



SOCIETY OF
PEDIATRIC NURSES

SAFE STAFFING FOR PEDIATRIC PATIENTS

INTRODUCTION/PROBLEM STATEMENT

The Society of Pediatric Nurses (SPN) remains committed to advocating for high quality, culturally sensitive, and comprehensive care of children and families. The healthcare needs of pediatric patients present unique challenges due to different developmental stages, limited communication skills, and differences in epidemiology and approaches to treatment as compared to adults. This position statement is intended to serve as the framework to assist organizations providing care to children in the implementation of evidence-based, outcomes driven staffing plans to promote the provision of safe, quality, customer focused care to children and their families.

DEFINITION(S)

N/A

RATIONALE AND SUPPORTING INFORMATION

Following a Congressional request in 1993 for the Institute of Medicine (IOM) to study the adequacy of nurse staffing in hospitals and nursing homes, a 1996 IOM report recognized the importance of determining the appropriate nurse to patient ratios and distribution of skills to ensure the delivery of quality care. Three years later, an IOM report first called the public's attention to the problem of increased patient morbidity and mortality related to errors occurring within healthcare delivery systems. Since that time, there has been a growing emphasis on patient safety, process improvement and the potential effects of adequate staffing (IOM, 1999).

Registered Nurses are the primary caregivers within the healthcare setting and are the essential link in assisting patients and families with navigating and humanizing a highly technical and impersonal healthcare system. An organization's commitment to high quality pediatric care is dependent upon appropriate staffing levels with adequately prepared nurses (American Nurses Association [ANA], 2017) and the implementation of collaborative, evidence-based, family centered care (American Academy of Pediatrics [AAP], 1994; Bowden & Greenberg, 2014; Mott, 2014).

Staffing levels should reflect differences in patient populations relative to age (AAP, 1994), severity of illness and complexity of care (Leary & Punshon, 2019; Hertel, 2012; Malloch, 2015; O'Keeffe, 2016; The Joint Commission [TJC], 2019) as well as the skills, education and experience of the nurses (Sloane, Smith, McHugh & Aiken, 2018). Finding the optimal nurse to patient ratio has been a national challenge. The complexity of staffing is that changes occur minute by minute, hour by hour, and shift to shift (ANA, 2017; Fitzpatrick, 2017). Demands on nursing staff shift as the numbers of admissions, transfers, discharges, and patients returning from surgery increase, resulting in care being provided for many more patients than what may be reflected in the RN hours per patient day or nurse to patient ratio (ANA, 2017; Hertel, 2012;

Needleman et al., 2011; O’Keeffe, 2016). Multiple studies have proven that lower nurse to patient ratios are associated with improved outcomes, including:

- Significantly lower mortality and reduction in adverse events, hospital readmissions and length of stay (ANA, 2015a; International Council of Nurses [ICN], 2018):
 - A lower incidence of urinary tract infection (Cimiotti, Aiken, Sloane, & Wu, 2012; ICN, 2018; Pappas et al., 2015).
 - A lower incidence of surgical site infection (Cimiotti, Aiken, Sloan & Wu, 2012)
 - A lower rate of central line associated bloodstream infection (ANA, 2015a; Pappas et al., 2015; Trinkoff et al., 2011).
 - A lower prevalence of pressure ulcers prevalence (Pappas et al., 2015) and falls (Hagan & Jones, 2015).
 - A reduction in medication errors (ANA, 2015a).
 - A significant decrease in readmission of children following hospitalization for common medical and surgical conditions. Each additional patient per nurse increased the odds of readmission for medical patients by 11% and surgical patients by 48% (Tubbs-Cooley et al., 2013).
 - Needleman et al., (2011) estimated the risk of death increases by 2% for each shift that is staffed below target and 4% for each high-turnover shift to which a patient is exposed.
- Improved nurse satisfaction:
 - Improved job satisfaction (ANA, 2017; Sloane et al., 2018) and retention (Aiken et al., 2012; ANA, 2017).
 - Reduction in nurse burnout (Cimiotti et al., 2012, Sloane et al., 2018) and nurse fatigue (ANA, 2015a).
- Improved patient satisfaction (ANA, 2015a; Cho et al., 2017) and health-related quality of life (ANA, 2015a).

Additional factors to consider when determining safe staffing include working hours and care continuity. Safe staffing should include risk reduction strategies to address the effects of an extended work day and cumulative work days to mitigate personal and patient safety events (Keller, 2009). Shifts beyond the traditional 8 hours increase nurse fatigue, adverse events, and employee injuries on the job (Martin, 2015; TJC, 2018). More medication errors, needle stick injuries and biological fluid exposures occur when nurses work more than 8 hours (Lockley et al., 2007). The risk of error almost doubles when nurses work more than 12.5 consecutive hours (Scott, 2007). The need to mitigate risk associated with working hours must also be balanced with the promotion of care continuity. Shift length can impact the number of transitions in patient care. Communication errors during patient hand-off are associated with increased adverse events and sentinel events (Kitch, Cooper, Zapol, Marder, Karson...Campbell; 2008; Pezzolesi, Schifano, Pickles, Randll, Hussain...Dhillon, 2010). One study of 10 years of sentinel events attributed two thirds of sentinel events to communication breakdown including during patient hand off (Croteau, 2005). Both nurses and employers must work together to minimize nurse and patient risks as they related to fatigue, shift length, overtime, and hand-offs.

POSITION and/or RECOMMENDATIONS

SPN believes that all children and their families should receive safe, high quality, culturally sensitive, family-centered care in an environment that supports the development of the child and promotes exceptional pediatric nursing care. As an advocate for patients, families, and the pediatric nursing profession, SPN recommends the following:

1. Staffing is a complex issue composed of multiple variables and therefore, no single published ratio for nurse staffing is automatically applicable in all settings where children receive care. Published recommendations for staffing ratios must be carefully evaluated for the particular pediatric setting since these ratios may inadvertently minimize the complexity and multitude of issues that must be considered in the care of pediatric patients and their families (ANA, 2015a; American Organization of Nurse Leaders, 2018; Hertel, 2012; Needleman et al., 2011).
2. The professional Registered Nurse must be considered an essential member of the team providing care for children and their families (IOM, 2010) and staffing plans must reflect this vital role (ANA, 2017).
 - a. Healthcare institutions should develop valid and reliable staffing plans. Nursing leadership, registered nurses and other designated nursing staff should be involved in the development of staffing plans and proper preparation of staff to provide safe and effective care (ANA, 2017; TJC, 2019).
 - b. Comparable pediatric staffing benchmark data and/or staffing guidelines from other pediatric focused professional organizations should be integrated into developing staffing plans (AAP, 1998, 2004, 2006, 2012; ANA, 2015b; NANN, 2014).
 - c. Measurable nurse sensitive outcomes to objectively assess the effectiveness of staffing should be clearly identified (ANA, 2015a; Fitzpatrick, 2017; Lewis-Voepel, Pechlaranidis, Burke & Talsma, 2012).
3. While specific details of these staffing plans will vary with individual patient needs and facility resources, SPN believes the following factors should be considered in all staffing situations:
 - a. The utilization of flexible staffing models to account for the changing number of patients and acuity of the patient population (ANA, 2015a; O’Keeffe, 2016).
 - b. The assessment of patient/family needs including developmental, physiological, psychosocial, and learning needs (ANA, 2015b; SPN, 2017).
 - c. The availability of specialized equipment, supplies and support services such as respiratory care, child life, social services, spiritual care (AAP, 1994, 1998, 2004, 2006 & 2012; Wallace, 2013) and the quality of multidisciplinary teamwork (Sheng et al., 2019) in providing care to children.
 - d. The level of education, competency, experience and specialized pediatric training of available staff (ANA, 2017; Needleman, 2016).
 - e. The level of family involvement and the family’s ability to meet the healthcare needs of the child (AAP, 2006; ANA, 2015(b); Bowden & Greenberg, 2014).
4. Nurses caring for pediatric patients must have appropriate education and experience to demonstrate competency in the care of this highly specialized patient population. The core concepts as cited in the following resources should be included in education and training:
 - a. Pediatric Nursing: Scope and Standards of Pediatric Nursing Practice (ANA, 2015b).
 - b. Position Statement on Child Health Content in the Undergraduate Curriculum (SPN, 2017).
5. Organizations and nursing staff providing care for pediatric patients should commit to

ongoing maintenance of nursing staff's clinical competency through continuing education that ensures a current knowledge base of issues and trends in pediatric care delivery.

6. Organizations should work to establish practice environments characterized by open communication, teamwork, and effective collaborative problem solving to address nurse staffing issues and ensure safe, effective care for children and families.
7. Employers and nurses should collaborate to implement work schedules that include risk reduction strategies to prevent work-related fatigue associated with extended shifts and cumulative work days to mitigate risks for adverse outcomes.
 - a. Employers should consider offering 8 and 12 hour shifts (Martin, 2015).
 - b. Shifts should be limited to no more than 12 hours (12.5 hours including a 30-minute meal period) in a 24-hour period (ANA, 2014; IOM, 2003; NANN, 2015).
 - c. Scheduled work shifts should not exceed three consecutive 12-hour shifts; four consecutive 10-hour shifts; or five consecutive 8-hour shifts in a week (NANN, 2015).
 - d. A minimum of 2 days rest should be provided after working three consecutive 12-hour shifts; four consecutive 10-hour shifts; or five consecutive 8-hour shifts (NANN, 2015).
 - e. Nurses should not exceed 40 (ANA, 2014) to 48 hours (NANN, 2015) of professional nursing work in a seven-day period.
8. Nurses must assume professional accountability for their own practice.
 - a. Being knowledgeable of the mechanisms available to address potential staffing issues.
 - b. Being aware of factors impacting individual work-related fatigue and being proactive in modifying those factors.

RESOURCE(S)

N/A

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REVIEWED AND APPROVED BY:

Subject Matter Expert/Task Force: Kathleen Van Allen, MSN, RN, CPN

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