

## THE CLINICAL NURSE LEADER AND RURAL HOSPITAL SAFETY AND QUALITY

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### ABSTRACT

Rural healthcare organizations face significant challenges when implementing quality and safety initiatives due to limited human and financial resources. The Clinical Nurse Leader (CNL), a new nursing role developed to address the quality and safety concerns of healthcare organizations and providers, may prove to be an exceptionally valuable member of the rural nursing leadership team. Educationally prepared to assume nine roles (expert generalist clinician, outcomes manager, advocate, healthcare team leader, information manager, educator, member of a profession, and life-long learner) the CNL is well prepared to function as a valuable member of the rural health care team. Through the use of the microsystem assessment process, the CNL can lead quality and safety initiatives specific to meet the unique needs of rural health care organizations, providers, and patients.

### INTRODUCTION

Through hard work and commitment, the quality and safety of care provided in US hospitals has improved over the past 10 years (Wachter, 2010). Unfortunately, rural applicability of the many quality and safety initiatives that brought this success is unknown as urban initiatives may not be effective and/or relevant to the delivery of care within rural and remote hospitals (Coburn, et al., 2004). While initiatives developed for urban and suburban hospitals have been imposed on rural hospitals with varying degrees of success (Longo, Hewett, Ge, & Schubert, 2007; Westfall, et al., 2004), successful rural hospital quality and safety initiatives are those that can be accomplished with the human, financial, and technological resources available and are relevant to the needs of rural hospitals and populations (Klingner, Moscovice, Tupper, Coburn, & Wakefield, 2009).

### RURAL LIFE AND HEALTHCARE

Thoughts of rural living frequently generate pastoral images of healthy farm life; however the reality of life in rural areas is often quite different. In fact, the cultural, social, economic, and geographic characteristics prevalent in rural America actually place rural individuals at high-risk for disease. Rural residents are more likely than their urban counterparts to have poorly controlled chronic illness, abuse alcohol and tobacco, and be either under- or uninsured (National Rural Health Association (NRHA), 2010). Poverty is prevalent with high rates of unemployment and limited access to higher education. Geographic isolation and

virtually nonexistent public transportation exacerbate these problems (Agency for Healthcare Research and Quality, 2010). As a result many individuals are not able to effectively manage their health; thus when they do seek care they tend to be quite ill. Rural hospitals often function as the primary healthcare provider for a region and may be the sole provider for many individuals (Lutfiyya, Sikka, Mehta, & Lipsky, 2009).

High quality, safe care that is free from preventable error and harm is an expectation of all patients (Blouin, 2010) in all healthcare settings. However, limited resources, lower volumes, small staffs, and inadequate technology (Baldwin, et al., 2004; Casey & Moscovice, 2004) create significant challenges to the development and implementation of quality and safety improvement initiatives in many rural hospitals. Nonetheless, to improve quality, rural health care organizations and providers must adopt a comprehensive approach to quality improvement that includes clinical knowledge and the tools necessary to apply this knowledge to practice, including practice guidelines, computer-aided decision support, standardized performance measures, performance measurement and data feedback capabilities, and quality improvement processes and resources (Institute of Medicine, 2005). Thus, organizational, key staff, and hospital leader commitment to advancing patient care quality and safety is critical for success (Casey & Moscovice, 2004).

Rural communities and healthcare organizations often have difficulty creating, recruiting, and sustaining an adequate health care workforce (Daniels, Vanleit, Skipper, Sanders, & Rhyne, 2007). While 20% of the population of the United States lives in rural areas, only 10% of physicians practice in rural areas (NRHA, 2010) and the gap between supply and demand is rapidly increasing (Rabinowitz, Diamond, Markham, & Wortman, 2008). Nursing shortages are prevalent in rural areas as well (Cramer, Nienaber, Helget, & Agrawal, 2006), though nurses continue to comprise the largest group of rural healthcare professionals. Functioning as generalists, rural nurses provide both routine and emergent care for individuals across the life span (Bushy, 1998). The large amount of time spent providing direct patient care and knowledge of the day-to-day issues involved in the delivery of care necessitates that nursing assume a leading role in hospital safety and quality improvement initiatives (Gantz, Sorenson, & Howard, 2003). In fact, no group of rural health care professional providers is better positioned to effect change in the rural care environment than nursing (Stanton, 2009).

Overall, the rural nursing workforce is aging and the impending retirement of large numbers of “baby boomer” nurses is ominous (Minnesota Department of Health, 2007). Rural hospital nurse leaders need to ensure that younger, less experienced nurses are educationally and experientially prepared to fill the resulting gaps (Squires, 2002). Effective strategies to offset the impact from the loss of these expert generalist nurses are urgently needed (Montour, Baumann, Blythe, & Hunsberger, 2009) as even one inexperienced nurse can affect patient safety due to the professional isolation inherent in rural practice (Hunsberger, Baumann, Blythe, & Crea, 2009).

The Institute of Medicine (IOM) has recommended the implementation of safe practices at the delivery level (clinical microsystem) as an effective measure to improve quality and safety (Kohn, Corrigan, & Donaldson, 2000). A clinical microsystem is a small group of people who work together on a regular basis to provide care and the individuals who receive care (Nelson, Batalden, & Godfrey, 2007). Regardless of the setting or the population served, knowledge of the clinical microsystems framework can be used to guide and support innovation and reach peak performance (Nelson, et al., 2008). Utilizing the microsystem assessment framework, the rural CNL is able to identify relevant quality and safety improvement opportunities that reflect the needs of the microsystem and the population it serves (Godfrey, 2009).

## CLINICAL NURSE LEADERS

The Clinical Nurse Leader (CNL) role was developed in response to concerns about the quality and safety of nursing care in the complex, technologically advanced, ever-changing healthcare system (Tornabeni, 2006). As a master's prepared nurse, the CNL is educationally prepared as an *advanced nurse generalist* to improve patient care outcomes through use of the microsystem assessment process (Rusch & Bakewell-Sachs, 2007) and managing care delivery for a group of patients (Hix, McKeon, & Walters, 2009; Rusch & Bakewell-Sachs, 2007; Stanley, Hoiting, Burton, Harris, & Norman, 2007).

As a clinician, the rural CNL would use evidence-based information to design and coordinate the care delivered to individuals and cohorts of patients within the rural hospital microsystem. Through the lateral integration of care, the CNL can facilitate and coordinate multiple disciplines and services to ensure the most efficient and goal-directed activities are performed at the right time and in partnership with other disciplines (Begun, Tornabeni, & White, 2006). Reduced fragmentation of care and gaps in communication result in cost-effective efficiency, improved clinical outcomes, and increased patient satisfaction. As an advanced generalist with graduate-level nursing knowledge of illness and disease management, health assessment, and innovative nursing interventions, the CNL brings nursing leadership needed at the point of care to ensure high quality, safe generalist nursing care. Comprehensive knowledge of the patient and case management skills, allows the CNL to facilitate patient movement efficiently through the rural healthcare system from the period of acute illness to the patient's return to the community. Efficiency and effectiveness in care delivery is particularly important in Critical Access Hospitals (CAH) with programmatic requirements to limit the length of stay to 96 hours and inpatient census no more than 25 inpatients (Center for Medicare and Medicaid Services, 2010).

As an outcomes manager, the CNL is prepared to lead quality improvement initiatives and design research-based interventions that reduce error, increase patient safety, and stream-line healthcare delivery processes. The CNL evaluates patient health and nursing care process outcomes through the analysis of variance data, communicates findings to the healthcare team, and leads the team in the implementation of initiatives to treat deficiencies within the microsystem. Cost benefit analysis is used as a strategy to reduce waste and manage resources. The organizational effectiveness of the CNL is measured by improved clinical, financial, and satisfaction outcomes (Harris, Tornabeni, & Walters, 2006). Examples of CNL effectiveness in improving clinical outcomes include improved rates of home health referrals, discharge planning (Bowcutt, Wall, & Goolsby, 2006), improved core measure data, decreased nursing staff turnover (Gabat, Hilton, Kinnaird, & Sherman, 2008), reduced length of stay (LOS) (Tachibana & Nelson-Peterson, 2007), increased patient satisfaction, a reduction in fall rates, and fewer cardiac arrests (Smith, Manfredi, Hagos, Drummond-Huth, & Moore, 2006). Satisfaction outcomes include not only patient satisfaction but nursing staff satisfaction which is demonstrated by increased retention rates, empowerment of nursing staff, and participation in career advancement opportunities.

As the interdisciplinary care team manager, the CNL delegates and manages nursing team resources (staff and supplies) (American Association of Colleges of Nursing, 2007). Through an understanding of human interactions, communication, problem-solving skills, conflict management, and coalition or team building (Harris & Roussell, 2010) the CNL is able to advance patient-care delivery through effective team work.

As a patient advocate, the CNL leads efforts to create and manage a care environment that is responsive to the healthcare needs of diverse rural patients and families. The CNL can include patient preferences and values into the plan of care with patients and families included as partners in care and decision-making. Through analysis of differences in clinical outcomes for cohorts of patients in the microsystem, the CNL is able to address health disparities for the most vulnerable including the uninsured, the aged, the less educated, and those with cultural barriers. As an advocate for health care professionals, the CNL promotes practices that are characteristic of healthy work environments.

As an educator, the CNL prepares individuals, families, or cohorts of clients for self-care and a maximal level of functioning and wellness (AACN, 2007). To maximize wellness, health promotion, and risk reduction, education programs are designed and implemented, with particular emphasis on those with chronic illnesses. The CNL working at the point of care in the microsystem is able to mentor new members of the nursing staff, promoting evidence-based practice, critical thinking, and sound clinical decision-making.

As an information manager, the CNL is able to use information systems and technology that put knowledge at the point of care to improve healthcare outcomes (AACN, 2007). Familiarity with the facility's state of technology and information systems allows the CNL to identify and document internal trends, as well as compare microsystem function to external benchmarks. As a systems analyst/risk anticipator, the CNL participates in the review and evaluation of processes at the system and individual level to anticipate risks to patient safety, prevent medical error, and improve the quality of patient care delivery (AACN, 2007). Utilizing tools such as the Failure Mode Effect Analysis (FMEA) and Root Cause Analysis (RCA) allow the CNL to anticipate and respond appropriately to near misses and sentinel events (Harris & Roussell, 2010).

As a member of a profession, the CNL is personally accountable for her/his personal practice; actively engaging in the acquisition of knowledge and skills to effect change in health care practice and outcomes and in the profession (AACN, 2007). As a lifelong learner, the CNL recognizes the need to actively pursue new knowledge and skills as the practice roles and the health care system evolve.

## DISCUSSION

Rural hospital nursing administrators are responsible for the professional nursing practice environment (Ploeg, Davies, Edwards, Gifford, & Miller, 2007) and the rural hospital microsystem will ultimately determine the resulting quality and safety of the patient care delivered. Successfully implementing evidence-based safety and quality initiatives is challenging and requires strategies that address the complexity of the rural health care system, healthcare providers, and patients to successfully change the culture to one of evidence based practices (Institute of Medicine, 2004). CNLs, through the use of the microsystems assessment framework, are well prepared to lead this process within the rural hospitals.

Utilization of the best available evidence to inform and guide practice is a critical component of any quality and safety initiative (AHRQ, 2008; Institute of Medicine, 2001). Though the vast majority of rural nurses want to include research to inform their practice, they lack the knowledge and skill (Bushy, 2004; Olade, 2004). As many rural nurses are educated at the Associate's Degree (ADN) level (Omery & Williams, 1999), they are not prepared to independently evaluate evidence and implement it into their nursing practice. Of interest, rural

nurses identify the lack of role models as a barrier to Evidenced Based Practice (EBP) and believe that having someone model these behaviors would “boost” their ability to engage in EBP (Olade, 2004). The CNL is educationally prepared to lead the development and implementation of evidenced based nursing practice and to mentor rural nurses, increasing the capacity to provide nursing care that is consistent with current best evidence.

Research specific to inform rural nursing practice is needed (Bushy, 2004). Providing high quality nursing care for at-risk rural populations requires high-quality rural nursing research as studies conducted by urban nurses in urban settings to guide urban nursing care may or may not be applicable to the delivery of nursing care in the rural setting. Finally, the role and effectiveness of the Clinical Nurse Leader has largely been examined from the perspective of large urban health care settings. Research to further determine the healthcare outcomes of the CNL role in diverse rural health care settings is needed. Partnerships between rural nurses and rural health services researchers to examine rural healthcare structures, processes, and subsequent outcomes are desperately needed. CNLs are educationally prepared to participate in the research process and in the development of innovative nursing interventions specific to rural nursing practice.

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