Advance practice nurses (APNs) have emerged as valuable members of the nursing facility interdisciplinary team. They function in a variety of roles, including clinical care, administration, nursing consultation, and education. Positive outcomes in key indicators of care and reduction in costs to the healthcare systems have been attributed to their practice. Barriers to implementation of the role include regulatory issues, facility resistance, and difficulty adapting to the environment. Facilitation of the role is enhanced by collegial relationships and role negotiation. There is strength in the APN–physician collaborative model. The APN is likely to concentrate on prevention, restoration, maintenance, and palliative care, allowing the physician to concentrate on complex medical problems. There is a need for APN practices to identify APN-sensitive outcomes, collect and analyze data, and disseminate findings. (J Am Med Dir Assoc 2003; 4: 337–343)

Keywords: Nurse practitioner; clinical nurse specialist; advance practice nurse; nursing home

Nurse practitioners (NPs) have teamed up with physicians to enhance the nursing and medical care available to institutionalized older adults. Documented positive outcomes and favorable legislation have facilitated the increased presence of advance practice nurses (APNs) in the nursing facility. The purpose of this article is to offer a historical perspective of APN practice in nursing facilities and to describe a variety of roles and practice models APNs have developed for a nursing facility practice. Outcomes associated with the various models are described. Educational preparation and key issues regarding state and federal regulations regarding APN practice are discussed. Finally, suggestions for implementing and managing a successful, satisfying nursing facility practice are discussed.

The term nursing facility is used throughout this article and is inclusive of other commonly used terms, eg, nursing home, long-term care facility, skilled nursing facility, or nursing home care unit. Services are interdisciplinary and include assessment and coordination of care by registered nurses (RNs). Licensed vocational/practical nurses (LVNs/LPNs) follow the plan of care established by the team. Most of the direct care is rendered by nursing assistants. The goals of care include appropriate management of acute conditions, restoration and maintenance of function, as well as comfort in dying.

HISTORICAL PERSPECTIVE

Geriatric nurse practitioners (GNPs) were first introduced to nursing facilities in the 1970s to improve access to medical services and to augment the role of the attending physician. The W. K. Kellogg Foundation through the Mountain States Health Corporation provided resources in which RNs were recruited from nursing facilities, then educated and trained in a continuing education model. Over a 10-year period from 1976 to 1986, 120 GNPs were trained and placed in facilities. Nearly all received their GNP education through university schools of nursing in western states, ie, Arizona, Colorado, Washington, and California. On finishing the program, they received a certificate of completion and were eligible to sit for the GNP examination offered by the American Nurses Credentialing Center (ANCC).

Local physicians were recruited to act as educational preceptors, many of whom became collaborating physicians in practice. After graduation, the GNPs returned to the sponsoring facilities that had agreed to employ them in the role for at least 18 months. As facility employees, the GNPs provided...
primary care services and enhanced nursing services by participating in quality improvement, infection control, staff education, and research. Positive outcomes associated with this model included a reduction in hospitalizations, improved management of chronic care, and greater attention to rehabilitation and restorative services.

In this day of exceedingly high turnover rates of nursing facility employees, it is worthwhile to take a look at the career paths of the first GNPs. Ten years after the program first began, a survey revealed the median length of time in the first position as a GNP was 4.5 years. Even when the GNPs left their initial position, most remained employed in a nursing facility in the advanced practice role. A remarkable 90% were still working in a nursing facility up to 8 years after training. Retention was most closely associated with prior experience working in the setting.

A few certificate-trained GNPs remain in practice, but the continuing education model no longer exists. A number of factors influenced the demise of the model. Since 1995, initial application for participation in Medicare has required APNs to have master’s degrees and national board certification. The ANCC now requires a master’s degree as preparation to sit for the GNP examination. Additionally, most states now require a master’s degree for current entry level into advance practice. Although GNPs continue to work in nursing facilities, the demand exceeds the supply. Adult and family NPs have joined the growing cadre of APNs caring for frail older adults.

Recognizing the need for systems management, facilities also began to use the services of clinical nurse specialists. Geriatric clinical nurse specialists (CNSs) have master’s degrees and have similar knowledge to GNPs, but clinical training focuses on populations or systems rather than individuals. For example, the CNS might plan and implement a fall management program for a healthcare system, whereas the NP would evaluate and manage falls in the individual resident. Most CNSs provide consultation to nursing thus will be employed, or employed by an APN group practice. Physicians attending physician. The literature re...

**CURRENT MODELS AND ASSOCIATED OUTCOMES**

To identify practice models, a review of the literature from 1970 forward was performed on 2 advance practice roles, ie, NPs and CNSs, and outcomes in the nursing facility. A Boolean search of Medline and CINAHL was conducted using the terms nurse practitioner, clinical nurse specialist, and nursing home. Inclusion criteria placed a preference on qualitative research or quantitative studies in which the outcome was attributed to the APN role. Of the 218 titles located, 33 met inclusion criteria.

Five practice models for APNs were found and included fee-for-service, faculty practice, managed care, nursing consultant, and nursing facility employee. With the exception of nursing consultant, the primary function was clinical. Other roles included educator, researcher, administrator, and nursing service consultant. Each model was reviewed for the description of functions performed, associated outcomes, and unanswered questions or challenges.

**Fee-for-Service**

In a fee-for-service model, the APN provides clinical evaluation and management services in collaboration with the attending physician. The literature reflects that most APNs are employed by the physician’s practice or clinic, self-employed, or employed by an APN group practice. Physicians cannot bill for services they do not provide; therefore, if self-employed, the APN will need to arrange for support services such as billing. Functions described include obtaining a health history, performing physical examinations, and developing treatment plans for acute and chronic illness. Kane et al. reported statistically significant improvements in functional status and clinical management of selected chronic diseases when APNs were allowed to make unlimited medically necessary visits. Others have reported improved practice efficiency, more comprehensive documentation, enhanced problem identification, improved resident outcomes, and reduced costs to Medicare and Medicaid.

Generalization of study results in fee-for-service has been compromised by small sample sizes, inconsistency of reporting statistical significance, and the inability to separate the impact of the APN from the impact of the physician–APN team. Regulatory changes have allowed APN substitution for physician services and permitted an increase in the frequency of provider visits, further compromising comparisons over time. Unanswered questions remain, including the optimal caseload census, the average number of encounters daily, productivity analysis, resident and facility satisfaction, and statistically significant clinical outcomes specific to APN intervention.
**Faculty Practice**

Academicians have recognized the need to offer geriatric long-term care experiences to medical students, medical residents, APNs, physician assistants, and other members of the interdisciplinary team. In 2 faculty practice reports, the role of the APN was clinical with an adjunct educational or administrative role.\(^{11,15}\) Compared with usual care, an academic model for nursing facility care, which included an APN and a geriatrician, demonstrated statistically significant improvements in functional status, discharge rates, transfers to acute care, staff morale, and resident satisfaction.\(^{11}\) It was not possible to attribute positive outcomes solely to the presence of the APN and a cost-effectiveness analysis was missing.

**Managed Care**

Managed care organizations have used APNs extensively to provide primary care services to nursing facility residents in collaboration with physicians. The role of the APN in managed care is primarily clinical and includes prevention, chronic and episodic acute care, and coordination of services. Most APNs triage telephone calls from facilities during the day, and some share evening or night call.\(^{16,19}\) Nonclinical services often include staff education and quality improvement.\(^{17}\)

Statistically significant favorable results have been reported in the managed care model, including reduction in emergency department transfers, hospitalizations, skilled nursing facility days, and timely response to acute problems.\(^{16}\) Economic benefits of the HMO model have been attributed to the decreased utilization of hospitalization and reduction in emergency department transfers.\(^{20,21}\)

One Medicare HMO exclusively serving nursing facility residents reported APNs spend 60% of their working day on resident care activities. They reported seeing an average of 8 residents per day with a caseload census of 84.\(^{22}\) The number of encounters and caseload appears low compared with fee-for-service; however, responsibilities for care management most likely explains the difference, but further clarity is needed. In a 2002 survey of APNs, the average number of visits per day in a geriatric practice was 13.\(^{22,29}\)

**Consultation**

Consultation roles have included formal education, mentoring at the bedside, and outcomes monitoring. As quality improvement consultants to nursing, APNs have been effective in improving the overall quality of care, changing behaviors to improve performance on single quality indicators, and demonstrate superior observational skills for recognizing an acute change in condition.\(^{26,27}\) Consultation by a CNS with education or inservice as a single intervention to improve the process of care delivery and subsequent outcomes has not been as effective as presence in the facility with mentoring plus education.\(^{23,25}\) Intensity and duration of education and mentoring have a positive effect on clinical outcomes, including restraint reduction and continence promotion.\(^{23,25,26}\) Analysis of cost-effectiveness of APN consultation for continence programs and wound care demonstrated cost savings for both initiatives.\(^{25}\)

Collaboration with the medical director for education and quality improvement would be desirable; however, it has not been reported in the literature. Perhaps this is because quality improvement and education regarding nursing processes reflect the independent role of the clinical nurse specialist. Challenges to the consultation model include lack of in-line authority, staff resistance to change, and ineffective implementation of process changes in the facility.

**Facility Employee**

The APN as facility employee represents a hybrid of nursing consultation and fee-for-service. When the APN is hired by the facility, there could be a greater opportunity to integrate many roles, including clinical, administration, research, and educator. The Mountain States Project reported successful resident clinical and functional outcomes in facilities that directly employed the GNP.\(^{2}\) All of the data regarding the APN as facility employee emerged from the Mountain States Project. There are no current studies or reports describing the evolution of this model, and the number of APNs who are employed by facilities is unknown. Also unknown are the outcomes associated with a CNS as the director of nurses. Their unique training in systems management and nursing makes them excellent candidates for an administrative role.

**APN PRACTICE ENVIRONMENT ISSUES**

**Regulatory Environment**

A variety of regulatory bodies influence the practice of an APN. Individual healthcare organizations or facilities can credential and approve clinical privileges. Individual states govern the degree of autonomy when the APN manages medical aspects of care and prescribes medicines and therapies. In some states, APN practice is governed by a state board of nursing; in others, governance occurs in conjunction with the board of medicine.\(^{29}\) The educational preparation and the practice site dictate the scope of practice. At the federal level, participation in Medicare adds another layer of rules and requirements for both the facility and the APN.

Regulations both enable and pose barriers to APN practice. Federal regulations for nursing facilities and state practice acts permit APNs to participate in managing the medical care of the residents. Corresponding Medicare rules allow for reimbursement of services rendered. Occasionally, the rules and regulations between agencies are conflicting. For instance, APNs can perform and bill for an initial admission comprehensive assessment in a hospital or ambulatory clinic, but not a skilled nursing facility. Furthermore, individual states have the option to allow APNs to perform the initial comprehensive service for non-Medicare Part A nursing facility admissions.

In a few states, APNs practice independently of physicians; however, when the APN establishes a relationship with an individual covered by Medicare, they will need a collaborating physician. For most APNs, collaboration is a key component of practice regardless of setting or payor, and is discussed by Resnick and Bonner elsewhere in this issue of the journal.\(^{30}\)
Table 1. Establishing Levels of Service

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Purpose of the Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>99301</td>
<td>Annual history and physical exam, or initial comprehensive visit* with low complexity</td>
</tr>
<tr>
<td>99302</td>
<td>Creation of a new plan of care following a significant change in functional status, or initial comprehensive visit* with moderate complexity</td>
</tr>
<tr>
<td>99303</td>
<td>Initial comprehensive visit* of high complexity</td>
</tr>
<tr>
<td>99311</td>
<td>Stable chronic disease, or problem focused visit</td>
</tr>
<tr>
<td>99313</td>
<td>Unstable new complication, unstable new problem. Follow up on return from hospitalization or emergency department. Follow up of chronic disease of high complexity.</td>
</tr>
<tr>
<td>99315</td>
<td>Discharge planning 30 minutes or less</td>
</tr>
<tr>
<td>99316</td>
<td>Discharge planning over 30 minutes</td>
</tr>
</tbody>
</table>

CPT = current procedural terminology

*May not be performed by an APN or PA in a SNF.

Reimbursement Issues

Medicare will reimburse APNs for services at 85% of the physician’s allowable fee. As of January 2003, any APN applying for an initial Medicare number must meet the practice requirements of the state, have national certification, and possess a master’s degree. The states determine which services APNs can legally perform. The service must be one that would be a covered service for physicians, and finally, the APN must collaborate with a physician in performing the services. 31

A frequently asked question is whether APNs can bill using the incident to rule in the nursing facility. Guidelines for the incident to rule stipulate that services are provided with the physician onsite and the APN provides care in follow up of the established plan. In other words, the care is rendered “incident to” the physician’s plan of care. Incident to is not applicable in the nursing facility setting unless the residents are being seen in an established office in the facility and the physician is physically in the office suite while the incident to services are provided. 32

Physicians can delegate medically necessary visits to APNs who are employees of the facility. 33 Hiring an APN as a clinical house officer is potentially a financially viable option that can have significant positive functional and clinical benefits for the residents. Readers are referred to the white paper on medical necessity prepared by the American Medical Director’s Association (AMDA) as a useful guide to determine covered services. 31

The most frequently used billing codes include those for comprehensive assessments, subsequent visits, and discharges. Comprehensive assessment codes are used for residents who are new admissions to the facility but not necessarily new to the physician’s practice. Comprehensive assessments are also done annually and with a significant change in condition. It is easier to think of the codes in terms of the function performed as opposed to new or established residents (Table 1). 34

Credentialing and Privileges

Many employing agencies, HMOs, insurance plans, and the Joint Commission for Accreditation of Health Care Organizations (JCAHO) mandate credentialing of APNs. Nursing facilities lag behind this trend, and few nursing facilities have formal procedures in place to credential or grant privileges to anyone, including APNs or physicians. Federal nursing facility rules for participation in Medicare and Medicaid do not require it. Credentialing establishes that the APN is qualified to perform designated clinical activities. At a minimum, credentialing will establish that the APN meets qualifications for advanced nursing practice in the state. Employers can verify this information by checking with the state organization that governs APNs.

The employer or setting grants privileges to perform clinical activities and procedures. 35 The APN would expect to have privileges to perform evaluation and management services within their scope of practice. GNPs have education and training to care for the older adult across settings and along the wellness continuum. Although caring for older adults is within their scope of practice, the intensity and duration of geriatric-specific training for family and adult nurse practitioners will vary.

During the orientation period, APNs and collaborating physicians might want to discuss frequently occurring, problematic, or high-risk problems encountered in the practice. This allows for a focused orientation and facilitates successful initiation of practice.

Physician Delegation of Tasks

Nursing facility rules for participation in Medicare and Medicaid allow APNs to substitute for some physician services (Table 2). 36 Physicians cannot delegate the role of the attending physician to an APN. Additionally, the medical director must be a physician. Required visits after admission under Medicare Part A to a skilled nursing facility and under Medicaid to a nursing facility include visits every 30 days for the first 90 days and every 60 days thereafter. In a skilled nursing facility, the initial required visit must be performed by the physician, and further required visits can alternate with the APN. For a Medicaid nursing facility admission, at the discretion of the state, the physician can delegate all the required visits. This does not relieve the physician of the responsibility of being available when medically necessary.
Integrated care/medical school curriculum model is a popular option in some facilities. In this model, the facility employee, the APN, and the medical director would jointly design an interdisciplinary care plan. The APN and residents are involved in all decision-making. As the APN’s practice develops, the resident is able to care for the resident, talking with families, and working with the APN.

Implementing and Managing a Successful Practice

Four of the 5 models presented in this article demonstrated positive outcomes from APNs working in collaboration with physicians to provide medical care to nursing facility residents. The remaining consultation model suggested benefits to the nursing system when the APN worked closely and consistently with the facility staff to improve processes of nursing care. Regardless of the model, there are unanswered questions regarding the optimal use of the APNs’ time, effect on staff outcomes, and appropriate compensation.

In a fee-for-service model, the APN must learn to balance quality with productivity. In addition, the APN will need to negotiate nonbillable services with the employer, or consider establishing a fee for educational or consultative services requested by the facility. Medicare might look suspiciously on an APN who regularly sees a large number of residents a day or fails to use a variety of billing codes. Conversely, an

Table 2. **Physician Delegation of Tasks**

<table>
<thead>
<tr>
<th>SNFs</th>
<th>Initial required visit*</th>
<th>Initial orders</th>
<th>Certification</th>
<th>Recertification</th>
<th>Subsequent orders</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP, CNS, PA employed by the facility</td>
<td>May not perform</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May sign</td>
</tr>
<tr>
<td>NP, CNS not employed by the facility</td>
<td>May not perform</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May sign</td>
<td>May sign</td>
</tr>
<tr>
<td>PA not employed by the facility</td>
<td>May not perform</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May sign</td>
<td>May sign</td>
</tr>
<tr>
<td>NPs</td>
<td></td>
<td></td>
<td></td>
<td>N/A</td>
<td>May sign</td>
</tr>
<tr>
<td>NP, CNS, PA employed by the facility</td>
<td>May not perform</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May sign</td>
<td>May sign</td>
</tr>
<tr>
<td>NP, CNS, not employed by the facility</td>
<td>May not perform</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May sign</td>
<td>May sign</td>
</tr>
<tr>
<td>PA not employed by the facility</td>
<td>May not perform**</td>
<td>May not sign</td>
<td>May not sign</td>
<td>May sign</td>
<td>May sign</td>
</tr>
</tbody>
</table>

*Initial visit is defined as first regulatory visit and must be performed within 30 days of admission.

**At the discretion of the states, the initial visit may be delegated to an NP, CNS, or PA

Required visits cannot be delegated to an APN who is an employee of the facility. As an employee of the facility, they can perform episodic care if the service is medically necessary. Residents can be seen by the APN before the physician’s initial visit and more frequently than required if the service is medically necessary. For care-planning purposes, the facility is required to perform a comprehensive assessment by day 14 and to develop an interdisciplinary plan of care by day 21. The comprehensive assessment includes the minimum data set (MDS) and resident assessment protocols (RAPs). The MDS screens for 18 functional problems and the RAP guides further assessment and care planning. Ideally, the APN and physician would coordinate the initial required visit, certifications, and medically necessary visits with the facility assessment and subsequent care plan to maximize incorporation of the medical plan of care. Optimal care by the APN/physician team includes evaluation and management of both functional problems and illness.

Coordination of care takes precedence over quantity of residents seen in managed care. Managed care models have demonstrated decreased utilization of acute care services, thus have saving costs for the organization. The challenge to the APN is ensuring necessary services while containing costs. A facility could have the nursing staff and skill level to care for an acutely ill resident, but the family or the resident could ask for emergency department transfer or hospitalization. The APN might need to provide some nail care services in lieu of visits to a podiatrist. The advantage of working in managed care appears to be the amount of time the APN devotes to caring for the resident, talking with families, and working with the staff.

The APN as facility employee model appears to combine the benefits of fee-for-service, managed care, and consultation. In addition, it could be an attractive option for nursing faculty who want to incorporate care of the frail elderly into the nursing school curriculum. Presumably, the APN would have a daily presence in the facility and would be able to evaluate and manage all residents, not just those on the managed care or physician caseload. Daily presence would enhance surveillance for early recognition of change in condition, which is crucial in preventing hospitalizations. As a facility employee, the APN can become more closely aligned with the medical director and participate in quality improvement initiatives. As a facility-based consultant, the APN could be able to provide ongoing mentoring and follow up of issues related to systems of care. Regardless of the model, the
Table 3.  Resources for Regulatory and Practice Information

<table>
<thead>
<tr>
<th>Organization</th>
<th>Website address</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Conference of Gerontological Nurse Practitioners</td>
<td><a href="http://www.ncgnp.org">www.ncgnp.org</a></td>
</tr>
<tr>
<td>American College of Nurse Practitioners</td>
<td><a href="http://www.nurse.org/acnp/">http://www.nurse.org/acnp/</a></td>
</tr>
<tr>
<td>American Academy of Nurse Practitioners</td>
<td><a href="http://www.aanp.org/default.asp">http://www.aanp.org/default.asp</a></td>
</tr>
<tr>
<td>National Association of Clinical Nurse Specialists</td>
<td><a href="http://www.nacns.org/">http://www.nacns.org/</a></td>
</tr>
<tr>
<td>American Medical Directors Association</td>
<td><a href="http://www.amda.com/">http://www.amda.com/</a></td>
</tr>
</tbody>
</table>

greatest challenge could be in implementing a successful practice.

Getting Started

Familiarity with the environment was an important factor in the success of the first GNPs. Respondents in a qualitative study exploring entry into a nursing facility practice identified an early need to make sense of the regulatory environment, understand the role and functions of various members of the interdisciplinary team, and figure out how to get the work done.\(^\text{38}\) Table 3 lists professional resources that can link the APN to others who are willing to share information and practice tips.

The APN will need to become acquainted with the leadership team consisting of the administrator, director of nurses (DON), and the medical director. The director of nurses will be a valuable resource regarding regulatory care issues and can help the APN understand the significance of the MDS for care planning, quality monitoring, and reimbursement. Most social workers are well-versed in residents’ rights. An active and informed medical director will be valuable in interpreting regulatory guidelines and an important ally in role negotiation at the facility level.

The APN should negotiate with the administrator and DON the procedure and who to notify regarding nursing care-related issues. If a systemwide problem is identified, the APN might want to volunteer to participate in the quality improvement process. When voicing care concerns, the APN will most likely be eager to participate in the solution.

Nurse practitioners will benefit from a strong mentor and role model to maximize efficiency in making visits. Physicians and other APNs who have developed a systematic approach to their day will be the most helpful. In any collaborative practice, the work will need to be negotiated. Who is going to do the required visits? Will the physician and the APN alternate as allowed? Will the APN primarily attend to acute or episodic problems? What forms and orders can the APN sign?\(^\text{39}\) In the case in which the collaborating physician is not the attending physician, the APN and attending physician will need to negotiate physician notification. For instance, does the attending want to be notified before sending a resident to the hospital, when an advance directive is signed, with changes in orders?

Generally, more communication early in the relationship will assist in developing trust. Daily telephone contact from new graduates to review all visits is not unreasonable. Essential components of care management can be discussed over the phone, and the APN will gain knowledge and skills to use in future encounters. In addition, the physician will learn more about the unique nursing perspective and contribution the APN makes to the care management team.

FUTURE DIRECTIONS

There are opportunities to develop new models of practice in the nursing facility. In the process, APNs should be encouraged to seek out assistance to collect data and monitor practice outcomes. The AMDA research network has committed a work group to evaluate APN/physician collaboration. Other partnerships might include academic institutions or APN professional associations.

Many unanswered questions remain. Liability issues were not addressed in any of the models reviewed. Does the addition of an APN to the care team improve resident, family, and staff satisfaction? If so, does this reduce liability, or is it related to some other factor? Does satisfaction differ among the various models? If so, what contributes to the difference? Is there a difference in the various models and the facility quality-of-care indicators? What are the cost comparisons across the models?

There is sufficient outcome data to recommend the addition of an APN to the facility roster of required employees.\(^\text{40}\) The diverse skills of APNs make them an ideal choice to facilitate quality improvement, improve quality of life for residents, and reduce healthcare costs.

SUMMARY

Nurse practitioners have become valuable members of the interdisciplinary care team for older adults residing in nursing facilities. Through creativity and innovation, several nursing facility models of APN practice have emerged. There are clear indications that positive clinical and functional outcomes have been associated with each model. Regulatory agencies have responded by enhancing resident access to APNs.

Establishing a nursing facility practice is both challenging and rewarding. Challenges can be met by understanding the rules and regulations, participating in the interdisciplinary care teams, and finding a facility mentor. The ultimate reward is the opportunity to participate in improving services and outcomes for the residents.

REFERENCES
