Changing Tides: Increasing Evidence to Embrace a Patient Classification System

**EXECUTIVE SUMMARY**

- The effective use of a patient classification system (PCS) in a way that provides value to all health care organizations has yet to be realized given the challenging developmental pathway of these systems.
- As the science and technology of workforce management emerges along with evidence to support the relationships between nurse work and patient care needs, it is no longer appropriate to rely on systems that provide aggregated and minimal data to address the need for safer patient care and retention of nurses.
- Specificity about patient care needs in a valid and reliable PCS is essential on our pathway to improved resource utilization, improved decision making, integration of nurse cognitive and knowledge work, and management of variances from planned resource use.
- Advancements with technology, the ability to create and monitor equitable nurse-patient assignments, conceptual clarity, evidence, regulatory requirements, and professional role development point to a new receptiveness for PCSs.

**Changing Perceptions**

There are several reasons our receptiveness to PCS is changing. The first reason is our advancements with technology. The introduction and widespread availability of sophisticated electronic software systems now makes it possible to include multiple data points, intelligent decision making, and integration of patient and staffing systems. Computerized systems allow for sophisticated data collection, analysis, and outcome documentation that was impractical, costly, and difficult to track and manage in manual systems. The objectivity and accuracy of data collected to determine patient acuity has improved significantly when compared to manual systems.

The availability of real-time data analysis and multi-user access to data allows for continual updating of activities and increases the ability to respond quickly and timely to changes in patient needs and activities. These sophisticated systems also provide automated processes for assessing inter-rater reliability of the data entered into the system. Previously, both real-time data updating and oversight of the reliability of the system were difficult to accomplish using manual systems in a timely manner. Finally, sophisticated electronic management tools are also available that integrate applications across single platforms and settings to provide real-time analytics that identify costs, outcomes, and variances between the care being provided and projected needs.

The second reason for increased receptiveness is the ability to create and monitor equitable nurse-patient assignments. A recent American Organization of Nurse Executives poll indicated the most pressing issues for nurses are those related to nurse-patient assignments and scheduling (Fox, 2012). Equitable nurse assignments can now be projected and managed using specific rules in software applications such as nurse competency, experience capabilities, unit geography, and other factors impacting staffing. As more and more organizations strive to staff by patient acuity, the impact of equitable nurse assignments becomes apparent with increasing nurse satisfaction.

The third reason for increasing use of a PCS is the conceptual clarity of what and why a PCS is intended...
to accomplish. Historically, the inconsistent goals and purposes of a PCS for all users have blurred the value and reliability of systems. The goal of a PCS is to reliably determine the number of hours for each level of caregiver required to provide safe and effective patient care. It is a foundational component in a dynamic workforce management system and serves to reflect the severity of a patient’s condition as it relates to nursing interventions. Some leaders and staff use the PCS to increase staffing, others to decrease staffing hours. The reality is the data produced by a PCS are patient care needs translated into hours of care; these then are compared with available staff hours. Increasing and decreasing staff hours is a management function based on data from patient needs, nurse hours, and available budget resources.

The American Nurses Association (ANA, 2012) provides support for the increasing clarity in its most recent safe staffing document and describes appropriate nurse staffing as “a match of registered nurse expertise with the needs of the recipient of nursing care services in the context of the setting and situation. The provision of appropriate registered nurse staffing is necessary to reach safe, quality outcomes, and it is achieved by a dynamic, multifaceted decision-making process that takes into account a wide range of variables that may differ across settings” (p. 2). Another national resource is provided by the Excellence and Evidence in Staffing Roundtable (Douglas, 2010) who defined excellence in staffing as “a dynamic, evidence-driven process that results in the efficient, effective use of qualified staff and the stewardship of resources to achieve the best possible outcomes for patients, their families, the workforce, and the organization in which care is delivered” (p. 3).

With clearer and accepted definitions of a PCS, the ability to build staffing effectiveness models in now possible. Staffing effectiveness models now identify and include multiple variables, complexity, and relationships of nurse-patient care. The level of unit support, nurse competence, patient turnover, and patient complexity are examples included in models to achieve safe and equitable nurse staffing (Berkow, Jaggi, Rogelson, Katz, & Hirschoff, 2007; Pinkerton & Rivers, 2001).

The fourth reason to support the use of a PCS is evidence. There is now a critical mass of research evidence to support the relationship between registered nurse staffing and patient outcomes. Research studies support the relationships between RN staffing and levels of medication errors, patient falls, new pressure ulcers, nosocomial pneumonia, urinary tract infections, length of stay, and unplanned re-admissions (Aiken, Clarke, Sloane, Lake, & Cheney, 2008; Blegen, Goode, Spetz, Vaughn, & Park, 2011; Letvak, Rhum, & Lane, 2011; Needleman et al., 2011; Trinkoff et al., 2011). Opinions can now be replaced with evidence, creating reliable, defensible methodologies to integrate patient care needs with staffing plans, daily staffing decisions, and budgeting processes.

The ANA Principles for Safe Staffing, developed in 1998 and updated in 2008 and 2012, clearly identify and support the need for empirical data to guide decision making to identify and maintain the appropriate number and skill mix of nursing staff using valid and reliable systems (ANA, 2012). This document includes the definitions, core staffing competencies, the role of the health care consumer, RN and support staff considerations, organizational culture, practice environment, and evaluation essential for safe staffing (ANA, 2012).

As noted previously, determining the appropriate type and number of caregivers and support staff needed to provide safe and effective patient care is the foundation of the workforce management system (Behner, Fogg, Fournier, Frankenbach, & Robertson, 1990; Mark & Burleson, 1995). With the standardized descriptions of nurse-patient staffing systems, it is now possible to identify services that do not impact the outcome of patient functionality and begin to eliminate them as inappropriate or unaffordable.

The fifth reason for a PCS concerns regulatory requirements. National and state legislation specific to nurse staffing ranges from the Centers for Medicare & Medicaid Services to specific state regulations requiring ratios, staffing plans, patient classification systems, and reporting requirements.

While legislation has been enacted in only 15 states, the requirements of documenting and reporting the required information still remain for those states. It is unknown whether federal legislation similar to some state legislation will be enacted and all states will be required to monitor, collect, and report compliance to these requirements. The regular monitoring of these requirements and reporting of specific requirements is tedious, inexact, and time consuming outside of software solutions.

It is important to note that many organizations continue to rely solely on ratio or grid staffing models in which nurses are accountable for the same numbers of patients. Fixed staffing numbers (ratios) cannot be considered sufficient to manage variations in patient care and sustain quality patient care (Bolton et al., 2001). Patient-to-nurse ratios identify the minimum staffing levels, whereas patient classification systems define the amount of staff needed for a particular situation. Ratio staffing levels are data derived from a valid and reliable PCS and from knowing the range of patient care needs. Ratio data are best used in the aggregate for budgeting and scheduling, not for day-to-day staffing.

The sixth and final reason that a PCS is important is for professional role development. An important value of a formalized patient classification system emerges when staff nurses are actively engaged in
building and defining nursing work and examination of the outcomes as a result of that work. Involved nurses become familiar with the language of nursing, the time required for care, and the significance of nursing work to patient health and well-being. Valid and reliable PCSs define and defend the work of professional nursing, increase visibility of professional nursing practice, protect patients from complications, and decrease the vulnerability of nurse staffing to budget cuts. The integration of nursing science taxonomy into practice also explicates professionalism and the ethical obligations of nursing to use resources wisely while providing skilled services.

**Thoughts for the Future**

The effective use of a PCS in a way that provides value to all health care organizations has yet to be realized given the challenging developmental pathway of these systems. As the science and technology of workforce management emerges along with evidence to support the relationships between nurse work and patient care needs, it is no longer appropriate to rely on systems that provide aggregated and minimal data to address the need for safer patient care and retention of nurses. Specificity about patient care needs in a valid and reliable PCS is essential on our pathway to improved resource utilization, improved decision making, integration of nurse cognitive and knowledge work, and management of variances from planned resource use. Creating actionable data is now the work of more contemporary workforce staffing models and all of their components.

**REFERENCES**


