Pediatric Nurse Practitioners Role in Care Delivery within Pediatric Intensive Care Units

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Dissertation under the direction of Professor Ann Minnick

**Background:** Admissions to the pediatric intensive care unit (PICU) have increased during a time of PICU physician shortage. Nurse practitioners (NPs) are increasingly employed in PICU. PICU models of care may vary based upon practice location and thereby influence NP demand as well as needed competencies. However, little is known about the role of and demand for PICU NPs, PICU provider team composition, and the influence of regulation on PICU NP practice.

**Objectives:** To 1) identify the roles and functions of NPs working in the PICU; 2) examine the PICU provider team composition; and 3) identify hospital-reported internal regulatory characteristics and state regulatory environments influence on the practice of NPs.

**Methods:** A national, quantitative, cross-sectional descriptive postal-mail survey of PICU medical directors (MDs) and lead NPs to describe: PICU NP clinical practice, labor inputs, working conditions; PICU provider supply and team composition; and state and organizational-level regulation of NP practice. Descriptive statistics, cross-tabulations, and Chi-square tests were used to test differences between institutional practices and provider reports of NPs’ roles and practice.

**Results:** Responses were received from 97 (30.1%) PICU MDs and 59 (42.1%) PICU NPs representing 126 institutions (39.1%). More than half of respondents reported local provider (55.3%) and national physician (61.3%) shortages. The type of physician providers on the interdisciplinary PICU teams differed between institutions with and without NPs. PICUs that employ NPs had, on average, three full-time NPs. PICU NPs’ primary role was the provision of day-to-day patient care. Variations were identified in organizational-level regulation of NP care. Respondents reported a desire to increase the number of PICU NPs and scope of NP care.

**Conclusions:** PICU NPs have been integrated into interdisciplinary team providing day-to-day patient care. Plans to increase the employment of and expand roles for PICU NPs should be examined in the context of the current roles and regulation of PICU NP practice. Future studies of diverse interdisciplinary PICU models of care, that investigate optimal incorporation of interdisciplinary providers skills and knowledge, may support achievement of positive patient and organizational outcomes.

Approved ________________________________________  Date _______________________

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