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Clinical Nurse Leaders forging the path of population health

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ABSTRACT

Population health is a topic of growing focus when combating the inverse relationship of rising healthcare costs and reduced financial reimbursement based on quality within the realm of healthcare. Despite the many definitions, the overall concept of population health centers on the management of health concerning a group of individuals. The Clinical Nurse Leader (CNL) is one innovative role within the profession of nursing designed to prepare nurses to practice across the continuum of care and manage the health of like populations. This manuscript will explore current practice and resulting outcomes at one medical center that employs the CNL and has allowed the role to focus on the concept of population health.

Population health is a topic of growing focus when combating the inverse or opposite relationship of rising healthcare costs and reduced reimbursement within the realm of healthcare. This article will use the definition provided by Kindig and Stoddart (2003) which was also adopted in the Institute of Medicine's Roundtable on Population Health Improvement (2015). Population health is defined as "the health outcomes of a group of individuals…(that) are the product of many determinants of health, including healthcare, public health, genetics, behavior, social factors and environmental factors" (Kindig & Stoddart, 2003; IOM, 2015). Although many definitions exist to delineate the breadth the term should span, they all center on the health management of a group of like individuals (Hester, Stange, Seeff, Davis, & Craft, 2015). These individuals can be similar in various ways such as having the same chronic disease, community of residence, etc. and the similarity can be broad or narrow in nature. Despite the size, Sox (2013) added to this definition that the demarcated population contained within the population health approach must also include everyone within the community. This definition creates a massive challenge for healthcare and those seeking to improve outcomes within the community.

The traditional model present in all levels of healthcare which perpetuates care fragmentation of the multidisciplinary team has proven to be ineffective in meeting the challenges facing today's healthcare system (Institute of Medicine, 2001). Therefore, in 2003 the American Association of Colleges of Nursing (AACN) introduced a solution to this identified deficiency as the Clinical Nurse Leader (CNL) (AACN, 2007). The CNL role is the newest Masters level role added to the nursing profession in more than 40 years. Nurses within this role serve as the advanced generalist overseeing the clinical care and outcomes of a group of patients through lateral integration of care (AACN, 2007, 2013). Harris, Roussel, and Thomas (2014) noted that the CNL role was developed to serve as an expert clinician equipped with graduate-level competencies in illness and disease management to utilize critical thinking skills to interpret and analyze clinical interventions. The CNL is unique to the nursing profession because it allows these clinicians with advanced education to oversee the clinical care provided to a cohort of patient by providing direct coaching and mentoring at the point of care where it is most needed (Rankin, 2015). With more than 4950 certified CNLs throughout the nation, the value of this role is quickly becoming more realized by healthcare providers.

Clinical Nurse Leader outcomes

Although new to the profession of nursing, outcomes related to the CNL role is becoming saturated in the literature. L'Ecuyer, Shatto, Hoffmann, and Crecelius (2016) notes significant evidence reflecting CNL related outcomes throughout numerous healthcare systems such as the Veteran's Health Administration, the Tennessee Valley Health System, a telemetry unit in Chicago, and a few units within a New Jersey hospital system. These outcomes range from a reduction in hospital acquired conditions, readmissions and length of stay to improved patient satisfaction scores with quantifiable cost savings related to a few of these outcomes. Furthermore, this article reflects the role's additional benefit of malleability in that the role can adapt to fit any setting of healthcare while accomplishing positive outcomes (L'Ecuyer et al., 2016).

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Hester et al. (2015) noted that while most healthcare systems and payers continue to focus primarily on improving care delivered to individual patients within a clinical setting, much less attention is devoted to the non-medical health determinants that greatly impact the longer-term health improvements of the community. The CNL is one innovative role within the nursing profession designed to prepare nurses to provide holistic multidimensional care across the entire continuum of care. This includes the various aspects of each individual patient including but not limited to the non-medical health determinants such as the domestic and psychosocial issues of patients. Reifsnider and Garcia (2015) noted that in preparation for the anticipated strain on the healthcare system and ever-rising costs of treating disease and illness, many more nurses will need advanced education that teaches the clinical knowledge and skills to prevent sickness and improve the health and wellness of populations within the community. Designed to mend care fragmentation, the Clinical Nurse Leader restores continuity of care at the bedside and serves as a leader of the medical team to improve patient outcomes. This centers on the concept of population health regardless of the determinant of health used to separate one population from another. A few healthcare systems have already invested in this role implanting CNLs in various settings, but until the CNL is given the opportunity and empowered to direct the focus of care into the abyss of population health, healthcare will never fully understand the great opportunities this role entails.

Care fragmentation

The improvement of healthcare quality requires a multidimensional, interprofessional approach that is created with the objective of eliminating silos or holes within healthcare by instituting nursing leaders at the micro, *meso* and macrosystem levels (Dartmouth Institute for Health Policy & Clinical Practice, 2010). This requires both high quality, didactic educational training and hands-on practice within the clinical setting to properly equip nurses for the future of healthcare. Practice settings must allow clinicians to train and explore the possibilities that population health contains, especially within the CNL role. Reifsnider and Garcia (2015) shared that although all nurses trained at the baccalaureate degree level or higher are taught within their education programs the impact of social, cultural, political, and economic determinants of health, very few places of employment include population focus opportunities or wording within the job description.

Methods

Within the clinical setting, the scope of nursing practice is limited to the care of the individual patient, lacking encouragement or training within the concept of a broader, population health perspective. This is not the case at a Level 1 Trauma medical center (TMC) in the United States. CNLs are branching out from the unit based microsystem location into the mesosystem layer of the healthcare system. TMC currently employs more than 41 CNLs and CNL students (appropriately named Patient Care Leaders until graduation and certification is achieved). While many of these clinicians work with designated room assignments of 12 to 15 bed cohorts, referenced as microsystems, a few CNLs have branched out into various areas to serve as the Trauma LEAN CNL, Emergency Room (ER) Flow and Capacity CNL, High-risk Obstetrics inpatient and outpatient CNLs, Colorectal Surgery CNL, Hepatobiliary CNL, and the upcoming Sickle Cell CNL program. These CNLs are leading the clinical care of a cohort of patients based on the clinical guidelines and evidence based practice principles that have been proven to improve the health of certain populations. Understanding that while CNLs are trained to practice as advanced generalists, focusing that generalist training to manage the complex needs of high acuity patient cohorts will greatly impact patient outcomes.

Population health

Oftentimes population health is confused with providing care for a group of patients with a common characteristic (Reifsnider & Garcia, 2015). Furthermore, population health must extend beyond the primary care setting or unit within an acute or long term care facility as it so frequently is thought of today. If one was to extend this thought of population health within the community, the level of impact could truly result to immeasurable success. Sox (2013) offered the idea that the population health approach should intervene to improve outcomes not only within the medical realm for sick people but also within the individual needs of the population. Sox revealed that the US Veteran Administration provides healthcare, finances, and continued education for veterans. The Medicaid program and federally qualified health centers provide healthcare services for low-income families while the US education system provides great opportunity for economic improvement. Sox noted that although these programs, provided at no charge to the public, are developed and operated separately, they foreshadow the potential that various systems fully committed to population health can have within a community.

The challenges facing today's healthcare system would become weakened if healthcare providers focus their practice beyond the patient's acute complaints. This can be accomplished by basing the treatment plan and care provision on prevention through a comprehensive patient assessment that anticipates the risks and future needs in order to restore baseline independence and function (Halfon et al., 2014).

Trauma LEAN CNL findings

For example, a little over a year of implementation the Trauma LEAN CNL achieved more than a 35% in length of stay, a 30% reduction in ventilator days, and a 25% reduction in hospital costs for the Diagnostic Related Group (DRG) coded as 3 & 4 which are the complex trauma tracheostomy patient population. This work yields projected annual savings greater than $2 million (TMC unpublished data, 2016). Although not directly impacted by the CNL, additional costs can be calculated from operational decisions made from this initiative that resulted in performing tracheostomy procedures at the bedside instead of in the operating room. The standardization and structure the CNL has attributed to this initiative has paved the way to permit groundbreaking advancements such as this at TMC. This initiative was created to directly address the team's findings that the DRG 3 & 4 patients, which made up a small percentage of the trauma population, were in fact using the majority of the healthcare costs totaled by the entire trauma population served at TMC. This CNL continues to work on this initiative with the team and there are current plans to triple the resourced due to the outstanding outcomes and goals achieved by the population focused initiative.

ER CNL findings

Another example that began in September 2016 consists of the ER Flow and Capacity CNLs. In September 2016, two CNLs were pulled out of the microsystem and given the responsibility to load balance the flow of an extremely busy ER at an 800+ bed Level 1 TMC campus and a smaller 100+ hospital campus within the same central division. As frequently seen, Level 1 Trauma centers are oftentimes at or above capacity due to the ability to care for critically ill patients. A team identified that the smaller hospital usually operated at below capacity allowing for much opportunity to load balance appropriate patients between the two facilities. CNLs, utilizing the generalist training coupled with risk anticipation, advanced physical assessment, team and outcomes manager were pulled to lead this initiative focusing on the acutely ill population that presents through the ER. A daily goal was set to transfer at least 10 patients from the Level 1 TMC to the smaller hospital

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