nurse Corps sponsored the first course to prepare Army nurses for roles as chiefs, nursing education and training services. The first such class met at the Academy of Health Sciences (AHS).<sup>74</sup>

Additionally, Army nurses could apply for Army-sponsored graduate education in civilian academic institutions as a part of the Long Term Civilian Training Program. Army degree programs could focus on many nursing specialty areas. Career officers could also take advantage of graduate education in health care administration and receive a master's degree in health care administration from Baylor University, with the classroom instruction at the AHS. They also could pursue graduate education in anesthesia nursing.

Although the overall topical content of course curriculums remained relatively constant, the Army Nurse Corps and the faculty continually improved and refined offerings. For instance, in 1981, the anesthesia course became a graduate program.<sup>75</sup> Originally, the State University of New York at Buffalo awarded a master's degree to Army nurses who successfully completed the anesthesia course.<sup>76</sup> In 1984, the Army transferred its anesthesia affiliation from the State University of New York to the Texas Wesleyan College.<sup>77</sup> By 2000, the Army again shifted its program affiliation, this time to the University of Texas at Houston Health Science Center. The repeated affiliation changes resulted from the competitive bidding process required for contract awards. Many civilian universities expressed interest in contracting with the Army Nurse Corps to provide anesthesia education.<sup>78</sup> As the century waned, candidates for anesthesia education could alternatively choose to attend the nurse anesthesia program at the Uniformed Services University of the Health Sciences.<sup>79</sup>

Other classes had military topics as their focus. The first two foundation military education courses were the AMEDD Officer Basic Course and the AMEDD Officer Advanced Course, both of which were in most cases mandatory. Opportunities for attendance in residence at the Combined Armed Services Staff School, the Command and General Staff College, and the Senior Service College, or its counterpart, the Army War College Corresponding Studies Course, were successively fewer and rationed to the most promising officers. The Corps gave preference to nurses assigned to Forces Command units for attendance at the Combat Casualty Care Course at Fort Sam Houston, Texas; the Medical Defense against Biological Warfare and Infectious Diseases Course given at Fort Detrick, Maryland; and the curriculum that dealt with Medical Management of Chemical Casualties at Aberdeen Proving Ground, Maryland.<sup>80</sup>

For many years, organized nursing acknowledged that newly graduated professional nurses, particularly those educated at the baccalaureate level, were susceptible to "reality shock" when moving from the role of student to that of full-time employment as a graduate nurse. Collegiate graduates were especially vulnerable because their demanding academic requirements left little time to gain hands-on experience from actual clinical practice. Possessing much theoretical knowledge, graduates had fewer clinical skills. The frustrated novice nurses, confronted by the reality of professional nursing as opposed to the ideal presented in their edu-

cational programs, often changed careers.<sup>81</sup>

To thwart reality shock and to ease the transition from collegiate student to Army Nurse Corps officer, the Corps created a preceptorship program for newly graduated second lieutenants in 1981.<sup>82</sup> The Corps intended the program to stimulate recruitment by the U.S. Army Recruiting Command and to enhance retention by “mitigating negative affective states.”<sup>83</sup> Designed by the Nursing Science Division at AHS, the program concentrated on three key areas: (1) socializing the new officer to identify with the nursing profession and the Army; (2) sharpening clinical skills; and (3) teaching entry-level managerial skills. The chief, Nursing Education and Training Section in the MTF normally was responsible for the program, whose original length was tailored to meet individual needs with an optimum goal of 120 days of developmental mentoring. The chief, Nursing Education and Training Section assigned the new officer to an experienced Army Nurse Corps preceptor who served as a role model in one of several clinical areas. The pair frequently worked together with identical schedules. The preceptee also rotated through several other clinical areas, usually medical and surgical units and recovery and emergency departments, with about one week spent in ancillary services. After completing each clinical element, the unit’s head nurse and the preceptor submitted a written evaluation of the preceptee’s performance using an AHS-designed form.<sup>84</sup>

Over time, the Army Nurse Corps fine-tuned its Preceptor Program. By 1987, the curriculum, as implemented at William Beaumont Army Medical Center, was a wide-ranging experience anchored in certain behavioral objectives that integrated nursing theory and practice with pragmatic leadership principles and skills needed in military organizations. However, the Beaumont nurse educators subsequently shortened the time allocated to the program, perhaps as a result of the shortage of nursing resources or possibly because the additional time was superfluous to the new graduates’ needs. Preceptees participated in the two-week Professional Orientation Program attended by all professional nurses new to the institution, which was followed by a four-week clinical experience under the direct supervision of a preceptor from the nursing unit to which the new officers would be permanently assigned. At intervals during the four weeks, the new officer spent eight hours in the emergency department and four hours each in the operating and recovery rooms, the laboratory, and the electrocardiogram clinic. The newcomer participated in classes on the Officer Efficiency Report, career planning, head nurse and wardmaster expectations, how to sponsor newcomers, and a group discussion of expectations and perceptions. The standard Officer Efficiency Report format guided the evaluation of the preceptee’s performance in the program, although its contents did not become part of the preceptee’s official military record. Rather, it was considered when preparing the preceptee’s mandatory initial 120-day Officer Efficiency Report.<sup>85</sup>

Four years earlier, in October 1977, the Air Force Nurse Corps began a program similar to the Army Nurse Corps Preceptorship Program. It ran for 20 weeks and aided in the transition from civilian life of about 100 new nurses every six months

at nine Air Force Base hospitals in the continental United States. Patterned after comparable civilian programs, the Air Force Nurse Internship Program included classroom lessons on topics such as clinical procedures, techniques for the emergency department, pharmacology, and nursing practice standards. For actual, hands-on clinical experience, the Air Force Nurse Corps paired the new nurse with an experienced partner who was to be both mentor and friend.<sup>86</sup>

In 1984, Slewitzke started another innovative program, the Army Nurse Corps Fellows Program, to develop mid-grade officers. She expected the fellowship to familiarize officers with the complex administrative activities involved in daily operations of the Office of the Chief and also to implement special projects.<sup>87</sup> The Dental Corps offered a similar yearlong fellowship, but the Army Nurse Corps had no personnel allocations or funds for such a lengthy venture. Thus, Slewitzke sponsored Army nurses locally assigned in the Military District of Washington for participation in the Army Nurse Corps three-month mentorship program.<sup>88</sup> Various Military District of Washington chief nurses in the Washington, D.C. area nominated the fellows, and Slewitzke made the final selection. Reservists initially filled in for the participating officers at their duty sites, but this practice quickly drew criticism. Chief nurses did not want reservists in some of these key positions, recalled Slewitzke, and the WRAMC commander, General Mologne, complained about nurses in his medical center working somewhere else even when a reservist replaced them.<sup>89</sup> The first two participants were Major Dena Norton and Major Kathleen Srsic-Stoehr.<sup>90</sup> Norton came from the Nursing Research Service at WRAMC, and her special project was to survey civilian anesthesia schools and students to gauge interest in a tuition assistance plan. The National Guard eventually funded a tuition assistance program based on her findings.<sup>91</sup> Srsic-Stoehr sat in on high-level meetings and reviewed and analyzed manpower databases—both civilian and military—as her special project. She described the interplay of the senior officers' personalities in the chief's office. Slewitzke, for example, was passionate about issues. Srsic-Stoehr recognized how much Slewitzke cared for the Corps and fought to keep it in the forefront. The assistant chief of the Corps, Colonel Eily P. Gorman, was perceptive, conscientious, and inquisitive, and she always asked the right questions and saw beyond the obvious. Colonel Audre McLoughlin, the Army Nurse Corps consultant in the Consultant's Branch, was knowledgeable in both an academic and a practical sense.<sup>92</sup>

Several years later, in 1986–1987, Lieutenant Colonel Gar Yip served in the three-month fellowship and also carried out a number of projects such as developing the hospital white duty uniform, evaluating a 600-response civilian nurse survey, and analyzing the Workload Management System for Nursing.<sup>93</sup> During her fellowship, Major Nancy Molter devised an Army-wide questionnaire seeking to modify the criteria for the critical care nurse skill identifier. The data gathered stimulated innovative regulation change. No office space was available for Molter, so she typically would sit at the desk of anyone who was not present. If all were there, she occupied a cupboard down the hall with a Canadian dental officer. The location of the Office of the Chief of the Corps explained the cramped quarters.



A while after her fellowship concluded and Major Kathleen Srsic-Stoehr, right, returned to duty at Fort Belvoir, she escorted Brigadier General Connie Slewitzke, left, who was making an official visit to DeWitt Army Community Hospital at Fort Belvoir, Virginia.

Photo courtesy of Colonel Kathleen Srsic-Stoehr, McLean, VA.

It was situated in the E-Ring, prime real estate in the Pentagon. On a lighter note, Molter set a personal goal to beat Gorman to work in the morning, but no matter how early she arrived, Gorman was always there. The best she could do was get there at 6:10 one morning only to find her senior officer already making the coffee. She never got there before her!<sup>94</sup>

The enthusiasm and resolve of all involved ultimately made the fellowship productive. The fellows' participation furnished them with a personal insight into the attitudes of the senior officers working under conditions of intense pressure



While Major Nancy Molter was serving as the Army Nurse Corps fellow, she was promoted to lieutenant colonel. Brigadier General Connie Slewitzke (left) and Colonel Elizabeth Finn (right) pinned on Molter's new rank insignia in December 1984.

Photo courtesy of Army Nurse Corps Archives, Office of Medical History, Falls Church, VA.

generated by the immediacy of multiple complex issues. The fellowship in the Office of the Chief, Army Nurse Corps, continued into the 1990s, at which time the Corps expanded the program to a year. This change was dictated by the fact that the original participants consumed the first four weeks of their three-month fellowship orienting themselves and feeling comfortable enough to do the work. Major Kathleen Tracy was the first Army nurse to serve in the extended fellowship.<sup>95</sup>

Not all the issues relating to Army Nurse Corps education and the development of its officers, however, were positive and encouraging. Some challenges to the educational status quo threatened the Corps overall high quality. Such was the case with the entry-level education issue.

Driven by the persistent shortages, external forces again tested the Army Nurse Corps 1974 regulation mandating that all its active duty officers have a minimum of a baccalaureate degree in nursing.<sup>96</sup> In July 1989, the House of Representatives Armed Services Committee approved a bill authorizing the three military

nursing services to again accept nurses with an associate degree or a diploma in nursing from a hospital school.<sup>97</sup> The Navy Nurse Corps, with its most critical shortages, supported the legislation. However, the Air Force Nurse Corps and the Army Nurse Corps General Clara L. Adams-Ender vigorously opposed it. Of course Adams-Ender would support the mandate if it became law, but she insisted on maintaining professional nurse quality and believed that accepting a lesser educational level was a step backward.<sup>98</sup> She reasoned that with a baccalaureate-educated nurse, the Army knew what it was getting and what it could do with the officer.<sup>99</sup> Opposing the legislation, Adams-Ender relied on an interesting strategy. She wrote, "In these situations . . . you have to fake it until you make it, [and] sometimes you are faking it up to the last minute." She told legislators that she considered the Corps already in compliance with the intent of the bill because it accepted less than baccalaureate graduates into the Army Reserve and Army National Guard, just not in the active component. Once they earned their bachelor's degrees, these Army nurses were then eligible for active duty. She argued for "the best folks I can have. I can't be mixing them up with all sorts of other kind of folks."<sup>100</sup> All the former chiefs of the Army Nurse Corps, representing almost a half-century of leadership in Army nursing, objected to the measure. Collectively, they wrote to Senator Daniel Inouye, member of the Defense Subcommittee and long-time advocate of military nursing, asking his support in defeating the bill in the Senate.<sup>101</sup> Inouye replied favorably, and through his efforts the bill failed to become law.<sup>102</sup> In 1992, Adams-Ender recalled:

That was 2 years ago and we did not have any further discussion on the BSN [bachelor of science in nursing] thing. I really wanted to know how to put that to rest once and for all. Things that are important in management and leadership are one, get people into positions where you don't have to worry about whether or not they can do their job, and two, find out how you can fix something so it will stay fixed. Those two things are tough, because you don't have full control. . . .<sup>103</sup>

This was but one of a series of perennial efforts that had the potential to degrade the caliber of the Army Nurse Corps. At best it was an attempt to overcome a severe nurse shortage. At worst it represented a covert effort to limit the Corps quality, authority, and influence. In any case, it failed. Fortunately the Corps stature remained inviolate and regrettably the serious shortfall of Army Nurse Corps officers persisted throughout the 1980s.

## Notes

1. William Mayer, J. Jarrett Clinton, and David Newhall, "A First Report of the Department of Defense External Civilian Peer Review of Medical Care," *Journal of the American Medical Association* 260 (11 November 1988): 2690–93. An AMA official offered a critique of the foregoing DoD computerized system used to assess quality in John T. Kelly, "Assessing Quality," *Journal of the American Medical Association* 260 (11 November 1988): 2715–16.

2. Bernhard T. Mitemeyer, "Quality Assurance: Major Army Focus," *U.S. Medicine* 20 (15 January 1984): 55–59.

3. Connie L. Slewitzke, "Memorandum from the Chief, U.S. Army Nurse Corps," 2, October 1984, Army Nurse Corps Collection (ANCC), Office of Medical History (OMH).

4. The use of "overprints" involved augmenting standard forms with additional printed information in a local MTF. The intent was to add data routinely recorded on a common group of patients and thereby save time and effort.

5. Martha R. Bell, "Field Test Clinical Nursing Records Study," Information Paper, 1 February 1984, Inclosure 6, in Charles J. Reddy, "Nursing Newsletter Number 84-1," 1 February 1984, ANCC, OMH.

6. Eily P. Gorman, "DASG-CN Newsletter," n.d.; and Clara L. Adams-Ender, "Memo from the Chief Army Nurse Corps," 4–5, 30 September 89 (both in ANCC, OMH).

7. American Nurses Association, *Standards of Nursing Practice* (Kansas City, MO: ANA, 1973).

8. American Nurses Association, *Standards of Clinical Nursing Practice*, second ed. (Kansas City, MO: ANA, 1998), vii.

9. Headquarters, Department of the Army, "Army Medical Department Standards of Nursing Practice," Department of the Army Pamphlet 40-5, November 1981, Change 2, 15 May 1986, 1-1.

10. Hazel W. Johnson-Brown, Interview by Charles F. Bombard, 1984, 130–33, USAWC/USAMHI Senior Officer Oral History Program, Project No. 84-15, ANCC, OMH. This issue was an outward sign of what Aiken referred to as "fundamental incompatibilities in the . . . social contract between nurses and physicians." Prevalent hospital trends in the 1980s, such as more acutely ill patients, decreased physician presence, and physician subspecialty practice with no one physician at the helm, could "result in costly and dangerous duplication or omission." All this contributed to the expansion of independent roles for

hospital nurses, of which diagnosis was a component. Aiken argued that the social contract between these two health disciplines that defined clinical decision making had to be renegotiated. Linda H. Aiken, "The Impact of Federal Health Policy on Nurses," in *Nursing in the 1980s, Crises, Opportunities, Challenges*, ed. Linda H. Aiken and Susan R. Gortner (Philadelphia: J.B. Lippincott, 1982), 3–20.

11. Hazel W. Johnson-Brown, Interview by Charles F. Bombard, 1984, 130–33, USAWC/USAMHI Senior Officer Oral History Program, Project No. 84-15; and Darlene K. McLeod, "Revisions to Standards of Nursing Practice," Memorandum for Brigadier General Johnson, n.d. (both in ANCC, OMH).

12. Freida J. Sadler, "The Standards & Primary Nursing," 1979, in Virginia L. Brown for Hazel W. Johnson, "Information for All ANC Officers," TD, 8 May 1980, Inclosure 6, ANCC, OMH.

13. Freida J. Sadler, "A Change of Life," 1979, in Virginia L. Brown for Hazel W. Johnson, "Information for All ANC Officers," TD, 8 May 1980, Inclosure 6, ANCC, OMH.

14. Marie O'Neil, "Highlights in the History of the Army Nurse Corps." Typewritten Memorandum (TM), 29 June 1990, ANCC, OMH. Bernhard T. Mittermeyer, "Army Medical Department," *Military Medicine* 148 (November 1983): 834. Carolyn M. Feller and Debora R. Cox, *Highlights in the History of the Army Nurse Corps* (Washington, DC: U.S. Army Center of Military History, 2000), 55.

15. Department of the Army, "Army Medical Department Standards of Nursing Practice," DA Pamphlet 40-5, Change 2, 15 May 1986; Hazel W. Johnson, "Notes from the Chief, Army Nurse Corps," Typewritten Newsletter, 5, March 1983; and Marie O'Neil, "Highlights in the History of the Army Nurse Corps," TM, 29 June 1990 (all in ANCC, OMH).

16. Eileen M. Sperling and Heidi L. Wesley, "Standards of Nurse Practitioner Practice: A Foundation for Peer Review," *Medical Bulletin of the US Army, Europe* 43 (September/October 1986): 14–17.

17. Connie L. Slewitzke, Interview by Beverly Greenlee, 79, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

18. James D. Vail, "Accountability of Anesthesia Nursing through Standards of Practice," *Military Medicine* 150 (November 1985): 582–86.

19. Diane M. Ebersberger, "13th Evacuation Hospital Nurses Develop a Quality Assurance Program," *National Guard* 40 (September 1986): 22–26.

20. Connie L. Slewitzke, Interview by Beverly Greenlee, 78, 79, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

21. The team contributing to the decision consisted of Brigadier General Nancy Adams, Colonels Terris Kennedy, Bettye Simmons, Dianne Bechtold, Claudia Bartz, and Dena Norton, and Lieutenant Colonel Donna Wright. All agreed unanimously to rescind Pamphlet 40-5. Carol I. Reineck to Colonel Bettye Simmons and others, E-mail Correspondence, 5 January 1995, ANCC, OMH. Mary Eichhorn to Emily Court, E-mail Correspondence, 24 March 2003, ANCC, OMH.

22. Susan McCall to Author, E-mail Correspondence, 24 March 2003, ANCC, OMH.

23. Although the quest for quality was a major reason for development of an Army Nurse Corps classification system, no research-based proof linking the use of such a system to quality outcomes then existed. Phyllis Giovannetti, "Understanding Patient Classification Systems," *Journal of Nursing Administration* 9 (February 1979): 4–9. However, it seemed reasonable to assume empirically that there was such a relationship.

24. Development of a Standard Patient Classification System for Use throughout the Army Medical Department, (AMEDD)," Typewritten Statement of Work, 12 March 1982; and James D. Vail, "Workload Management System for Nursing (Patient Classification and

Staffing Guide),” Monograph, 1–2, January 1986 (both in ANCC, OMH).

25. Susie M. Sherrod, “Patient Classification System: A Link between Diagnosis-Related Groupings and Acuity Factors,” *Military Medicine* 149 (September 1984): 506–11. James D. Vail and Elizabeth A. Rimm, “Testing of a Patient Classification System for Army-Wide Use,” Information Paper, 10 March 1983, Inclosure 3, in Hazel W. Johnson, “Notes from the Chief, U.S. Army Nurse Corps,” August 1983; James D. Vail, “Workload Management System for Nursing (Patient Classification and Staffing Guide),” Monograph, 1–2, January 1986 (both in ANCC, OMH).

26. Rosemary T. McCarthy, “Categorization Scheme (Acuity Index) Project Proposal,” Disposition Form, 18 March 1975, ANCC, OMH.

27. Rosemary T. McCarthy, “Patient Classification System Currently Utilized by Madigan Army Medical Center, Department of Nursing (MAMC-DON),” Disposition Form, 21 December 1981; and James J. James to Connie L. Slewitzke, Typewritten Letter (TL), 14 January 1982 (both in ANCC, OMH).

28. Direct patient care activities, such as administering a medication or health teaching, required an observable, behavioral interaction between nurse and patient. Indirect care activities were those carried on in behalf of the patient but usually away from the bedside, such as documenting care or ordering a diet tray for the patient. Susie M. Sherrod, “Patient Classification System: A Link between Diagnosis-Related Groupings and Acuity Factors,” *Military Medicine* 149 (September 1984): 506–11.

29. James D. Vail and Elizabeth A. Rimm, “Testing of a Patient Classification System for Army-Wide Use,” Information Paper, 10 March 1983, Inclosure 3, in Hazel W. Johnson, “Notes from the Chief, U.S. Army Nurse Corps,” August 1983; James D. Vail, “Workload Management System for Nursing (Patient Classification and Staffing Guide),” Monograph, 1–6, January 1986; “Workload Management System for Nursing: A Tri-Service Staffing Standard,” *Army Nurse* 3 (1990): 3; and Susie Sherrod to Author, E-mail Correspondence, 26 March 2003 (all in ANCC, OMH).

30. Connie L. Slewitzke, “Memorandum from the Chief U.S. Army Nurse Corps,” October 1984; and “ANC Annual Historical Report FY 85,” 8 (both in ANCC, OMH).

31. Jude Larkin, “Army Nurse Corps Personnel Management Practice Study,” Information Paper, 2 August 1985, ANCC, OMH.

32. Connie L. Slewitzke, “Memorandum from the Chief U.S. Army Nurse Corps,” 7–8, December 1986; and Gar Yip, “After Action Report of ANC Fellowship for LTC Gar Yip, 17 Nov 1986–13 Feb 87,” Memorandum for Record, 13 February 1987 (both in ANCC, OMH). UCAPERS (Uniform Chart of Accounts for Personnel) was a system employed by the Army “using uniform accounting principles and performance indicators, standardized terminology, common expense classification procedures, and standard statistical definitions” to capture workload. Vernon McKenzie, “Department of Defense,” *Military Medicine* 144 (September 1979): 569–72. The WMSN captured the workload of nurses. When these two systems were linked, the ability to accurately project nursing manpower standards was enhanced. Gar Yip to Author, E-mail Correspondence, 12 February 2003, ANCC, OMH.

33. Betty C. Jones, “Ways to Increase Job Productivity for Army Nurses,” Memorandum for LTC Wil Nieves, 26 May 1989, ANCC, OMH.

34. Karl H. Pfaehler, TL, 12 December 1988, ANCC, OMH. FM 8-501, November 1990; and Clara L. Adams-Ender, “Memo from the Chief Army Nurse Corps,” 5, 30 September 1989 (both in ANCC, OMH).

35. Connie L. Slewitzke, “Topics for the Army Study Program,” TM, 3 August 1987; John M. Hudock, “US Army Nurse Corps Nursing Research Advisory Board (NRAB),

2–4 November 1987,” Typewritten Meeting Minutes, 3; Jeffrey P. Moon and James M. Georgoulakis, “Input Regarding AMEDD Study Program—Ambulatory Care Classification Project,” TM, 10 August 1988; and “Synopsis of Nursing Research from Health Care Studies and Clinical Investigation Activity,” in Barbara S. Turner, “Nursing Research Activities Report, 1988–1989,” n.d. (all in ANCC, OMH).

36. Bonnie M. Jennings to Author, E-mail Correspondence, 30 January 2004, ANCC, OMH.

37. Connie L. Slewitzke, Interview by Beverly Greenlee, 241–43, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

38. Carol Reineck to Author, E-mail Correspondence, 8 March 2003, ANCC, OMH.

39. John E. Major “Commander Calls Nurses Vital Part of Team,” *HSC Mercury* 16 (May 1989): 2.

40. Carol Reineck to Author, E-mail Correspondence, 8 March 2003, ANCC, OMH.

41. Brigadier General Connie Slewitzke firmly believed that the WMSN was the best available instrument. “Outside consultants” and “another Corps” (the Navy Nurse Corps) confirmed its validity. General Slewitzke shared that she “was so proud of Susie’s [Sherrod] statistics. They could not question our data. . . .” Connie L. Slewitzke, Interview by Beverly Greenlee, 240–41, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

42. Connie L. Slewitzke, Interview by Beverly Greenlee, 20–23, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

43. “Military Nurses Task Force Report on the Military Nursing Shortage,” Department of Health and Human Services, Secretary’s Commission on Nursing, VI-12, December 1988, ANCC, OMH.

44. Clara L. Adams-Ender, “Memo from the Chief Army Nurse Corps,” 5, 30 September 1989; Clara L. Adams-Ender, “Memo from the Chief Army Nurse Corps,” 7, 31 December 1989; Clara L. Adams-Ender, Interview by Virginia Ruth Cheney, 152, 1992, Project 92-3, U.S. Army Military History Institute, Senior Officer Oral History Program; and “Workload Management System for Nursing: A Tri-Service Staffing Standard,” *Army Nurse* 3 (1990): 3 (all in ANCC, OMH). Sunnie Scarlett, “Statistics Prove Need for Nurses,” *HSC Mercury* 16 (August 1989): 4.

45. Mary L. Messerschmidt, Officer Efficiency Reports, DA Form 67-7, 11 December 1973, 1 September 1974, Typewritten Documents (TDs), ANCC, OMH.

46. While Army nurses were the key players in TRIMIS, Air Force nurses also actively participated. Navy nurses, however, remained on the sidelines. The Army and Air Force nurses had many spirited discussions about informatics and sometimes the battles were “not pretty.” Mary L. Messerschmidt to Author, 30 January 2004; Mary L. Messerschmidt to Author, 2 February 2004 (both E-mail Correspondence in ANCC, OMH).

47. Robert N. Smith, “Department of Defense,” *Military Medicine* 142 (August 1977): 585–90. Philip A. Deffer, “Tri-Medical Information System (TRIMIS),” in Department of the Army, Headquarters, U.S. Army Health Services Command, *Commander’s Notes*, CG HSC Bulletin No. 1-75 (January 1975): 9, Record Group 112, Entry 452, National Archives.

48. Vernon McKenzie, “Department of Defense,” *Military Medicine* 144 (September 1979): 571. John H. Moxley, “Department of Defense,” *Military Medicine* 145 (September 1980): 608–11. John H. Moxley, “Military Medicine Programs Progress,” *U.S. Medicine* 17 (15 January 1981): 14. John H. Moxley, “Department of Defense,” *Military Medicine* 146 (September 1981): 626–30. John H. Moxley, “Department of Defense,” *Military Medicine* 147 (November 1982): 943–48.

49. Connie L. Slewitzke for Hazel W. Johnson, "Notes from the Chief, US Army Nurse Corps," 3, December 1982, ANCC, OMH.

50. Developers created CHCS as an information system based in hospitals to manage clinical patient data. The Workload Management System for Nurses was developed to gauge nursing workload and make staffing determinations. The two systems were never linked, conceptually or operationally. Gar Yip to Author, E-mail Correspondence, 29 January 2004, ANCC, OMH. Sunnie Scarlett, "Army Experts Say CHCS 'Can Do'," *HSC Mercury* 17 (June 1990): 7. Harry Noyes "Computer System Gets Go-Ahead," *HSC Mercury* 20 (May 1993): 12.

51. Gar Yip, "Composite Health Care System (CHCS)," Information Paper, 3 March 1988, ANCC, OMH. "Knox Tests New Health Care Computer System," *HSC Mercury* 15 (June 1988): 7. "CHCS Computers Online at All DoD Hospitals," *The Mercury* 25 (October 1997): 7.

52. United States General Accounting Office, Information Management and Technology Division, *Medical ADP Systems: Composite Health Care System Is Not Ready to Be Deployed*, GAO/IMTEC-92-54 (Washington, DC: United States General Accounting Office, 1992).

53. Anonymous to Author, E-mail Correspondence, 22 March 2003, ANCC, OMH.

54. Sunnie Scarlett, "Army Experts Say CHCS 'Can Do'," *HSC Mercury* 17 (June 1990): 7.

55. Anonymous to Author, E-mail Correspondence, 22 March 2003, ANCC, OMH.

56. Jennifer Petersen, Untitled TD whose subject was the NCLEX, ANCC, OMH. Another unique requirement for commissioning in the Army Nurse Corps specified that an applicant be a graduate of a nursing program recognized by the U.S. Secretary of Education or accredited by the National League for Nursing and acceptable to the Department of the Army. Headquarters, Department of the Army, Army Regulation 135-101, "Appointment of Reserve Commissioned Officers for Assignment to Army Medical Department Branches," 10-11, 15 February 1984. Prior to 1978, different states used various locally prepared paper and pencil tests.

57. Department of the Army, AR 135-101, "Appointment of Reserve Commissioned Officers for Assignment to Army Medical Department Branches," 15 July 1979.

58. Hazel W. Johnson, "Information for All ANC Officers," 7 November 1980, Inclosure 9, ANCC, OMH.

59. Eily P. Gorman, "Implementation of Licensure Requirements for Army Nurse Corps Officers and Other Nurses," Information Paper, 3 February 1986, ANCC, OMH.

60. Department of Defense, DoD Directive 6025.6, "Licensure of DOD Health Care Providers," 18 July 1985.

61. Hazel W. Johnson, "Information for All ANC Officers," 2, 27 November 1981, ANCC, OMH. Headquarters, Department of the Army, Army Regulation 135-101, "Appointment of Reserve Commissioned Officers for Assignment to Army Medical Department Branches," 10-11, 15 February 1984.

62. "Scope of Practice for NCLEX-RN Failures," Information Paper, n.d., ANCC, OMH.

63. Clara L. Adams-Ender, "Department of Nursing Organizational Model," 6 November 1989, ANCC, OMH.

64. Claudia Bartz, "After Action Summary for the Course," TM, 27 July 1989, ANCC, OMH.

65. This position eventually had differing titles in different institutions. For instance, Tripler Army Medical Center nurses suggested using the appellation "Deputy Commander

Patient Care Services (DCPCS).” “Optimal Organizational Structure for the Department of Nursing in U.S. Army Medical Treatment Facilities,” TD, 15 May 1989, ANCC, OMH.

66. LTC Bomberger, “Outcomes of the Professional Development Course, 12–16 June 1989—Bethesda, Maryland,” TD, ANCC, OMH.

67. Claudia C. Bartz to Author, E-mail Correspondence, 1 February 2003, ANCC, OMH.

68. Terris Kennedy to Author, E-mail Correspondence, n.d., ANCC, OMH.

69. Clara L. Adams-Ender, Bonnie Jennings, Claudia Bartz, and Richard Jensen, “Nursing Practice Models, The Army Nurse Corps Experience,” *Nursing & Health Care* 12 (March 1991): 120–23.

70. J.P. Riehl and C. Roy, “Theory and Models,” *Conceptual Models for Nursing Practice*, second ed. (New York: Appleton-Century-Crofts, 1980), quoted in Terris E. Kennedy and others, “A Conceptual Model of Army Nursing Practice,” *Nursing Management* 27 (October 1996): 33–36.

71. Terris E. Kennedy and others, “A Conceptual Model of Army Nursing Practice,” *Nursing Management* 27 (October 1996): 33–36.

72. “Classes Scheduled FY81,” 7 February 1981, Inclosure 4, in Hazel W. Johnson, “Information for All ANC Officers,” 9 February 1981; and “Army Nurse Corps Course Schedules, FY 82,” Inclosure 5, in Connie L. Slewitzke for Hazel W. Johnson, “Information for All ANC Officers,” 27 November 1981 (both in ANCC, OMH).

73. Before 1982, the Army Nurse Corps called the Principles of Advanced Nursing Administration Course the Chief Nurse Orientation Course. Carolyn M. Feller and Debora R. Cox, *Highlights in the History of the Army Nurse Corps* (Washington, DC: U.S. Army Center of Military History, 2000), 53.

74. Carolyn M. Feller and Debora R. Cox, *Highlights in the History of the Army Nurse Corps* (Washington, DC: U.S. Army Center of Military History, 2000), 58.

75. The Air Force Nurse Corps began their transition to a graduate program in 1987. They closed their nurse anesthetist residency program at Wilford Hall Air Force Medical Center in San Antonio, Texas, that year and began sending 20 students to the University of Texas Health Science Center’s School of Nursing in San Antonio in 1989 to complete a master’s program in anesthesia. They also instituted a master’s degree affiliation in nurse midwifery with Georgetown University in September 1988. The nurse midwife students took part in a clinical practicum at Malcolm Grow USAF Medical Center at Andrews Air Force Base, Maryland. Mary C. Smolenski, Donald G. Smith, and James S. Nanney, *A Fit, Fighting Force, The Air Force Nursing Services Chronology* (Washington, DC: Office of the Air Force Surgeon General, 2005), 42, 43, 44. Monte B. Miller, “Air Force Launches ‘New Approaches’,” *U.S. Medicine* 25 (January 1989): 45–46, 48.

76. Bernhard T. Mittemeyer, “Army Medical Department,” *Military Medicine* 147 (November 1982): 919.

77. Kathleen Srsic-Stoehr, “AN Educational Opportunities,” Information Paper, October 1988, ANCC, OMH. “Nurse Graduates Get Degree,” *HSC Mercury* 15 (November 1987): 4. Carolyn M. Feller and Debora R. Cox, *Highlights in the History of the Army Nurse Corps* (Washington, DC: U.S. Army Center of Military History, 2000), 53.

78. John Sherner to Author, E-mail Correspondence, 11 August 2003, ANCC, OMH.

79. Carolyn R. Bulliner, “U.S. Army Nurse Corps Programs in Anesthesia Nursing, FY 00 Application Guidelines,” Printed Brochure, n.d., ANCC, OMH.

80. U.S. Army Forces Command was the major command that included continental United States-based TO&E, or go-to-war, units. Kathleen Srsic-Stoehr, “AN Educational Opportunities,” Information Paper, October 1988, ANCC, OMH.

81. Marlene Kramer, *Reality Shock: Why Nurses Leave Nursing* (St. Louis: Mosby, 1974). Claudia Schmalenberg and Marlene Kramer, *Coping with Reality Shock: The Voices of Experience* (Wakefield, MA: Nursing Resources, Inc., 1979), 1–30. Robin Isaak Chagares, “The Nurse Internship Question Revisited,” *Supervisor Nurse* 11 (November 1980): 22–24.

82. Kathleen Srsic-Stoehr, “Transition to Practice: The Army Nurse Corps Preceptorship Program,” Unpublished Manuscript, n.d., ANCC, OMH. The 1980 ANC Professional Development Workshop advanced the recommendation for such a preceptorship on 3 November 1980. Hazel W. Johnson, “Information for All ANC Officers,” 7 November 1980, Inclosure 1, ANCC, OMH.

83. Bruce C. Allanach and Bonnie M. Jennings, “Evaluating the Effects of a Nurse Preceptorship Programme,” *Journal of Advanced Nursing* 15 (1990): 22–28.

84. Major (P) Kennedy, “ANC Preceptorship Program,” Information Paper, 21 March 1983, ANCC, OMH.

85. Jane Y. Yaws, “The Army Nurse Corps Preceptorship Program,” *Military Medicine* 152 (August 1987): 411–13.

86. Don Washington, “Nurse Internship Program Eases Transition to AF,” *Air Force Times* 49 (24 October 1988): 21. Paul W. Myers, “Air Force Holding Optimistic Outlook,” *U.S. Medicine* 17 (15 January 1981): 61–62. Randall H. Smith, “The Air Force Nurse Intern Program,” *Military Medicine* 156 (August 1991): 417–19. Mary C. Smolenski, Donald G. Smith, and James S. Nanney, *A Fit, Fighting Force, The Air Force Nursing Services Chronology* (Washington, DC: Office of the Air Force Surgeon General, 2005), 36.

87. Connie L. Slewitzke to Author, E-mail Correspondence, 21 January 2003, ANCC, OMH.

88. Connie L. Slewitzke, Interview by Beverly Greenlee, 386–87, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8; and Connie L. Slewitzke to Author, E-mail Correspondence, 21 January 2003 (both in ANCC, OMH).

89. Connie L. Slewitzke, Interview by Beverly Greenlee, 387–89, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

90. Connie L. Slewitzke to Author, E-mail Correspondence, 21 January 2003, ANCC, OMH. Other participants included Major Charlene Walker, Lieutenant Colonel Jude Larkin, and Major Frances Davison in 1985. “ANC Annual Historical Report FY 85,” 2, ANCC, OMH. In 1986, additional fellows included Captain Rita Schulte, Lieutenant Colonel Dennis Rieker, Lieutenant Colonel Jean Reeder, Major Elaine Mayo, and Lieutenant Colonel Gar Yip. “Army Nurse Corps (ANC) 1986 Annual Historical Report,” 3, ANCC, OMH.

91. Connie L. Slewitzke, Interview by Beverly Greenlee, 389, n.d., USAWC/USAMHI Senior Officer Oral History Program, Project No. 88-8, ANCC, OMH.

92. Kathleen Srsic-Stoehr to Author, E-mail Correspondence, 16 January 2003, ANCC, OMH.

93. Gar Yip, “After Action Report of ANC Fellowship for LTC Gar Yip, 16 November 1986–13 Feb 1987,” Memorandum for Record, 13 February 1987, ANCC, OMH.

94. Nancy Molter to Author, E-mail Correspondence, 13 March 2003, ANCC, OMH.

95. “ANC Staff Officer Fellow Orientation,” Memorandum for Record, 30 January 1986; and Clara L. Adams-Ender, “Management Fellow, Office of the Chief, Army Nurse Corps,” Memorandum for Record, 6 January 1988 (both in ANCC, OMH). Clara L. Adams-Ender, “Management Fellow, Office of the Chief, Army Nurse Corps,” TM for Record, 2 October 1990, ANCC, OMH. Carolyn M. Feller and Debora R. Cox, *Highlights in the History of the Army Nurse Corps* (Washington, DC: U.S. Army Center of Military History, 2000), 58. Connie L. Slewitzke, Interview by Beverly Greenlee, 390, n.d., USAWC/USAMHI Senior

Officer Oral History Program, Project No. 88-8, ANCC, OMH.

96. Department of the Army, AR 601-100, paragraph 2-61, October 1974; and Department of the Army, DA Circular 01-68, "Army Nurse Corps Active Duty Program Fiscal Year 1977 through 15 January 1978," 13 October 1977 (both in ANCC, OMH).

97. H.R. 2461. "Plan Would Lower Nurse Education Standards," *Army Times* 49 (10 July 1989): 18. Vincent H. Demma, *Department of the Army Historical Summary, Fiscal Year 1989* (Washington, DC: Center of Military History, United States Army, 1998), 167.

98. The Air Force had required a bachelor of science in nursing for all newly accessed officers since 1979. However, in 1987, it accepted applicants for commissioning with an associate degree or a diploma in nursing if the applicant had a baccalaureate degree in another health science field as well. Linda J. Stierle, "Presentation to the Committee on Appropriations, Subcommittee on Defense, United States Senate," April 1998, ANCC, OMH. Colonel John Hudock recalled that "the *minimum* requirement for all other Army active duty commissioned officers was a baccalaureate degree. Why should the ANC be any different? Because the 'hidden' agenda here was that if we took less than BSN on active duty, we would then be forced to have less than commissioned officer nurses—i.e., warrant officers again!" John Hudock to Author, Handwritten Letter, 15 September 2003, ANCC, OMH.

99. "Plan Would Lower Nurse Education Standards," *Army Times* 49 (10 July 1989): 18. Clara L. Adams-Ender, Interview by Virginia Ruth Cheney, 90, 1992, Project 92-3, U.S. Army Military History Institute, Senior Officer Oral History Program, ANCC, OMH.

100. Clara L. Adams-Ender, Interview by Virginia Ruth Cheney, 93-95, 1992, Project 92-3, U.S. Army Military History Institute, Senior Officer Oral History Program, ANCC, OMH.

101. Ruby F. Bryant and others to Daniel K. Inouye, TL, 4 October 1989, ANCC, OMH.

102. Daniel K. Inouye to Clara L. Adams-Ender, TL, 6 November 1989, ANCC, OMH. John Hudock to Author, Telephone Interview, 7 March 2003.

103. Clara L. Adams-Ender, Interview by Virginia Ruth Cheney, 95-96, 1992, Project 92-3, U.S. Army Military History Institute, Senior Officer Oral History Program, ANCC, OMH.

