The Role of the Nurse Practitioner and Physician Assistant in the Care of Hospitalized Children

ABSTRACT. The positions of nurse practitioner and physician assistant were created approximately 30 years ago. Since then, the role and responsibilities of these individuals have developed and grown and now may include involvement in the care of hospitalized patients. The intent of this statement is to suggest a manner in which nurse practitioners and physician’s assistants may participate in and contribute to the care of the hospitalized child on the general inpatient unit, among other areas.

ABBREVIATIONS. NP, nurse practitioner; PA, physician assistant.

During the 1960s, nurse practitioner (NP) and physician assistant (PA) training programs were initiated in response to a perceived shortage of physicians, especially in medically underserved communities that were often also economically deprived. NPs and PAs were originally considered to be alternative health care personnel who would function under the supervision of physicians, extending the ability of the physician to provide service to a greater number of patients.

During the last 10 years, however, the scope of practice of NPs and PAs in pediatrics has been expanded to include the care of hospitalized patients. This expansion has been driven by continuing regional shortages of physicians, efforts to reduce the cost of health care, and decreasing funding for graduate medical education which means fewer residents (residency positions). A major concern has been that the expansion of the scope of practice of NPs and PAs may impact on the management of pediatric inpatients and create a two-tier system of health care. Another issue is that resident experience may be diluted when NPs and PAs assume some of the responsibilities for patient care.

EDUCATION AND LICENSURE

The first PA program was created at Duke University (Durham, NC) in 1965, at approximately the same time as the first pediatric NP program was being developed under the combined auspices of the Department of Pediatrics of the School of Medicine and the School of Nursing of the University of Colorado, Denver. During the 30 years since their inception, the education, training, and practice of NPs and PAs have changed substantially.

NP

A NP is a registered nurse with advanced education and clinical training beyond the usual 2 to 4 years of basic nursing education required for state licensure. The additional education may be through a certificate program or a master’s degree program. Thus, the education of a NP may be completed in as little as 2 years of junior college and 9 months in an advanced NP certification program or in as much as 4 years of college and 2 years in a combined master’s and certification program. Most NPs acquire a master’s degree in nursing as their route to certification.

In some states, the NP is required by law to work in collaboration with a physician. The NP can provide only those services specifically articulated by state statute and in accordance with a written practice agreement with a licensed physician. In other states, NPs have been granted independent practice and prescribing authority.

PA

A PA is registered by the state after 2 or more years of undergraduate education followed by 9 to 12 months of preclinical didactic studies and 9 to 15 months of physician-supervised clinical education. Some educational programs for PAs graduate child health associates, who receive specialized training in pediatrics. By law, PAs may perform medical services, but only when supervised by a physician and only when such acts and duties are within the scope of practice of the supervising physician.

ROLES AND RESPONSIBILITIES

As initially conceived, the roles of NPs and PAs in pediatrics were to assist the physician in the provision of primary care for well children and those with acute minor illnesses. During the past 30 years, subspecialty areas for NPs, such as the neonatal NP, have developed. PAs have been used more extensively in hospital departments of surgery, in which they may obtain initial histories and perform physical examinations and minor surgical procedures, under physician supervision.

Despite the original intent for the roles of NPs and PAs, current economic pressures have promoted their increased use and expanded scopes of practice. This is true despite data from ambulatory settings clearly demonstrating that although NPs and PAs
individually earn lower incomes than physicians, their involvement in care costs the same or more per patient encounter because they tend to spend more time with each patient and usually work a 40-hour week, while physicians treat patients more expeditiously and work longer hours.36

However, a role may exist for NPs and PAs on the pediatric inpatient unit. The NPs and PAs who are used in such positions require additional precepted education, beyond that required for certification. The additional precepted education should be the responsibility of the pediatric unit director and should include orientation to hospital and departmental policies and protocols and direct teaching of clinical skills needed for the specific unit. The NPs and PAs should work under the close direct supervision of an attending physician, and the patient’s primary physician must always remain readily available to answer questions and provide backup to the NP or PA. Decisions regarding the need for admission, management plans, and appropriateness for discharge must be made with the involvement of the attending physician.

**RELATIONSHIP WITH THE PHYSICIAN**

Management of hospitalized patients in an inpatient setting should always be directed by a physician; therefore, the responsibility and legal accountability belongs to the physician. The establishment of and adherence to written protocols for NP involvement in the care of hospitalized infants and children should be required.

**CREDENTIALING**

It is incumbent on the hospital to develop a detailed credentialing process for NPs and PAs if they are used in the inpatient setting. This process must include a clear delineation of privileges, just as is done for members of the medical staff. Because PAs work directly under the supervision of a physician, they should be credentialed through a medical staff process. Because NPs are nurses, they should initially be credentialed through nursing channels; however, delineation of privileges for inpatient care should be done in collaboration with the medical staff and clearly state that the physician of record retains ultimate responsibility for the management of patients.

Recredentialing of NPs and PAs should be part of any hospital-wide quality improvement program. The NPs and PAs should be considered when developing standards of patient care, quality care, and outcome standards. Evaluations of NPs working on an inpatient unit should be performed jointly by nursing supervisory personnel and the unit medical director; evaluations of PAs should be performed by the unit medical director.

**POSTHOSPITALIZATION FOLLOW-UP**

After the patient is discharged from the hospital, follow-up may be performed by the NP or PA, provided well-delineated parameters exist for the care to be given. The determination of the specific follow-up needs of each patient must be made by the team providing care before discharge from the hospital.

**CONCLUSION**

NPs or PAs working with a physician have a meaningful role in the management of hospitalized children. Having already demonstrated their abilities to perform in supervised intensive care settings, NPs and PAs should be effective on the general pediatric inpatient unit. As the scope of ambulatory care continues to expand, the children admitted to the general inpatient unit of the hospital have increasingly more complex illnesses. The responsibility for the management of the hospitalized child should be under the supervision of a qualified physician, because the physician has the most education and training for this role. Nevertheless, the NP and PA can play a valuable role in the care of the hospitalized child by contributing specialized skills that improve the quality of patient care. The NPs and PAs who participate in the care of the hospitalized child must have the additional education and training that such involvement requires.

**RECOMMENDATIONS**

1. NPs and PAs may participate in the care of hospitalized patients.
2. NPs and PAs caring for hospitalized patients should have appropriate credentials and clearly defined clinical privileges.
3. Credentials for NPs and PAs must include specific education, experience, or both for the position. This training may include experiences precepted by a qualified physician.
4. NPs and PAs may also take part in posthospitalization follow-up of patients by using written protocols for medical care and necessary patient education.

---

**AMERICAN ACADEMY OF PEDIATRICS**

**Section Liaison**

Theodore Striker, MD

**Consultants**

Jess Diamond, MD

**Liaison Representatives**

Elizabeth J. Ostric

American Hospital Association

Mary T. Perkins, RN, DNSc

Society of Pediatric Nurses

Elias Rosenblatt, MD

Joint Commission on Accreditation of Healthcare Organizations

Eugene Wiener, MD

National Association of Children’s Hospital and Related Institutions

Jerriann M. Wilson, CCLS, MEd

Association for the Care of Children’s Health

**Committee on Hospital Care, 1997–1998**

Henry A. Schaeffer, MD, Chairperson

David R. Hardy, MD

Paul H. Jewett, MD

John M. Neff, MD

John M. Packard, Jr, MD

Marleta Reynolds, MD

Curt M. Steinhart, MD
REFERENCES

ERRATUM

In the practice guideline entitled, “Practice Parameter: The Diagnosis, Treatment, and Evaluation of the Initial Urinary Tract Infection in Febrile Infants and Young Children” (Pediatrics. 1999;103:843–852), recommendation number 11 on imaging should read:

“Infants and young children, 2 months to 2 years, with UTI, who do not demonstrate the expected clinical response within 2 days of antimicrobial therapy, should undergo ultrasonography promptly. Voiding cystourethrography (VCUG) or radionuclide cystography (RNC) is strongly encouraged to should be performed at the earliest convenient time. Infants and young children who have the expected response to antimicrobials should have a sonogram and VCUG or RNC performed at the earliest convenient time; a VCUG or RNC is strongly encouraged (Strength of evidence: fair).”

Corrected wording is shown with underlining; deleted wording is shown using strikeout.
**ERRATUM**

*Pediatrics* 1999;103;1052

<table>
<thead>
<tr>
<th>Updated Information &amp; Services</th>
<th>including high resolution figures, can be found at:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="http://pediatrics.aappublications.org/content/103/5/1052">http://pediatrics.aappublications.org/content/103/5/1052</a></td>
</tr>
<tr>
<td>Permissions &amp; Licensing</td>
<td>Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:</td>
</tr>
<tr>
<td></td>
<td><a href="https://shop.aap.org/licensing-permissions/">https://shop.aap.org/licensing-permissions/</a></td>
</tr>
<tr>
<td>Reprints</td>
<td>Information about ordering reprints can be found online:</td>
</tr>
<tr>
<td></td>
<td><a href="http://classic.pediatrics.aappublications.org/content/reprints">http://classic.pediatrics.aappublications.org/content/reprints</a></td>
</tr>
</tbody>
</table>
ERRATUM
Pediatrics 1999;103;1052

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://pediatrics.aappublications.org/content/103/5/1052