
Factors Influencing the Decision to Use Nurse Practitioners in the Emergency Department

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Introduction: Emergency department overcrowding is a serious problem nationwide. Of an estimated 14 million visits to hospital emergency departments, only 12.9% are considered emergent. Many emergency departments, however, employ only physicians despite the fact that nurse practitioners have a proven record of providing high quality, cost-effective care in the emergency department. The purpose of the study was to determine factors that influence the decision to use nurse practitioners in the emergency department.

Methods: Interviews were conducted with ED managers in hospitals that both employ and do not employ nurse practitioners in the emergency department.

Results: In this study, the primary reason that nurse practitioners were not employed by emergency departments was that physician groups with whom the hospitals contract refuse to use nurse practitioners. Emergency department managers of facilities with nurse practitioners reported high levels of satisfaction with the nurse practitioners performance. The 2 ED managers without nurse practitioners in their facility were highly supportive of having nurse practitioners in the emergency department and have advocated for hiring nurse practitioners.

Discussion: Education needs to occur with emergency departments regarding the value of the nurse practitioner's role to the facility. Research is needed to investigate why emergency department physician groups resist hiring nurse practitioners. Increased staffing with nurse practitioners in the emergency department can serve to reduce overcrowding, reduce waiting times, and increase patient satisfaction.

Emergency department overcrowding is a serious problem nationwide. Overcrowding is defined as a situation in which demand for emergency services exceeds the ability of a department to provide quality care within acceptable time frames.¹ A number of commonly held definitions for overcrowding have been identified. These include all ED beds occupied for more than 6 hours a day, patients placed in hallways, a full ED waiting room for 6 hours or more per day, physicians feeling rushed for 6 hours or more a day, and acutely ill patients who wait more than 60 minutes to be seen by a physician.² Emergency department overcrowding is a matter of patient safety when there is a delay in providing care as well as an issue with patient satisfaction. The Joint Commission on Accreditation of Healthcare Organizations' review of sentinel events has attributed patient deaths to delays in patient care. In hospital emergency departments, delay of treatment is the most common type of sentinel event.¹

The 2004 National Hospital Ambulatory Medical Care Survey (NHAMCS) reports an 18% increase in the number of visits to emergency departments from 1994 to 2004.³ During the same period of time, there was a decrease of about 12% in the number of hospital emergency departments in the United States. In 2004, an estimated 110 million visits were made to hospital emergency departments. The emergency department, however, is being used by the public for care of seriously ill or injured patients on a limited basis. The 2004 NHAMCS reports contusion with intact skin was the leading ED diagnosis followed by abdominal pain, open wound excluding the head, chest pain, and acute upper respiratory infection excluding pharyngitis.

The 2004 NHAMCS also provides insight into the acuity of care being provided in emergency departments. Only 12.9% of ED visits were classified as emergent with 37.8% urgent, 21.8% semi-urgent, and 12.5% non-urgent. The triage status of the remaining 15.1% was unknown.³ This small percentage of ED visits classified as emergent suggests that nurse practitioners are suited ideally to providing care to the majority of ED patients. One national survey of hospitals, however, found that only 17% of respondents employed nurse practitioners in the emergency department and only an additional 9% were planning to hire new nurse practitioners.⁴ This low level of employment of nurse practitioners in emergency departments occurs

despite nurse practitioners having a proven record of professional performance and effectiveness in their ED roles.⁵⁻⁸

There is no literature that discusses why nurse practitioners are not being used in emergency departments when their education, skills, and ability may reduce ED overcrowding, improve patient satisfaction, and improve access to care. This pilot study examines the factors that contribute to the decision to employ or not employ nurse practitioners in the emergency department.

Care Provided in the Emergency Departments

The primary role of the emergency department is treatment of seriously ill and injured patients. The emergency department, however, provides a significant amount of unscheduled primary and urgent care often because there is inadequate capacity for this care in other parts of the health care system. The emergency department is the only segment of the health care system that is mandated by federal law to screen and, if necessary, treat all patients who present to the emergency department for care. The Emergency Medical Treatment and Labor Act ensures that the public has access to a medical screening exam in the emergency department regardless of the ability to pay.⁹ In the absence of a national universal health benefits program, hospital emergency departments are essentially the only place in our current health system where all patients are guaranteed medical care.¹⁰

Unable to turn non-urgent patients away, ED overcrowding has emerged as a pressing health care issue over the last decade. The top 10 visits to the emergency departments (Table) include only a few symptoms or problems that can be characterized as emergent. The 3 leading complaints among ED patients were for abdominal pain, chest pain, and fever.³

Emergency Department Nurse Practitioner

There are currently only 4 nurse practitioner programs in the United States that specifically prepare emergency nurse practitioners (ENPs). As there is no national certification for ENPs, graduates of these programs are also educated to qualify for national certification in other nurse practitioner

TABLE
Top 10 reasons for visits to the emergency department

1. Stomach and abdominal pain, cramps, and spasms
2. Chest pain and related symptoms
3. Fever
4. Back symptoms
5. Headache, pain in head
6. Cough
7. Shortness of breath
8. Vomiting
9. Pain, site not referable to a specific body part
10. Lacerations and cuts—upper extremity

Modified from McCaig LF, Nawar EW. National hospital ambulatory medical care survey: 2004 emergency department summary. Hyattsville, MD: National Center for Health Statistics 2006. Available at: <http://www.cdc.gov/nchs/data/ad/ad372.pdf>.³

areas. At Emory University, for example, graduates are eligible to become certified as family nurse practitioners.¹¹

Although there are few programs educating emergency nurse practitioners, many primary care nurse practitioners are well suited to care for the majority of patients with non-emergent problems who present to the emergency department. The use of nurse practitioners in the emergency department, which began in the 1970s, can complement the care of the emergency department physician and improve ED efficiency.¹² The responsibilities of the ED nurse practitioner should be consistent with her or his educational preparation, area of certification, and state scope of practice.

The Emergency Nurses Association (ENA) Scope of Practice Statement for Nurse Practitioners in the Emergency Department concludes that knowledge in advanced physical assessment, the ability to triage and prioritize care in an uncontrolled environment, and skill in providing a continuum of care as essential competencies for this role.¹³ The ENA recognizes that nurse practitioners have a breadth of knowledge and expertise in their specialty area and are capable of managing complex clinical issues.

Cole and Ramirez¹⁴ developed a profile of nurse practitioners employed in emergency departments. The majority (69.9%) of nurse practitioners in ED settings were nationally certified family nurse practitioners with another 15% educated in emergency nurse practitioner programs,

11.5% educated as adult nurse practitioners, and 3.6% educated in another type of nurse practitioner program. Emergency department nurse practitioners worked in fast tracks, urgent care centers, and main emergency departments located mainly (81%) in urban settings. The range of experience as a nurse practitioner in an emergency setting was 1 to 21 years with an average of 4.45 years.

The number of nurse practitioners working in the ED setting is unknown. A 2003 statewide survey of nurse practitioners practicing in Washington State found that 4% (n = 69) of respondents reported a hospital emergency department as their place of employment.¹⁵ The survey had a response rate of 73%. Although the number of nurse practitioners employed in emergency departments nationwide is unknown, 1 study showed that nurse practitioners provided 5.76 million ED patient visits between December 1996 and December 2000.¹⁶ This figure represents only 1.4% of all ED patient visits during that 4-year period.

Almost two-thirds of the reasons for the ED visits of patients seen by nurse practitioners were injuries of specific types and locations and symptoms related to the musculoskeletal system, general symptoms, and respiratory symptoms.¹⁶ A study of invasive and diagnostic skills performed by 72 nurse practitioners in emergency departments determined the 5 procedures carried out most frequently were fluorescein staining, removal of a foreign body from the eye, interpretation of 12-lead EKG, single layer closure of an extremity or trunk wound, and removal of a foreign body from soft tissues.¹⁷

Use of the Nurse Practitioner in the Emergency Department

Nurse practitioners are successfully fulfilling a vital role in the delivery of non-urgent, urgent, and emergency care. A high degree of patient satisfaction and the delivery of quality care are well documented. More facilities are beginning to consider the employment of nurse practitioners in emergency departments. One emergency facility in Missouri created a fast track program staffed by nurse practitioners for non-urgent patients. The facility found this was an effective system of care for patients with non-urgent rather than emergent problems. The most common types of patient problems were for complaints of upper and

lower respiratory problems, injured extremities, and simple, single-system complaints.¹⁸

Several studies in support of the role of nurse practitioners delivering ED care come from Great Britain and Australia.^{5,19-21} These studies conclude that not only are patients satisfied with nurse practitioner care, they also report that nurse practitioner interpersonal skills are better than those of physicians. In one of the studies, emergency nurse practitioners were better than junior doctors at recording the medical history and fewer patients seen by a nurse practitioner had to seek unplanned follow-up advice about their injury.¹⁹ Another study documented that with the addition of nurse practitioners in the emergency department there was a reduction in waiting times and an improvement in the quality of care.²¹

Although nurse practitioners are educationally prepared, nationally certified, and experienced providers of quality care, only a small percentage of nurse practitioners are being employed in ED settings. With the emergency care system in the United States providing care to many who are uninsured or who lack access to primary care, it is documented that nurse practitioners can serve a vital role in improving the efficiency and lowering the cost of care in emergency departments. The purpose of this study was to investigate factors that influence the decision to employ or not employ nurse practitioners in the emergency department.

Methods

A qualitative exploratory study was conducted to investigate factors influencing the decision to use nurse practitioners in the emergency department. A convenience sample of ED managers from hospitals in southwest Washington that do and do not employ nurse practitioners in their emergency department and hospital was used.

After approval from the Institutional Review Board, a cover letter requesting an interview was sent to 5 ED managers at their place of employment. If no response was received within 7 days, a follow-up phone call was made. Those ED managers interested in participating were scheduled for interviews at a time and place of their choosing. Four ED managers participated. Before the interviews, informed consent was obtained. The interviews were conducted using a semi-structured interview guide and were tape-recorded. The

audio tapes were transcribed verbatim and transcripts were analyzed using content analysis.

In addition to the interviews study participants were asked to share other data. This included the number of emergency department visits per year in their facility and the percentage of ED visits that were for primary care problems or non-life threatening problems that did not require ED care. All 4 managers shared this data.

Results

The number of ED visits in the 4 hospitals ranged from 27,000 to 65,000 visits per year. Emergency department managers reported that the percentage of level 1 emergent visits ranged from 4% to 13% of the total ED visits. On the other hand, 25% to 40% of ED visits were non-emergent or level 4 to level 5 visits, or as one manager stated: "...visits for problems that can be handled by an NP—chronic pain patients, lacerations, sprains, strains, more minor kinds of things."

All 4 ED managers reported that ED overcrowding was a problem in their hospital. One manager reported overcrowding as being a "huge problem," others answered "definitely." One ED manager stated: "Last year we saw 65,000 patients, 2 years ago it was 45,000." Another stated: "We have designated hall beds already. We have actually reached the numbers projected for this year in March, which is what has driven the construction in the emergency department to add 14 beds."

All of the ED managers reported that their hospitals contracted with an outside group of emergency medicine physicians to provide medical care in the emergency department. The decision as to whether or not to employ nurse practitioners was therefore up to the contracted physicians group. The factors that influenced the physician groups as to whether or not to employ nurse practitioners were not clear to the ED managers, although they surmised it was due to several issues. One ED manager commented: "I think the only challenge of using nurse practitioners in the emergency setting is getting past the medical model from the physicians. Once they learn that they work just as well hand-in-hand with them [NPs] as anybody else does we'll be by that." Another ED manager reported discussing

the addition of a nurse practitioner-staffed fast-track. The ED medical director was concerned about liability issues if he could not observe the nurse practitioners even though Washington nurse practitioners are licensed independently.

The ED managers whose facilities did not employ nurse practitioners stated that there had been recent discussion about adding nurse practitioners to the physician group. A factor contributing to increased willingness to consider hiring nurse practitioners relates to a 2005 legislative change in Washington State. This law grants nurse practitioners prescriptive authority for all controlled substances without physician involvement making Washington nurse practitioners fully autonomous.

Two of the four emergency departments currently had a minor ED/urgent care area staffed by nurse practitioners. The 2 emergency departments that employed nurse practitioners used a 4 or 5 level triage system with level 1 being considered emergent and level 4 and 5 being non-urgent. Level 4 and 5 patients were triaged to the nurse practitioner rather than physician.

The 2 ED managers that had experience with nurse practitioners in the emergency department reported it as a positive experience. One manager stated that the nurse practitioners had "excellent clinical skills." The other manager reported her experience as "great—no problems!" There has been no negativity from patients regarding the use of nurse practitioners.

The ED managers had other illuminating comments regarding factors that they saw contributing to ED overcrowding as well as employing nurse practitioners in the emergency department. "In some places the overcrowding is worsened by the fact that we have a huge psychiatric population that has no place to go so the overcrowding gets worse. At some of the campuses we have it's not unusual for them to be boarding 6, 7, or 8 psych patients for 3, 4, or 5 days so that takes up one-third of your emergency department." One manager reported that there is a lack of community providers taking new patients or Medicare and Medicaid patients. "So where do they come? They come here." One ED manager had an ED employee who had returned to school to become a nurse practitioner. There had been discussion of the physician ED group hiring him, and the ED manager was disappointed when he was hired by another facility. "This was unfortunate as it would

have been a great way to break a NP into the system since the physicians were familiar and comfortable with this person's skills."

Discussion

In all 4 facilities, ED provider staffing is controlled by a contracted physician group. As a result, whether or not nurse practitioners are used in the emergency department was up to the physician group rather than the facility. There is no definitive national data regarding the percentage of emergency departments staffed by contracted physician groups. Estimates vary from 14% to about 50%.¹⁰ Physician groups may be more comfortable working with nurse practitioners if they have had past experience working with a nurse practitioner in another capacity. Review of the literature showed there were no studies that evaluated or explored physician perspectives on hiring nurse practitioners in emergency departments.

Emergency department managers of facilities with nurse practitioners reported high levels of satisfaction with the nurse practitioners' performance. The 2 ED managers without nurse practitioners in their facility were highly supportive of having nurse practitioners in the emergency department and have advocated for hiring nurse practitioners. Despite greater than 50% of ED visits falling into the category of non-emergent, facilities have not reconfigured the way they provide care to this population of patients who present to their emergency department. Instead, they are adding beds and capacity.

Limitations

This study is limited by being a pilot study, having a small sample size, and being limited geographically to a specific area of Washington State. It may not reflect the use of nurse practitioners in emergency departments across the state or nationwide.

Implications for Emergency Nurses

Education needs to occur with emergency departments regarding the value of the nurse practitioner role to the facility. Research is needed to investigate why ED physician

groups resist hiring nurse practitioners. Increased staffing with nurse practitioners in the emergency department can serve to reduce overcrowding, reduce waiting times, and increase patient satisfaction.

Efforts need to focus on increasing community-based capacity for primary care rather than providing primary care in the emergency department that leads to ED overcrowding and excess costs. Hospitals need to consider the addition of an urgent care staffed by nurse practitioners where patients with non-emergent problems could be seen. This primary and non-urgent care could be delivered in areas of the hospital that are not used continuously such as clinic areas.

Conclusion

Hospitals must look at alternatives to ED care for non-emergent visits. Until a systems level change occurs, emergency departments and patients will be best served when nurse practitioners are employed more widely in emergency departments. Nurse practitioners will improve the quality of care, lower cost, and improve patient satisfaction by decreasing ED overcrowding.

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