

# The Attending Nurse: An Evolving Model for Integrating Nursing Education and Practice

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**Abstract:** The discipline of nursing continues to evolve in keeping with the dramatic expansion of scientific knowledge, technology, and a concomitant increase in complexity of patient care in all practice settings. Changing patient demographics require complex planning for co-morbidities associated with chronic diseases and life-saving advances that have altered mortality in ways never before imagined. These changes in practice, coupled with findings from sophisticated nursing research and the continuous development of new nursing knowledge, call for realignments of the relationships among academic faculty in schools of nursing, advanced practice nurse administrators, and staff nurses at the forefront of practice. This article offers a model designed to bridge the gaps among academic settings, administrative offices and the euphemistic “bedsides” where staff nurses practice. Here we describe the nurse attending model in place at the New York University Langone Medical Center (NYULMC) and provide qualitative data that support progress in our work.

**Keywords:** Collaboration, attending nurse, practice support.

## OVERVIEW

The gap between nursing education and nursing practice is well documented [1] and begins in nursing school as students move between the classroom and clinical rotations; the clarity of didactic content and the non-linear reality of patient care; the professor who speaks of evidence-based practice and decontextual critical thinking and the clinical instructor who, from knowing the patient and reading the clinical situation, makes assessments and judgments in pursuit of good outcomes. Too often students internalize a division between nursing education and practice that stays with them throughout their careers and is reinforced by daily experience as staff nurses, regardless of their practice settings. The purpose of this paper is to describe a new and novel approach to the integration of the academic/clinical gap through the attending nurse model. The goal of the attending nurse model program is to provide support to practicing staff nurse generalists by bringing the knowledge and expertise of senior faculty and administrators to patient care rounds. We provide background for why a new approach can have added patient care value and provide data from a pilot study in an academic teaching hospital.

## BACKGROUND

While in recent years it has become more common for academic nurses and, in some cases, nurse administrators, to continue some form of ongoing clinical practice, it is by no means the norm. Nurses who continue their education and attain graduate degrees are likely to either stay in classrooms, research settings, or administrative roles. As a result, they may not be current with contemporary practice expectations or technology and may no longer feel competent or welcome in the clinical

setting. The electronic medical record is a perfect example of technology that in the absence of regular experience, is not readily navigated by classroom professors. The attending nurse model described here provides a practice framework that facilitates educators and administrators in the practice role with staff nurse colleagues in the interdisciplinary team setting. Originally conceptualized as a nurse-centric teaching model, we have expanded it to focus more intensely on the very important concepts of communication and leadership. The inherent value to the attending nurse model includes the ability to see first-hand the challenges in contemporary practice and the curricular changes that need to be made as well as the capacity to stay abreast of ongoing practice changes in the discipline.

Benner and colleagues, in a recent book based on a major Carnegie Foundation study of nursing education, have pointed out with some urgency that a rapidly changing nursing profession requires mastery of increasingly complex knowledge and technology, as well as improved ways of helping beginning nurses master the situated embedded knowledge in particular situations with specific patients. The message is clear: far better integration of classroom teaching and clinical practice is needed [2].

The profession already has examples of ways to engage academic nurses and nurse administrators in practice [3]. In the *faculty practice model*, the clinical agency buys out a portion of the faculty member’s expended effort in order to retain that person at one setting in a specific advanced practice role. The *nursing center model* revolves around a clinic practice where patients can come, on a fee-for-service model (some have Centers for Medicaid Services reimbursement structures), for health promotion, screening, and intervention. A *joint appointment* means that a faculty person has both an academic and a clinical appointment and is paid by both organizations (for example, by school and hospital), with concomitant professional responsibilities and reporting responsibilities to

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each organization. For example, the academic program might reimburse half the salary, while the hospital or other clinical system would reimburse the other half. The *moonlighting model* is one where the academic nurse–professor works evenings, weekends, or other part-time hours in the clinical setting—both to maintain clinical experience and to supplement salary. Finally, the *episodic clinical consultant model* (the clinical nurse specialist model, for example) is when a faculty member, such as a geriatric nurse specialist, responds episodically, when requested, to consult on patient cases. These models each provide an approach for the maintenance of clinical practice. However, none specifically address the critical communication, leadership and collegial team constructs that are challenging to learn in any setting and called for in the recent Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing at the Institute of Medicine [1]. The discipline of medicine has traditionally used the attending physician model, and the literature that discusses the role and responsibilities underscores its centrality of role modeling for young physicians [4–6]. While there is some variation in the roles described by this widely used term, in most settings it refers to a seasoned senior clinician with a faculty appointment who helps educate medical students, interns, and residents. In that model, an experienced physician rounds with those in training in order to impart knowledge and experience and provide clinical expertise, support, role modeling and guidance. We have studied the role in order to determine what aspects of this construct are relevant and appropriate for nursing professors and nurse administrators. Having long believed that a similar model could be adapted for the nursing profession, particularly for those not well served by the above models, Fulmer piloted an attending nurse pilot project at Mt. Sinai Hospital in New York City in July 1999 [3]. In that pilot, the attending nurse’s specialty practice (geriatric nursing) was used to frame the dialogue on rounds—much as how, in medical attending rounds, the physician’s expertise is dominant in the teaching exchange with interns and residents. The month-long experience at Mt. Sinai included monitoring geriatric patients’ progress and daily rounding during which staff nurses were engaged in dialogue on treatment and management issues for common geriatric problems such as insomnia, pressure ulcer prevention, incontinence, delirium, and cognitive decline. This was a nurse-centric pilot project and rounds included only nurses. This short-term, targeted experiment led to a number of practice improvements, including: more consistent and effective use of geriatric assessment tools and more collaboration with medical residents in the care of geriatric patients. At the same time, it allowed the attending nurse to retain and hone clinical skills while modeling approaches related to how research findings could be applied immediately in practice. Further, the attending nurse was able to role model dialogue with attending physicians, and therefore teach an aspect of nursing that can be difficult for newly licensed nurses and nursing staff in general.

Going forward, the opportunity lies in the attending nurse’s capacity to help engage staff nurses in daily rounds in order to give voice to their knowledge and assessment of the patient and their questions or concerns about the patient’s treatment. The model supports staff nurses in validating their judgments about patients with more seasoned nurses and the staff nurses are coached to raise questions or express concerns to the team. Eliciting the specific concerns of the particular patient and family about his or her disease and treatment is extremely

important, because traditional medical rounds tend to focus on diagnostic and pathophysiologic data.

We believe an attending nurse in partnership with the nurse manager is in a strong position to provide clinical expertise, coaching, and support for staff nurses. In turn, this may increase the clinician’s satisfaction, improve knowledge transfer, and improve dialogue across different disciplines. For academic nurses and nurse administrators who do not have joint appointments or private practices, the attending nurse model helps ensure senior nurses will have a realistic way to engage in the practice setting and bring current evidence and their specific expert knowledge to practice. It should be underscored that the attending model experience has the potential to fundamentally change curricula when professors see firsthand the state-of-the-art content and the demands of practice, and amend their classes to reflect them. By bringing insights from actual practice situations into the classroom, faculty are more credible, and more likely to help students develop an integrated and realistic view of the complexities of clinical practice [2]. The attending nurse model is meant to accelerate role modeling so that staff nurses to take a more proactive, confident, and informed role in day-to-day exchanges with the interdisciplinary team. The success of the attending nurse model depends on a philosophy of openness and a stated institutional commitment to the teaching role of nursing faculty and nurse administrators who do not have regular patient care responsibilities. In the best settings, clinical nursing practice and clinical knowledge development are continuously being refined and extended [7], and it makes good sense that staff nurses are supported in this learning by experienced nurses.

## APPROACH AND METHODOLOGY

Initially, the dean of the nursing school and the chief nursing officer of the hospital met to exchange ideas regarding how the model might work, determine an appropriate patient care unit in which to pilot the model, identify colleagues who might be willing and interested in testing the model, and determine that the model would be “cost neutral”—that is, that no funds would be exchanged by either side to compensate for the effort.

A rotation schedule was developed for the year, and it was agreed that regardless of area of individual expertise, all attending nurses would focus on supporting the staff nurse as she/he engaged in the rounding process with the attending physicians, interns, residents, and other students. All of the attending nurses agreed to commit to a two- or four-week block over the year, and to participate in an evaluation of the program.

The attending nurse and the attending physician agreed they would comment on all patients where appropriate. The attending nurse schedule was set for a 12-month rotation on one large, general medical unit. The staff nurses would need time to adjust to the model and consider ways to provide input on what is most effective in the rounding process. We chose to match our initial start date with a new rounding model that was concomitantly being developed by the Department of Medicine (August 2009). Full advantage was taken of the change-state in the physicians’ rounds to establish the attending nurse’s role as a part of the overall change process. It was anticipated that continuity of teaching rounds over an extended period would engender continuity in teaching relationships between staff and faculty serving as attending nurses and staff nurses would see teaching rounds as an expectation rather than an exceptional

or case-by-case event. While on service, the attending nurses were also available for consultation by telephone, e-mail, text message, or (depending on the situation) in person in order to underscore accountability and further ensure sound communication and continuity.

The NYULMC staff nurse group participated collaboratively in the design, implementation and evaluation of the attending nurse model using a community based participatory research approach (CBPR). CBPR seeks to bridge the social divide between academic researchers and communities (in this case, nurses in clinical practice) through mutual learning and education [8]. Through CBPR, a co-learning educational process takes place for both researchers and practitioners as they work together on all phases of the research [9]. Focus groups were conducted prior to the implementation of the model to assist in the model development and to obtain baseline information about attitudes toward an attending nurse model and six months later for evaluation purposes. Institutional Review Board approval was obtained from NYULMC IRB.

### Sample and Recruitment

All staff nurses from two general medical units were invited to participate in focus groups at baseline and six months later. Nurse managers of the two units explained to the staff nurses that groups were being conducted to learn more about their attitudes toward a new model for collaboration with nursing faculty and nursing administrators as nurse attendings. We used assent, and those nurses who joined the lunch were considered "non-refusers" and the purpose of the study was explained with explicit discussion regarding the intent to collect data and publish findings. The manuscript was reviewed with the nurses prior to submission.

### Data Collection and Measures

Focus groups were conducted in a conference room on the medical unit during work hours to reduce any barriers to participation and lunch was provided. Two focus groups lasting approximately 30 minutes each were conducted at baseline with the voluntary participants. At the six month follow-up, two groups (seven in the first group and five in the second group) were conducted with nurses from the same two units. Each group lasted about 30 minutes. All focus groups were audiotaped and transcribed verbatim for data analysis. Interview guides for baseline were developed that explored current collaboration and communication patterns with physicians and nurses in the clinical setting, attitudes toward an attending nurse model, facilitators and barriers to implementation of the attending nurse model. The content guide stayed constant from Time I to Time II (appendix).

### Data Analysis and Results

Using constant comparison, through an iterative process [10], themes were identified and validated by group participants. The focus group data provided valuable information on what the staff nurse thought the attending nurse model might bring to their practice with the subsequent data after six months of experience. At Time I, the nurses had three themes: *role clarification, communication concerns and time urgency*. They described the relationship with the attending physicians as little to non-existent; and instead, had a strong sense that communication should necessarily go through interns

or residents as the norm, and not directly to attending physicians. There was an overall willingness to try the model and an agreement to round with nurse attendings, but the group expressed confusion as to what the rounds might accomplish and how they could be efficiently implemented. There was a strong sense that the rounds would be a problem in terms of time management and be challenging in day-to-day practice.

At six months, we again convened our group and used the same questions to frame the conversation. We wanted to learn how the interdisciplinary attending model rounds were working, and how the staff nurses perceived the rounds in their day-to-day practice. The themes that emerged at Time II were *improved communication, time urgency and affirmation of value for the model*. Similar to Time I, the staff nurses described the challenges of joining rounds in the midst of busy morning practice, but did indicate that the rounds were very helpful for communicating with the medical team for improved patient care planning. There was agreement that communication had become more efficient with fewer telephone interactions required. There was a better sense that nurses' voices were being heard, and the concerns of staff nurses were better reflected in the patients' interdisciplinary care plans. The nurses indicated that the rounds helped them be clear in terms of goals and plans for the patients' medical treatment, which then helped them prioritize their own nursing goals and plans and felt it was a more coordinated approach to patient care. Staff nurses reported a strong sense of time urgency and concern regarding "time taken away from patient care." Finally, there is a clear mandate for nurse manager leadership in order for the model to succeed. Nurse managers are obviously extremely influential in terms of creating a valuing attitude toward the model and making adjustments in workflow to support the rounds. Their leadership is essential.

### DISCUSSION, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE PRACTICE

We have learned several lessons that provide valuable information about how best to move forward with the attending nurse model. Staff nurses are willing to participate in rounds that are time intensive and the nurses describe the experience as value added in terms of nurse-physician communication and educational content. They do, however need ongoing consistency in the approach so that they can plan and anticipate for participation. From the perspective of the attending nurse, there are opportunities to help improve patient care in the context of attending rounds because of the experience and knowledge that experienced nurses can bring to the practice setting and we firmly believe that there is a responsibility of faculty and nursing administration to do so. Bringing current literature to rounds and helping nurses discern best practices has great utility and is welcomed. Interdisciplinary teaching dialogues demonstrate collaboration and practice and the role modeling is invaluable to those with less experience. Further, building a strong and positive relationship with attending physicians is extremely important. Our experience has been remarkably positive and the medical attendings have exhibited great respect and strong interest in the interdisciplinary dialogue. Bonds between the attending nurse and attending physician have been readily formed and are creating a stronger sense of cohesion across disciplines on the unit. Further, having a regular time and explicit structure to our rounds is important to ensure success.

There are two main limitations to the model: consistency to the approach and quantitative data upon which to measure change. Given different sets of expertise and practice styles, approaches have varied. Consistency is important to all involved, and all members of the rounding group need to be able to count on a consistent time and approach to the attending rounds. Given the intense pressures inherent in busy academic teaching hospitals, a focused commitment of all persons is an absolute requirement. The continuing goal is to help practicing nurses see this as an educational opportunity as well as an opportunity to clarify goals for patient care, therefore improving efficiency and necessitating fewer interruptions over the course of the day. Further, nurses need encouragement in finding their voice during rounds. It is not readily apparent, especially to newly licensed nurses, what the parameters are for "appropriate questions and input." A strong recommendation from this program is to have a standard pattern of communication around key nursing care constructs, such as assessment and documentation of cognitive function and functional capacity. Newer nurses are anxious about presenting in rounds, but more experienced nurses tend to speak with greater authority and confidence. A mnemonic device has been created to help the staff present consistently in rounds. Another limitation has to do with the discontinuity that can ensue when nurses have had several days off and are just picking up new patients, and therefore, have less detailed knowledge of the careplan. In these instances, we have encouraged the staff nurses to simply assert that they are just picking up the patient, and will be able to comment more fully on future rounds. There does appear to be a secondary gain when the attending physician, the residents, medical students, and clinical pharmacist begin to appreciate the staff nurse's and nurse attending's knowledge and expertise concerning patient care. It's important to be highly respectful of time constraints for not only staff nurses, but interns and residents who are trying to fit the new model into their workflow. Busy clinicians are constantly engaged in the learning process, but are less experienced in their organizational skills and any new structure that adds time can be perceived as a burden. The nurse manager's has become increasingly complex in today's health care arena, and that the manager's attention and ability to engage staff around issues of patient care can be easily diverted by administrative demands. This observation has reinforced the belief that this model may be of strong value to the nurse manager in meeting his/her central role of developing nursing practice for better patient outcomes [11]. Finally, there are some obvious opportunities for attendings in both disciplines to teach and learn from each other. The practices of medicine and nursing have distinct endpoints and each is scaffolded by particular knowledge and skill. The complexity of medical diagnosis and treatment cannot be overstated and each set of rounds provides an opportunity for the attending nurse to hear a current approach to disease and treatment.

Our experience with the attending nurse model in interdisciplinary teaching rounds at NYULMC creates a baseline from which we will measure change to determine the approaches and adjustments that can help us improve the model and ultimately affect patient care outcomes. Consistent with recommendations in the IOM report, "Crossing the Quality Chasm," [12] we believe that interdisciplinary dialogue and role modeling by senior seasoned clinicians in practice together benefits the learning of newer clinicians, is good for the senior clinicians, and more importantly, good for patients.

Further limitations of our model to date include the need for replication, and the need for quantitative data from well-tested national measure such as the NDNQI-RN Survey [13] to determine change in important practice constructs. This work is underway. Finally, there is the opportunity to measure satisfaction and collaboration metrics for our physician colleagues. Currently, there is only anecdotal evidence that physicians are benefiting from the model and plans are also being developed to capture this important information. Collaboration and job satisfaction in the clinical workplace are key metrics for improving the quality and safety of patient care [14-16]. More research needs to be conducted in order to measure changes in quality, safety and satisfaction across all participating in the model including nurses, physicians and the patients for whom we care. We believe this model has potential for the Quality and Safety Education for Nurses (QSEN) program developed under the auspices of the Robert Wood Johnson Foundation and holds promise for the implementation of the RWJ/IOM recommendations for The Future of Nursing Report.

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## APPENDIX 1

### Two Case Studies

The structure of these interdisciplinary rounds facilitated a collaborative process whereby an intervention, normally within the purview of the attending physician, was carried out by the attending nurse. The result, as in the following cases, was a good outcome for the overall team and obvious benefits for the patients.

**Case 1.** A 94-year-old patient came to the emergency room with severe congestive heart failure and was admitted to the floor for medical therapy. She was initially found at home, where she lived independently and had a person in her building who kept track of her and her household needs. Although she lived in a part of the city closer to other hospitals, she was admitted to our hospital because a friend of hers, a physician, felt he could better oversee her care at NYULMC.

Her hospital course was relatively unremarkable, consisting primarily of treatment with diuretics and oxygen therapy. In light of the patient's unstable cardiovascular status and age as well as the impossibility of contacting any relatives, the attending nurse inquired about whether or not the patient had an advance directive or a "do not resuscitate" order. The attending physician did not know of any advance directive; when asked about it, the patient said she did not have one. The team agreed that the attending physician would complete the document with the patient, but during further discussion the attending physician expressed discomfort about doing this since she was a hospitalist and not the private physician for the patient. Further inquiry revealed that there was not a private physician of record; in effect, the hospitalist was indeed the physician of record. The attending nurse, a geriatric nurse specialist with extensive experience in advance directives, offered to speak with the patient and get her documents in place.

*The attending physician expressed appreciation for this collegial support, and the attending nurse worked with the staff nurse to document the patient's advance directives in the record.*

**Case 2.** A 45-year-old woman was admitted to the unit for a severe and advanced case of cellulitis on her left lower extremity requiring IV antibiotics. The patient was legally blind and developmentally disabled. On rounds, the resident noted that the patient was having episodic vaginal bleeding—but quickly moved on to focus on her cellulitis. The attending nurse asked about the cause of the bleeding, and noted that it was not documented and not known by the team. She suggested that some of the possible causes could be sexual assault or tumor. In discussion with the team, she explained the vulnerability of developmentally disabled individuals to sexual assault and suggested that the team speak with the mother, who was at the patient's bedside. The team entered the room and the attending physician did a physical exam, with particular emphasis on the left lower leg cellulitis. The attending nurse then asked the mother questions related to the etiology of the vaginal bleeding. The mother indicated that the bleeding was episodic and that there was a follow-up gynecologic appointment scheduled for the next week.

*The interns, physicians, and staff nurses were able to observe how this sensitive communication among the patient, her mother, the attending physician, and the attending nurse was skillfully handled, and see how the distinct perspectives of the practices of medicine and nursing could be intertwined to benefit the patient by addressing the totality of her health issues.*

## APPENDIX 2

### Box 1.

1. What is the nature of your relationship with attending MDs at this hospital?
2. Can you describe your daily experience with attending MDs around collaborative patient care?
3. How do nurses currently communicate with attending MDs?
4. We are developing an attending model in nursing using senior nurse leaders from our medical center and our college of nursing. What do you think an attending in nursing might bring to our nursing clinical practice?
5. What will facilitate our attending model in nursing?
6. What might be the value?
7. What are the key barriers?

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