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A Day in the Life of a Hospital Bedside Nurse: A

Different Look at Nurse Stressors

by

Angela R. Higdon

A project submitted to the faculty of Gardner-Webb University Hunt School of Nursing in partial fulfillment of the requirements for the Master of Science in Nursing Degree

Boiling Springs, North Carolina

2022

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Abstract

This project is intended to be an example of the affects on the nursing work environment after years of technological advancement, healthcare reform, and process improvement. The bedside nurse work environment is riddled with a multitude of interruptions, intricate processes, and complicated documentation to prove quality care and compliance to regulatory agencies and for tracking purposes. These demands are significant as nurses are continuously reprioritizing work to meet the needs of the patient while also meeting the organizational and regulatory demands. The demands on nurses often lead to delays in patient care and sometimes omission of certain less acute patient care needs. This omission of patient care needs is misaligned with the role of a nurse as a helping profession. This, in conjunction with the repetitive documentation, tasks, technology troubleshooting, and other daily frustrations leads to a lack of accomplishment for the nurse and a less than optimal patient care experience. The goal of this project was to exemplify some stresses that often go unnoticed during the daily work of a nurse. Personal data during 12-hour shifts was collected to examine medication administration demands, interruptions due to phone advancements, order reviews during a shift, and physical walking demands. These findings are some of the stressors that are difficult to capture by nonclinical observers and may help identify areas in need of further investigation and improvement.

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CHAPTER I

Introduction

The role of a nurse has many obvious stressors as the profession is physically, mentally, and emotionally demanding. The fast-paced world of nursing is everchanging, requiring updated knowledge of diseases, treatments, and technology on a continuous basis. The role requires focused, mindful, multitasking, and perfected communication skills with each patient, family member, and health care team member. Nursing requires speed, agility, organization, and critical thinking. Patient care calls for the nurse to provide education about a multitude of diseases and procedures, care for physical needs, and management of chronic conditions and health crises (Kalyani et al., 2014). Nurses must be able to provide timely, accurate communication to each patient as well as with members of the patient's family and health care team (Rapport et al., 2019). Building a patient nurse relationship is key to understanding the patient's story, needs, and evaluating the patient's understanding of the plan of care provided by the health care team. The patient nurse relationship develops with each patient centered encounter between the nurse and the patient. Unfortunately, the patient nurse relationship is challenged by other expectations and demands on the nurse.

The expectations set forth for the nursing profession are countless. Nurses are expected to exhibit patience, empathy, sympathy, kindness, and integrity in each patient encounter and completion of each nursing task. Physicians expect nurses to complete all prescriptions and orders for patients, as well as provide notification of changes in a patient's condition including diagnostic results, alterations in needs or disease processes and subtle nuances in assessment findings. Nurses are expected to gather supplies, prepare the patient, and assist physicians with procedures, prep patients for surgery and diagnostics. They are expected to keep the patient clean and dry, assist with hygiene, feeding, skin care, repositioning, pain control, bowel and urinary function, hydration, and any patient request to improve comfort. Not only must nurses meet these expectations, but the nurse must do so while being exposed to an array of body fluids, unpleasant odors, and awkward situations while maintaining personal composure and patient dignity.

Organization expectations have increased with the push for quality patient care and the addition of the electronic health record (EHR). Organizations expect nurses to document standards of care that prove policy is followed for regulatory and accreditation agencies ensuring patient safety and resulting in quality care. Standards of care are defined as general guidelines that provide a foundation as to how a nurse should act or what a nurse should do or not do within one's professional capacity (HG.org Legal Resources, 2021). Some standards of care change when new evidence is found to be beneficial while other standards of care have been steadfast. The Affordable Care Act of 2010 went into effect to insure the uninsured, decrease the cost of healthcare, emphasize disease prevention and chronic disease management, ease the burden of health disparities, and spend less money with better patient outcomes (Apha.org, 2021). This led to the supporting of research and tracking of key health measures. As of 2017, 95% of medical information has become electronic. This has made data collection and tracking much easier but has also caused some unintended consequences (McBride et al., 2018). The electronic health record has created some automated protocols that sometime leave the nurse questioning if these plans of care are appropriate for certain individuals. The most disturbing unintended consequence is the possible erosion of the patient nurse

relationship (McBride er al., 2018). The nurse's primary commitment is still to the patient in which they are ethically obligated. (American Nurses Association [ANA], 2021). Research suggests that the EHR may be taking the nurse away from the patient nurse relationship (Rathert et al., 2016).

Regulatory agencies and CMS audit charts for proof of safe, quality patient care. The Joint Commission certifies institutions and sets the gold standard for safe and quality patient care (The Joint Commission, 2021). The Joint Commission accreditation also meets the standards required for the Center for Medicare and Medicaid Services reimbursement and establishes national patient safety goals (The Joint Commission, 2021). Joint Commission surveys assure compliance of standards and protocols and help institutions achieve the highest quality of care with new and changing evidence-based standards. The documentation requirements vary in different institutions, but if the surveyors come, the documentation must be present per institutional policy. Correct documentation of standards of care allows for tracking of policy and protocol compliance while assisting in identification of gaps in care delivery. The amount of documentation has proven to be one of the least satisfying and frustrating aspects of the nurse role (Bean, 2019).

The role of the nurse also includes the expectation to assist with other ancillary duties such as housekeeping, nutrition services, patient transportation, secretarial duties, round participation, phlebotomy, and technological troubleshooting. Nurses assist with many other roles when needed, but only a nurse can fulfill the role of a nurse (Johnson, 2015). When ancillary staff is cut or short staffed, nurses pick up the slack in addition to patient care. Nurses are often passing trays, taking out trash, cleaning rooms, completing delegable tasks such as getting capillary blood glucoses and vital signs, and assisting at the desk answering call bells, phone calls. Other time-consuming tasks may include drawing labs, retrieving supplies and equipment, and transporting patients to and from procedures or to a different destination.

Nursing is defined as a helping profession where the nurse helps individuals, families, and communities work toward health goals. Though medical care has changed with the advancement of technology and the push for healthcare reform, the core of nursing to help people remains the same (Nursingtheory.org, 2021). Literature supports the idea that the most satisfying part of a nurse's job is still helping others and making a difference in people's lives (Stotkowski et al., 2017). Unfortunately, the role of the nurse is misaligned (Peters, 2018). The reality of the nursing task expectations and repeated moral injury have proven to be a source of compassion fatigue and dissatisfaction among nurses. The realities of the hospital nursing role conflicts with the nurse's desire to help people and make a difference in lives. Exposure to pain and suffering daily while being pulled away from the patient to complete mandated tasks to assure patient safety is a constant source of moral injury to the nurse. Completing many tasks that are not visible to the patient and sometimes meaningless to the nurse does not help achieve a sense of accomplishment when providing patient care or foster the nurse patient relationship.

Literature also supports the time intensive behaviors nurses exhibit that affect a patient's perception of compassionate care (Rodriguez, 2019). Compassionate healthcare is often based on relationships in which the patient perceives the care team as having other-oriented actions such as being respectful, empathetic, concerned, caring and tender towards one who is suffering during a healthcare crisis or chronic illness (Rodriguez,

2019). Compassion is fundamental to the purpose of healthcare and is the action component of helping others (Rodriguez, 2019).

Compassionate care requires contextualized knowledge of the individual's condition, treatment, and plan of care communicated through interactions with the healthcare team over time and indifferent settings (Rodriguez, 2019). Patient perception of compassionate care includes the time nurses spend listening, answering questions, showing empathy, easing the patient's anxiety and isolation, explaining things, and being interested in the patient as a whole person while engaging in their story (Bikker et al., 2015). Physical needs are often met and appreciated by patients (Chan et al., 2018). Patient experience studies have shown that patients sympathize with nurses due to the working environment and patient load leading to prioritizing their requests to the nurse as well as a decreased expectation for emotional support from the nurse (Chan et al., 2018).

Nurses are highly educated, often specialized in certain disease processes, surgical procedures, or technological treatments. Over the past two decades, burnout has increased 60-70% (Gutson et al., 2018). Studies about nurse turnover have been linked to nurse burnout. Burnout is defined by the mayo clinic as "a special type of work-related stress-a state of reduced accomplishment and loss of personal identity" (Mayoclinic.org, 2021). Some work-related stresses are obvious, others go unnoticed. Nurses often express staffing as being one of the major attributions to burnout. Many facilities use a productivity model to staff their nursing units. It is usually a calculation of care hours per patient days. Unfortunately, this model comes with warnings from experts that this process fails to account for the required complexity of care needed for some patients and this may lead to unsafe staffing levels (Hunt, 2016). When patient load increases so does

the mandated tasks, documentation, and even the nurse's walking mileage. This takes the nurse away from the patient while the patient's expectations and rights remain the same. The patient perception of care may change due to lack of attention from the nurse while the nurse may become overwhelmed with organizational tasks that are not patientcentered and personally fulfilling.

Problem Statement

The problem is the accumulation of unseen stresses that a nurse may experience daily that increases when patient loads increase, or support staff is not present. The accumulation of these stressors has created a chaotic work environment filled with tasks that often do not lead to a sense of accomplishment for the nurse, do not lead to a perception of quality compassionate care for the patient, and is the major contributing factor when nurses express concern for patient safety when understaffed. The work environment has changed drastically over the last two decades. The implementation of health information technology and health care safety initiatives have called for designing or redesigning processes and workflow for patient-centered care. These redesigns require data entry and collection, auditing, or proof that the goal improvement has been completed or that the outcome was positive. This has required lots of data entry for tracking as well as proof of implementation for regulatory agencies. Patients have also changed over the past two decades. Comorbidities of patients, the opioid epidemic, and the obesity epidemic have been additional stressors. These societal changes have made nursing not only stressful but has challenged the safety of the nurse.

Purpose

The purpose of this Master's project was to provide examples of some of the

unseen stressors that a nurse may experience daily while caring for a patient assignment and the skills needed to complete these tasks. These examples are significant in understanding the accumulating tasks and demands on a nurse when patient loads are increased and demonstrate how decreased patient ratios may allow for better patient care resulting in a sense of accomplishment for the nurse. It is also significant to demonstrate the multiple skills that a nurse must be able to juggle while completing these role demands.

Conceptual Framework

The conceptual framework used to guide this project is King's theory of goal attainment. Her theory emphasizes care interactions between the patient and the nurse, nursing care as perceived by the patient, and the communication of information to the patient that will help facilitate collaborative goal setting and achievement (Nursingtheory.org, 2021). If the goals are understood and achieved between the patient and nurse, then satisfaction will occur. If there is stress or conflict in the patient-nurse relationship, collaborative transactions will not occur leading to disjointed care and less than optimal goal achievement (Nursingtheory.org, 2021).

Nurses are a part of the patient's environment in which the goal is to help the patient achieve their health goals. The nurse helps the patient make their goals, creates a plan for interventions, assesses the patient's understanding, and evaluates the goal outcomes by spending focused time with the patient achieving meaningful patient-nurse encounters (Nursingtheory.org, 2021). It is a process of action, reaction, and interaction in which the patient and nurse share information (Nursingtheory.org, 2021).

Definition of Terms

- Key health measures- measures that assist in providing evidence that a health care organization is providing safe quality care including their structure, processes, and outcome measures (Agency for Healthcare Research and Quality [AHRQ], 2021).
- Moral injury- "occurs when we perpetrate, bear witness to, or fail to prevent an act that transgresses our deeply held moral beliefs" (Dean & Dean, 2019). In this project, it is the oath taken by nurses to put the patient first versus the conflict of stakeholder demands that accumulate over time leading to moral injury. The cumulative effect of often not putting the patient first.

Conclusion

In summary, this project was designed to illuminate some of the realities of the nursing profession, realities that often do not lead to patient satisfaction or nurse self-satisfaction. The redundancy of multistep processes to complete simple nursing tasks such as medication passes, documentation, and equipment or supply retrieval has accumulated over the years into complex, frustrating, daily hurdles for nurses to provide adequate care to patients. These complexities are time-consuming, taking the nurse away from the patient and forcing them to deal with issues unrelated to actual patient encounters. The nursing profession is filled with individuals who want to make a difference and help people (Stotkowski et al., 2017). Compassionate care is a right of every patient and what many nurses perceive to make a difference and help people.

Compassionate care takes time for the patient to understand their story, needs, and goals. It takes time for each patient to support personal decisions, evaluate the

understanding of treatment and involve each in personal plans of care. The accumulation of mandated documentation and tasks, increased complexity of patients and individual care, as well as the goal to achieve cost-effective care have created an accumulation of tasks that require time away from the patient. This often results in nurses feeling less than successful in providing patient-focused, compassionate care. This constant conflict of nurse satisfaction, patient right to quality compassionate care versus the reality of complex care delivery is misaligned. The following chapters are designed to give the reader a greater understanding of the intricacies that have accumulated over the past two decades in the nursing profession. Intricacies that may be needed to provide safe patient care may have contributed to an increase in burnout in the nursing profession.

CHAPTER II

Literature Review

The following literature supports the theory that an increase in patient-nurse ratio increases nursing stress, creates a more chaotic work environment, negatively affects the patient's healthcare experience, and increases nurse burnout and turnover. Evidence is also supportive of the theory that the nurse-patient relationship is negatively affected when nurse workload increases decreasing the amount of time a nurse spends at the bedside with uninterrupted, focused, patient-centered care. The effects of the healthcare reform and advances have created a snowball effect of unseen daily nursing tasks and stresses. Literature supports the findings that nurses are experiencing moral distress by the time constraints that result from the need to prioritize care leaving some patients to receive the care they deserve and not meeting some of their basic care needs. This repeated struggle of organizational demands versus patient care needs has proven to cause distress and is one of the main reasons for nurse burnout and turnover. Combined with caring for patients with comorbidities, the opioid and obesity epidemics, and a pandemic and the work environment for nurses is overwhelmed with stress.

Review of Literature

This literature review was completed using the National Library of Medicine (PubMed.gov) database exploring key terms including inefficient EMR, nurse burnout, nurse burnout, and patient satisfaction, interruptions in nursing, nurse multitasking, moral distress among nurses, and nursing ethical dilemmas.

Unintended Consequences of Technological Advances

Increased Time for Medication Administration

The 2004 congressional initiative to create a national health information infrastructure that will lead to better patient outcomes and increase efficiency was also implemented to improve nursing efficiency, quality of care, and patient safety with the EMAR (McComas et al., 2014). This led to a study that supported the safety of the EMAR but also noted the increase in time of bedside medication administration. This observational study using time-and-motion techniques was conducted by observing 38 nurses and 156 cases of medication administration activities on a 40-bed medicaloncology unit (McComas et al., 2014). This study also included medication error reports 6 months before the EMAR and 6 months after the EMAR went active (McComas et al., 2014).

The complexity of medication orders and administration may include 50-100 steps from the time the medication is ordered to the time it is administered (McComas et al., 2014). This observational study assessed nurse medication administration efficiency by following the nurses and timing their medication administration process from the beginning to the end (McComas et al., 2014). This timed motion is the recommendation when evaluating the efficiency of the workflow (McComas et al., 2014). Observations noted included the availability of medication dispensing machines and medications to the nurse, medication preparation, types of medications to be administered, administration, and the documentation process (McComas et al., 2014). Interruptions/distractions during the medication administration process were also included (McComas et al., 2014).

Pre- and post-EMAR comparison found an increase in post-EMAR bedside

patient education (65.4% vs. 79.5%), missing pyxis medications (6.4% vs. 20.5%), bedside medication preparation (9.0% vs. 19.2%), distractions/interruptions (65.4%-89.7%) and two patient identification check (76.9% vs. 91%) (McComas et al., 2014). This data is evident of safer medication administration practices post EMAR implementation (McComas et al., 2014).

Post-eMAR medication prep time, time administering at the bedside, and documentation time all increased (McComas et al., 2014). These time increases resulted in a 3.1-minute overall increase in the medication administration process (McComas et al., 2014). This increase from 11.3 minutes pre-EMAR to 14.4 minutes post-EMAR was an unexpected finding that was found to be due to the delay in completing the process (McComas et al., 2014). These differences listed above explained a large fraction of time increase in completing the medication administration process whereas the EMAR was not a significant predictor of medication administration efficiency (McComas et al., 2014). IV medications, number of medications, missing medications, and distractions/interruptions were significant predictors of medication administration efficiency (McComas et al., 2014).

The EMAR was implemented in November 2011 (McComas et al., 2014). The pre-EMAR and post-EMAR data were collected using the hospital Midas+medication error database (McComas et al., 2014). This data was taken from May 2011-June 2012. No data was collected for 2 months while the staff was learning and implementing the new EMAR system (McComas et al., 2014).

This timed observation proves the increase in medication administration time and that increase in patient load would increase administration time decreasing time at the bedside. Although the EMAR is more time-intensive, the results related to patient safety cannot be ignored. The EMAR has to decrease med errors and kept patients much safer.

Delay in Patient Care and Extra Work

In Lee's study of unintended adverse consequences of EMR use in acute care, there were several frustrations noted among bedside nurses (Lee, 2021). This study includes a sociotechnical perspective to study the interactions between healthcare information technology, the individuals using the systems while managing patient care, and the patient (Lee, 2021). The implementation of HIT is never implemented without unintended consequences on the individuals using the systems, the environment in which they work, the user's workflow, and the patient's experience (Lee, 2021). This study included data collected from 155 bedside nurses that use the EMR and CPOE in a public hospital (Lee, 2021). A nursing-focused unintended adverse consequence instrument and open-ended questions were used to measure data from a survey (Lee, 2021). The categories that had the highest percentage of respondents marking "mostly/almost always" included the malfunctioning and inefficient designs of the EMR screens (Lee, 2021). This included shutdowns, slow systems, and repeated pop-ups that were often unknown to the user (Lee, 2021). This was reported to cause delays in patient care (Lee, 2021). Respondents also reported that creating unit-specific bundles was very difficult within an overall system (Lee, 2021). They also reported that these bundles, once created were effective in delivering safer patient care (Lee, 2021).

Repetitive entries of the same information, difficulties recognizing changes in medication orders, increased verbal orders, complicated medication return, and narcotic resolution, errors on the wrong chart while multitasking different charts were all areas that the nurses reported caused extra work (Lee, 2021). The nurses also reported concerns for patient safety including decreased time spent with the patient in proportion to the time spent navigating and using the EMR (Lee, 2021).

Lee's study also concluded that the electronic medical record delayed patient care as perceived by nurses. Further investigation is needed to understand the correlation between the EMR and recognizing order changes and an increase in verbal orders. A specification of the EMR on these processes would have been a great addition to this study.

Workarounds

Lee and Kang completed a study regarding workarounds related to the unintended consequences of the EMR (Lee & Kang, 2021). One hundred forty-three survey respondents from several age groups, mainly BSN prepared, and almost 50% were from a medical unit (Lee & Kang, 2021). A Likert Scale was used to rate 21 categories including EMR function, design, compatibility, dependence on EMR for safety, and extra work related to the EMR (Lee & Kang, 2021). A modified tool was used to measure workarounds in relation to EMR use (Lee & Kang, 2021).

The evidence in this study showed unintended consequences of the EMR were the immediate cause of nurses' perception of EMR-related workflow delay (Lee & Kang, 2021). Although there was less correlation between EMR unintended consequences and workarounds, further investigation is encouraged to understand nurses' needs when purchasing, developing, designing, and implementing EMR technology (Lee & Kang, 2021).

Although one of the criteria for this study was that the respondent must use the

EMR in daily work, the validity of the results would be strengthened if the percentage of use or type of use was specified. For example, the respondent uses the EMR 50% of their shift or uses more than 20 functions of the EMR during every shift. The findings still support the theory that there are unintended accumulative effects of HIT.

Time Intensive Documentation and Nursing Task Implementation

In 2018 a time-motion study was completed studying the time nurses spent on nursing activities and where those activities occurred (Yen et al., 2018). The shifts studied were 12 hours from 7 am - 7 pm (Yen et al., 2018). The study split the shift into time blocks of 7 am - 11 am, 11 am - 3 pm, and 3 pm - 7 pm (Yen et al., 2018). Observations of hands-on tasks, communication, and location of tasks were recorded by observers and then the different time blocks were compared (Yen et al., 2018). The study was conducted on med-surg units with full-time RNs with more than 2 years of acute care nursing experience and 6 months or greater experience in the study unit (Yen et al., 2018). The nurse-patient ratio for these units was 1:4 to 1:5 (Yen et al., 2018).

Locations of observed nursing activities included patient rooms, hallways, nursing stations, med rooms, and supply areas (Yen et al., 2018). Activities observed included direct patient care activities, indirect patient care activities, interprofessional communication, and EHR review and charting (Yen et al., 2018). These timed observations were loaded into TimeCat which is an electronic time capture tool used to collect and analyze time-motion study information including time stamps, location, and multitasking data (Yen et al., 2018). Over 316 hours of observation, data was collected for 79 observations with 15 registered nurses (Yen et al., 2018). Each observation was completed over 4 hours (Yen et al., 2018). Completed observation blocks included 23 from 7 am - 11 am, 30 from 11 am - 3 pm, and 26 from 3 pm - 7 pm and included all days of the week (Yen et al., 2018).

The nurses spent most of their communication time communicating with the patient and other nurses totaling an average of 56.67 minutes in 4 hours (Yen et al., 2018). Reviewing the EHR and charting took approximately 53.14 minutes and an average of 23.85 minutes to get and administrate medications (Yen et al., 2018). Most of the nurse's time was spent in the patients' rooms (60.17 min.), at the nurses' station (53.55 min.), and in the hallway (37.74 min.) (Yen et al., 2018).

In comparison, more time was spent in the halls, med room, and supply room from 7 am - 11 am (Yen et al., 2018). Less time communicating with family during this time block was evident but may be attributed to the fact that most visitors are present after 11 am (Yen et al., 2018). Nurses also multitasked 37.17% of the time between 7 am - 11 am and 26.5% of the time from 11 am - 3 pm and 32.01% of the time from 3 pm - 7 pm (Yen et al., 2018). The most common multitasks occurred during hands-on tasks and included patient communication during medication administration, charting, and patient assessment (Yen et al., 2018). Nurse-to-nurse communication was also common during charting and reviewing the HER (Yen et al., 2018). Patient communication time decreased as patient load increased (Yen et al., 2018).

It was also found that charting locations were most frequent in the nursing station, then the hallway, and then in the patient rooms (Yen et al., 2018). More investigation would be needed in determining barriers to real-time charting (Yen et al., 2018).

This study also sheds light on difficulties faced by nurses including the push for real-time charting and phone call interruptions during medication retrieval and

administration (Yen et al., 2018). Nurses expressed real-time charting as it being difficult to share their attention between the chart and the patient while in the room (Yen et al., 2018). Nurses also find the mandated documentation that is required for each patient competes with meeting the patient's needs (Yen et al., 2018). This study supported nurses' concerns regarding real-time charting since most of the nurses' documentation time was spent in the nursing station or the hallway (Yen et al., 2018). A patient safety concern was also noted during this study as it was found that nurses spent 8-13% of their time in medication rooms dealing with phone interruptions and 16-18% of their time in patient rooms dealing with phone interruptions increasing nursing stress (Yen et al., 2018).

Interruptions Affecting Delivery of Care

Nurses' work environment is one of the recurrent interruptions. One study supported the fact that interruptions have been found to negatively influence the ability of nurses to concentrate leading to medication errors and compromising patient safety (Sassaki & Perroca, 2017). The main sources of interruptions found in this study were phone calls during nursing tasks and problem-solving in the unit during documentation (Sassaki & Perroca, 2017). The focus of this study was to answer the following questions: "In what situations, in what form, and what frequency do interruptions occur during the care process? How do nurses perceive their implications for the work dynamics" (Sassaki & Perroca, 2017)?

One hundred and thirty-three inpatient, specialized units, diagnostic and therapeutic support services, and administrative nurses in a school hospital completed self-administered questionnaires (Sassaki & Perroca, 2017). This medical center has 708 beds with a nursing team composed of 242 nurses, 565 nursing techs, and 481 nursing

assistants (Sassaki & Perroca, 2017). The first questions demographic questions regarding profile and qualifications (Sassaki & Perroca, 2017). Other questions included sources of the interruption, frequency, and time demand involved before returning to the initial activity (Sassaki & Perroca, 2017). A 5-point Likert scale from totally agreeing to disagreeing was used to measure the nurse's perception of the degree to which these interruptions affected patient/family care (Sassaki & Perroca, 2017). Of the 217 nurses that agreed to the survey, there was a 61.3% response rate (Sassaki & Perroca, 2017). This study resulted in 42% of the surveyed nurses reporting 13 or more interruptions during their work activities (Sassaki & Perroca, 2017). The majority of nurses reported phone interruptions to be the major cause of interruption (Sassaki & Perroca, 2017). Other causes worth noting were unit problem solving, unforeseen emergencies, coworkers needing information or help, or calls from other professionals also being reported by > 50% of respondents as perceived causes (Sassaki & Perroca, 2017). The nurses reported recurrent and frequent interruptions that often took several minutes to return to their previous task (Sassaki & Perroca, 2017). These interruptions were reported to break concentration and increase mental workload resulting in decreased performance (Sassaki & Perroca, 2017).

An observational study of interruptions during medication administration had concerning results related to patient safety and medication errors (Johnson et al., 2017). This observational study used an observational tool to record interruptions and sources of the interruption during 56 medication events completed by nurses (Johnson et al., 2017). During the 56 observed medication events of 47 unique patients, 101 interruptions were recorded by the observer (Johnson et al., 2017). Of note, 29 events had one interruption, 16 had two interruptions and seven had three interruptions (Johnson et al., 2017). Four and five interruptions were noted at two different times in both categories (Johnson et al., 2017).

The sources of interruptions varied but the main source was nurses asking questions, patients needing assistance or conversing, followed by physician interruptions, and missing or broken equipment (Johnson et al., 2017). The safety concerns were related to medication errors and procedural failures (Johnson et al., 2017). Two medications were given at the wrong time and seven medications were not documented or documented incorrectly (Johnson et al., 2017)

This study design was well defined but limited in its sample population. The results of this study would be more reliable with a larger nurse population across different hospitals and different units. This study design would be useful in identifying unit-specific issues that may be a result of inadequate staffing or lack of support (nurse interruptions, patient care needs) and unit culture (physician interruptions and equipment issues).

Moral Distress and Ethical Dilemmas

The purpose of one study of surgical trauma nurses in intensive care units was to study the effects of compassion satisfaction, compassion fatigue, moral distress, and educational level on work engagement (Walke et al., 2014). This pilot had four key variables including compassion fatigue or satisfaction, moral distress, level of education, and work engagement (Walke et al., 2014).

Thirty-four trauma surgical intensive care nurses were eligible for this survey type study (Walke et al., 2014). Each participant was a current registered nurse with 50% of

their time being spent in direct patient care in an ICU setting and was computer literate (Walke et al., 2014). Of the 34 eligible nurses, 26 anonymous nurses responded to the four-part survey (Walke et al., 2014). The four parts included educational questions, questions measuring compassion satisfaction and fatigue, a burnout and stress subscale, scaled questions measuring work and wellbeing, and a moral distress subscale (Walke et al., 2014). All sections ended with open-ended questions as well as comment sections (Walke et al., 2014).

This study resulted that more than 65% of nurses who responded to this survey reported experiencing moral distress (Walke et al., 2014). Some possible therapeutic interventions were suggested by respondents including storytelling and time spent with colleagues discussing difficult days, events, or ethical and clinical situations (Walke et al., 2014). Debriefs following traumatic or stressful events with educators, social workers, management, and or chaplains were also suggested (Walke et al., 2014). The suggested interventions led to the recommendation of strengthening team building on units and unit-based councils (Walke et al., 2014)

System issues such as staffing, nurse-patient ratios, equipment issues, repetitive documentation, and lack of supplies were additional sources of distress for nurses (Walke et al., 2014). Certain themes of moral distress included role conflict with management and rules, witnessing death and suffering, violent situations, family communication, and management and negative feelings of helplessness (Walke et al., 2014). There was no proven correlation between the effect of this moral distress on employee engagement although of the nurses surveyed the overall score was low (Walke et al., 2014).

This study was limited in that it was specific to trauma care nurses. Some positive

aspects of this study such as the nurse-patient ratio, repetitive documentation, and supply issues being distress warrant further investigation at a unit level. Some of these stressors may be lessened or mitigated if identified with a further study as to the nature of these issues.

Ethical dilemmas were the focus of one study that discussed the holistic nature of patient care conflicting with organizational demands and heavy workloads (Haahr et al., 2020). This literature review resulted in 15 articles that were analyzed for ethical dilemma content in daily nursing practice (Haahr et al., 2020). The areas of concern causing ethical dilemmas for nurses included performing care that they believed may be futile and may cause pain or harm, decreased quality in care due to administrative duties, heavy workload, staffing shortages, and organizational norms that require high patientnurse ratios affecting care quality, not being heard due to lack of authority compared to other care team members and navigating in disagreement (Haahr et al., 2020). This study resulted in the conclusion that work environment, role conflict, hospital cultures, and organizational demands or structures have a strong relationship with the nurse's ability to practice true to their ethical and moral convictions (Haahr et al., 2020). These daily ethical concerns have hindered the nurse's ability to deliver quality patient care consistent with basic nursing values (Haahr et al., 2020). This repeated compromise in care delivery and nursing value has been found to be a source of nursing dissatisfaction and burnout (Haahr et al., 2020).

This literature analysis resulted in continued support for the suggestion that nurses experience a daily struggle between what they believe to be quality patient care and what they can deliver due to organizational demands. It also supports the theory that the accumulated effects of the nurse's inability to deliver the care they think the patient deserves, witnessing pain and suffering, and feelings of helplessness are a source of burnout. This literature search also supports the need for further investigation on this topic as the sources were limited.

One literature study looked at nursing prioritization and rationing of care in relation to patient load, lack of available resources and nursing support, and severity of illness or disease process (Suhonen et al., 2018). This prioritizing and rationing of patient care needs is difficult for nurses according to the literature mentioned in this study (Suhonen et al., 2018). A declining patient condition requiring more nursing care and the inability of nurses to care for patients equally in this situation leads to unsatisfactory completion of patient care and causes an ethical strain on nurses (Suhonen et al., 2018). Work intensification requires the nurse to prioritize care and often leads to some patients getting more nursing care than others based on the severity of their illness (Suhonen et al., 2018). Nurses report that due to organizational demands they often focus their attention on organizational needs and demands that are not congruent with the care needs of the patients (Suhonen et al., 2018). Nurses reported having to withhold or omit certain less urgent patient care including comforting patients or other caring interventions to meet all the demands of patients with more acute care needs and to meet organizational demands (Suhonen et al., 2018). This prioritization and omission of patient care increase with the increase in patient loads or inadequate staffing (Suhonen et al., 2018). It is reported that this attributes to diluting quality care as well as delays in care or services needed by patients (Suhonen et al., 2018). This forced care prioritization and care omission cause moral distress for the nurse (Suhonen et al., 2018). This leads to physical, emotional, and mental exhaustion (Suhonen et al., 2018). This forced decision-making often leaves nurses feeling guilty, frustrated, and inadequate and is a threat to the future of nursing and the quality of care a patient receives (Suhonen et al., 2018).

Nurse Burnout, Patient Satisfaction, and Safety

The history of nursing has repeatedly suggested that work environment and workload are factors that lead to burnout and turnover. This is not a new topic but has been complicated by the change in the nursing environment as health care reform has evolved, patient perceptions and health have changed, and organizational demands have required the nurse to attend to more issues not related to patient care. One pre-reform study shows a relation of nurse satisfaction or dissatisfaction in relation to their work environments. It also suggests that the work environment and their ability to give quality care to their patients was a source of emotional exhaustion and burnout when the unit's work environment was suboptimal. It suggests that there were direct and indirect effects on patient satisfaction as well. The repeat of this study now post-reform actions and postpandemic would be interesting to compare. The average age of these nurses was 35 which would make these nurses approximately 53.

Surveys were gathered from 820 nurses and 621 patients (Vahey et al., 2004). The respondents were from 20 urban hospitals and across 40 different units (Vahey et al., 2004). A cross-section of survey results was completed to examine the effects of the nurse work environment on nurse burnout and the effect of the nurse work environment and nurse burnout on patient satisfaction (Vahey et al., 2004).

Patients were interviewed about their satisfaction with the nursing care they received. The nurse survey questions were derived from the Nursing Work Index (NWI-

R) and the Maslach Burnout Inventory (MBI) and intentions to leave (Vahey et al., 2004). The nurse's intent to leave was measured by a single question regarding plans to leave in the next 6-12 months (Vahey et al., 2004).

Patient satisfaction data were collected by using a 4-point scale in which they agree or disagree with 21 statements such as "the nurse makes helpful suggestions" (Vahey et al., 2004). These statements were from the La Monica-Oberst Patient Satisfaction Scale (LOPSS) (Vahey et al., 2004). The scores for each patient were summed and categorized as general dissatisfaction or general dissatisfaction (Vahey et al., 2004).

Registered nurses represented 71% of all nursing personnel, the mean hospital size was 583 patients, with a unit size of 26 patients as an average daily census. Ninety-three percent of the nurses surveyed were female, the average age was 35 with an average of 10 years of experience with an average of 4 years on the current unit (Vahey et al., 2004). One-third reported intent to leave their position while burnout measures were within the "average" range (Vahey et al., 2004).

Nurses on units with good environments were much less likely to score high in emotional exhaustion, depersonalization, and intent to leave than nurses that reported poor working environments (Vahey et al., 2004). Patients on units resulted in higherthan-average nurse emotional exhaustion were only half as likely to be highly satisfied with their nursing care as those on units scoring lower levels of emotional exhaustion (Vahey et al., 2004). Patients on units where nurse personal accomplishment scores were above average were twice as likely to be satisfied with their care as units that scored lower than average in this category (Vahey et al., 2004). This study demonstrated that nurse work environment and increase in burnout measures had both direct and indirect effects on patient satisfaction (Vahey et al., 2004). Some modifiable aspects of the nursing work environment were identified during this study (Vahey et al., 2004). Adequate staff, administrative support, and the nursephysician relationship were evident to influence nurses' emotional exhaustion and patient dissatisfaction with the care they received (Vahey et al., 2004). Change in the work environment is needed to retain nurses, prevent burnout and increase patient satisfaction scores (Vahey et al., 2004).

This study included a high volume of both nurse and patient respondents. The number of respondents from across multiple systems and units makes these results more valid and inclusive. Though dated, this supports that good work environments directly relate to nursing burnout and has been an issue for years within the nursing realm.

Using data from the US Department of Health and Human Services' Health Resources and Service Administration National Sample Survey of Registered Nurses (NSSRN) an anonymous sample of respondents was used in a study in 2018 of 3.9 million U. S. registered nurses resulting in 31.5% of respondents leaving a position due to burnout (Shah et al., 2021). Forty-nine and a half percent of the surveyed nurses worked in the hospital setting and 45.8% reported having a BSN degree (Shah et al., 2021). The factors affecting burnout the most were working in a hospital setting or working greater than 20 hours per week (Shah et al., 2021). This pre-pandemic data was collected in April 2018 and October 2018 and data analysis was completed in October 2020 (Shah et al., 2021). Respondents reporting burnout as the reason for leaving or considering leaving their job associated their burnout with a stressful work environment (68.6% and 59.5%, respectively) and inadequate staffing (63.0% and 60.9%, respectively) (Shah et al., 2021). The mean age of nurses reporting leaving their job due to burnout was 42 and those considering leaving their job due to burnout was 43.7 (Shah et al., 2021). Regional data results that nurses report lower rates of burnout in California and Massachusetts where legislation has been passed regulating nurse-patient ratios (Shah et al., 2021).

Years later this study still suggests a stressful work environment and inadequate staffing as the main reason for burnout. This study is important because of the volume of respondents and the high percentages of associated burnout factors that lead to turnover. This supports that the work environment might be a focus for nurse retention and decreased turnover in turn saving money on training and possibly improving patient and staff satisfaction.

One study aimed to examine the nurse staffing in correlation to the patient's experience. The main theme reported by patients has missed nursing care and the effects of this on the nurse-patient relationship. This study included 23 nursing units, 210 patients, 23 nurse managers, and 362 nurses (Cho et al., 2017). A 4-point scale was used to measure nurse perception and patient perception of staffing adequacy (Cho et al., 2017). Patients were also asked about missed care including basic needs, communication, and nurse response time (Cho et al., 2017). They were also asked about six types of adverse experiences they may have experienced during their hospitalization (Cho et al., 2017). HCAHPS was also used to measure patient satisfaction regarding the patient's perception of the unit and hospital (Cho et al., 2017).

The average patient load was 11.5 to one nurse which was perceived as adequate by 10% of the nurses and adequate by 77% of the patients (Cho et al., 2017). One adverse event was reported by one-third of the responding patients (Cho et al., 2017). After data analysis, it was concluded that nurse staffing adequacy was associated with missed communication and basic care needs impacting the overall patient experience (Cho et al., 2017).

This study is of value due to the link between nurse staff adequacy as perceived by the patient and nurse and the resulting patient satisfaction scores. This study was performed in Korea so the findings may vary in the US. Although a stateside study may prove similar results the study design and results would be valuable in correlating nurse staffing adequacy and good patient satisfaction scores. A study of nurses' perception of patient safety in relation to their work environment was completed with 350 respondents (Mihdawi et al., 2020). Using A 5-point Likert scale respondents anonymously rated their perception of patient safety of the following statements (Mihdawi et al., 2020). "Patient safety is never sacrificed to get more work done, our procedures and systems are good at preventing errors from happening, it is just by chance that more serious mistakes do not happen around here, and we have patient safety problems on this unit" (Mihdawi et al., 2020). Patient safety culture was measured using the Agency for Healthcare Research and Quality's (AHRQ) HSPC instrument that included 42 safety items (Mihdawi et al., 2020). These items included topics such as staffing, teamwork, manager response to error, error reporting frequency, managerial safety promotion, and communication openness (Mihdawi et al., 2020). A Likert scale was also used to rate the nursing environment in areas such as staffing, professional relationships, resources, managerial ability, and professional growth opportunities (Mihdawi et al., 2020).

After data analysis, it was found that only 35.2% of respondents positively
perceived "overall patient safety" (Mihdawi et al., 2020). The lowest positive response was 24.2% believed "chance has nothing to do with preventing serious mistakes" (Mihdawi et al., 2020). Although half of the respondents reported that the overall systems and procedures were good at preventing errors, only 36.3% perceived responded positively to the statement "patient safety is never sacrificed to get more work done" and 27.4% responded positively to the statement "we have patient safety problems on this unit".

Staffing and resources were the highest predictors of overall safety perception as well as nurse-physician relationships and nurse involvement in hospital improvement (Mihdawi et al., 2020). This study supports an interdisciplinary approach to patient care with positive communication encounters among caregivers empowering nurses to be involved in the decisions affecting patient safety (Mihdawi et al., 2020). This study is significant in that the safety culture of a facility is directly affected by the work environment of the nurse. The amount of substantial response is a strength of this study, but the limited hospital sources only represent a small population. Another strength of this study is that it measured not only overall patient safety but the culture of the safety of the organization as well. This correlation between the culture of safety, nurses' perception of unit safety, and the indicators used to measure that perception is a strong design for future-focused improvement at a unit or operational level.

Strengths and Limitations of the Literature

The literature supports unseen stressors that nurses experience daily. Healthcare reform has changed organizational demands and nursing tasks to keep up with regulatory standards and prove in the patient's chart that quality care has been delivered. The

unintended consequences of health information technology are proven to be a source of time-intensive documentation, troubleshooting, less efficient processes, repetitive frustration for nurses, and less patient-focused time at the bedside. The interruption increases with phones, missing or broken equipment, and delays patient care. This all interrupts the nurse's concentration, and results in mental exhaustion and decreased performance.

The moral distress of nurses is also apparent in the literature. Feelings of helplessness, witnessing pain and suffering, prioritizing care resulting in care omission, and being unable to deliver the care each patient deserves holistically are all sources of moral distress leading to decreased job satisfaction or a sense of accomplishment and burnout. Increased workloads and inadequate staffing were repeated sources of several of these moral distress sources. Organizational demands conflicting with nurse training and the desire to be holistic caregivers are supported by these literary sources.

Patient safety issues such as medication errors and adverse events related to inadequate staffing, workload, and interruptions are also supported. Patient and staff satisfaction, as well as safety culture, is shown in the literature to be related to the nurse work environment including workload and staffing levels.

Conclusion

The literature supports the purpose of this project. It sheds light on many unseen daily stresses of nurses that have resulted from the accumulated effects of healthcare reform, improvement, organizational and regulatory demands, and the result of mental exhaustion. The daily prioritization of patient care and care omission causes distresses for nurses whose ethics are continuously challenged. The literature says this repeated conflict often results in burnout and turnover. The work environment of the nurse is complicated, mentally exhausting, and affects the safety and satisfaction of the patient and nurse as well as the perceived safety culture of the organization.

CHAPTER III

Needs Assessment

The following discussion is meant to show some elements of the nurse work environment that have developed from years of process improvement and technological advances. It is also meant to combine these stresses and mandates into one review to show not only leadership, but staff nurses the amount of patience, endurance, and resilience it takes to provide patient care in today's healthcare settings. It is also designed to start the conversation around the nurse work environment and areas in need of further study.

Target Population

The targeted population is the bedside nurse and the daily work environment in the Long-Term Acute Care Hospital (LTACH) unit. Nurses are highly educated not only on medical diagnoses, diseases, and treatment, but also in the use of technology, equipment, and rules and regulations. Nurses experience a high level of stressors during each shift that often leaves the nurse feeling mentally exhausted. Many of these stressors do not add value to the nurse's sense of accomplishment or the nurse-patient relationship.

Setting

A 36-bed LTACH unit within an 800-bed teaching hospital was the setting for the review of the nurse's work environment. The unit has a combination of high observation patients and progressive care patients that usually require an average stay of 21 days or more. The patient's diagnosis and needs vary in both the high observation unit and the progressive care unit. The diagnosis may include heart and abdominal surgery complications, long-term infections or complex wounds, advanced chronic conditions,

and vent dependence. Patients admitted to this unit are typically in need of extensive physical therapy, ventilator or oxygen weaning, or extensive wound care. Patients admitted to this unit are usually transferred from an intensive care unit to a high observation unit, then to the progressive care unit with a goal of discharging to an extensive rehab setting.

Sponsors and Stakeholders

The stakeholders affected by this project include the Chief Executive Officer (CEO), Director of Nursing (DON), Quality Improvement Specialists, the Ethics and Compliance Officer, nurses, and patients. The CEO and Director of Nursing have invested interest in learning ways to decrease nurse turnover, improve nurse retention, and improve staff and patient satisfaction. Nurse turnover is expensive, sacrifices knowledge and expertise, and taxes other nurses who are responsible for training new staff. The Quality Improvement Specialist is often trying to understand nursing workflow and areas in need of improvement including patient experience and improving quality indicators such as decreasing Central Line-Associated Blood Stream Infections (CLABSIs), Catheter-Associated Urinary Tract Infections (CAUTIs), Falls, Hospital Acquired Pressure Injuries (HAPIs), and Hospital Acquired Infections (HAIs). The Ethics and Compliance Officer is interested in understanding the amount of information and tasks nurses are responsible for and how compliance may be challenged by competing for nursing tasks. Nurses are key to this project in that most have trouble articulating why increased patient ratios are unsafe. Nurses may not understand the number of tasks required to complete, the number of medications administered, the interruptions endured, the miles walked, or the amount of communication involved during a shift. However, all

of these actions increase when patient loads increase or staffing is inadequate. Patients are also stakeholders as patients deserve focused care and communication with each nurse encounter. Patients also deserve a safe, quality healthcare experience with optimal outcomes.

Desired Outcomes

The desired outcome of this project was to broaden the understanding of the nursing work environment on LTACH. It is meant to inspire leaders to think about specific units and what a patient load on each unit might look like. It is meant to make team members stop and think or investigate before implementing change. It is also meant to spotlight nurses for the ability to juggle the stresses nurses endure physically, mentally, and emotionally daily. Questioning the nurse work environment in relation to patient load and staffing might be explained if a study were able to completely calculate the actual tasks and time nurses spend performing multiple tasks. During patient and family pain and suffering, nurses are assessing and respond to the patient's physical, emotional, psychological, and medical needs. Nurses inform the physician, patient care tech (PCT) pharmacist, case manager, respiratory therapy (RT), physical therapy (PT), occupational therapy (OT), wound care, and speech therapy of needs that arise and then communicate to the patient and family. Nurses implement the orders, assess the outcomes, make changes to orders when necessary, and receive new orders. Nurses also complete the mandated daily tasks required to prove care, nurse presence in the patient room, appropriate monitoring, implementation of preventative measures, attention to patient needs, and response to interventions.

SWOT Analysis

Table 1

SWOT Analysis

	SWOT Analys	is
Internal origin: Attributes of the organization	 Strengths Favorable patient-nurse ratios for data collection Invested, engaged leadership team Data collection is completed during a shift by a nurse caring for patients Environment conducive to collecting data 	 Weaknesses Data collection is completed during a shift by a nurse caring for patients Some days were too busy to collect data Collected data is difficult to define and capture
External origin: Attributes of the environment	 Opportunities Work environment affects patient care 	 Threats Inadequate staffing due to illness is unavoidable at times System changes may affect unit operations and culture depending on delivery and enforcement Regulatory agency mandates may be misunderstood by staff causing a lack of documentation and intervention completion

The LTACH unit's environment is favorable for this type of data collection due to the size of the unit, nurse-patient ratio, and the dedicated leadership invested in nurse retention, staff satisfaction, and safe quality patient care. The medical-surgical unit, where the nurse-patient ratio may be 1:6 would leave the nurse with much less time to document the findings found in Table 1. The LTACH unit environment also operates as a hospital setting within a hospital, allowing for the documentation (Appendix A), technology and equipment (Appendix B), nurse measures (Appendix C), and disposal processes (Appendix D) to be easily accessible for data collection. The bedside nurse collecting data is a strength due to the real-time collection and ability of the nurse to document interruptions and different tasks that may only be calculated with certain access to technology or understanding of the nurse workflow. However, the bedside nurse collecting the data may also be a weakness since some data collection was aborted on days that became too busy or data collection was missed due to competing patient care needs. Another weakness in reaching the objective was the difficulty in expressing what underlying nurse stressors could be defined and counted that would help show stress factors that are often hard to define. LTACH is also a good environment for collecting data as patient turnover is lower than in an acute care setting in which throughput is a priority.

Some threats to this project include the inability of leadership to invest in certain changes or improvements due to regulatory agency or organizational mandates and requirements. LTACH, being a hospital within a hospital, is at an advantage in that creative thinking is encouraged and often more manageable within the smaller system. Leadership supports improvement not only in quality safe patient care but also in staff satisfaction and engagement. The accessibility of leadership and the open-door policy is apparent across the board from the CEO, DON, Ethics and Compliance Officer, Infection prevention, process improvement specialists, multidisciplinary leadership, physicians, and Nurse Practitioners. The lack of red tape within a smaller more controlled environment is a strength for this project in that the leadership may gain insight into the LTACH nursing work environment and be able to implement positive changes or improvements without having to negotiate with other units or other leadership for system change.

Resources

The resources needed for this project are a nurse working on the LTACH unit and an in-depth look at the unit and the nurse work environment. The nurse work environment will include a unit's specific review of the technology, equipment, nursing unit-specific measures, interruptions, physical demands, mandated documentation, medications administered, orders verified, and changes or education received in the given month that the nurse is responsible for or that effects nurse practice.

Team Members

This project will require one registered nurse willing to keep track of certain data while completing 12-hour shifts of patient care. The nurse must have experience working on the unit for more than a year and must have greater than 5 years of nursing experience. The nurse must have support staff for the patient load including a patient care tech (PCT) and cannot be precepting another nurse or doing charge duties during the data collection.

Cost-Benefit Analysis

This project will amount to time and attention from the nurse collecting the data. The financial component will be the nurse's salary, which would be paid whether participating in the project or not. The benefit of this project will not only help formalize the amount of knowledge and patience a nurse exhibits daily but will also help leaders understand what nurses are experiencing when patient loads increase or staffing is inadequate. It will also help create a picture of the redundant, everyday tasks and stressors that often leave nurses feeling mentally exhausted. These stressors may be sustainable with manageable patient loads but may lead to burnout and professional dissatisfaction as patient loads increase or support staff is not present. Inadequate staffing and a stressful work environment have been identified as two of the major sources of nurse burnout and turnover (Shah et al., 2021). The cost of one bedside RN turnover is approximately \$40,038 (Nursing Solutions, Inc, 2021). A one-point change in the percentage of nurse turnover will save or cost approximately \$270,800 per year (NSI, 2021). Improvements to the nurse work environment may lead to a decrease in the percentage of nurse turnover and save money.

Conclusion

The shift data collection revealed many interruptions related to the phone. The number of medications administered for the 3:1 and 4:1 patient-nurse ratio was an impactful finding in that each medication is given and also requires retrieval, opening, and bar code scanning. The range of medications administered for the patient assignment groups during a 12-hour dayshift was 37-82. Several medications often include multiple administration and documentation steps as well as noted in Appendix E. The amount of

equipment and technology found on the unit was a surprise to see listed in one document. An incidental finding that was not included in the original study design was the number of places nurses access to dispose of medical waste.

CHAPTER IV

Project Design

This study is designed to look at some of the accumulated nurse stressors that have arisen with the implementation of healthcare information technology (HIT), increase in technology, in combination with some existing stresses nurses experience every day but may be difficult to observe or calculate without being a practicing nurse and experiencing it firsthand. The study will be a collection of instances experienced or performed by the nurse in a shift providing patient care. It is a unit-specific collection of quantitative information including counts of tasks, medications administered, orders reviewed, interruptions, task shifts, texts, calls/alerts, dressing changes, and miles walked during a 12-hour shift. It will also include a quantitative example of nurse responsibilities including documentation, plans, and protocols that are experienced daily using the electronic medical record (EMR). A quantitative example of unit equipment that the nurse is responsible for using, understanding, interpreting, and often troubleshooting. Other stresses that will be quantified will include the nurse measures that are daily topics of huddles and nurse communications.

Sample

The shifts in which data collection will occur are 12-hour shifts worked by the nurse. Dayshift clock in time is 0638 with an approximate clock out time of 1915-1930. All shifts will include assignments given to the nurse by the charge nurse and not selected for the nurse based on the study. The assignments will be assigned as if the nurse were not participating in the study. The assignment may be in either a high observation unit or progressive care unit but must have nursing assistant support and not include trainees.

The participant will be the researcher, an RN with 19-years of medical-surgical experience and employed in the LTACH unit for the past year. The researcher will analyze the documentation and tasks completed by nurses on LTACH. The researcher will also assess the unit and collect the equipment and technology that the nurse is responsible for using and interpreting results or often requires troubleshooting. The nurse practices and outcomes are audited and measured on LTACH. This will be included in this data collection.

Goals

The purpose of this project was to collect data related to daily nurse stress which is often not measured or discussed. It is also to share this information with leadership to close a gap of misunderstanding as to why nurses might challenge increased patient loads. The data will spotlight nurses' everyday achievements and ability to perform patient care during the difficult work environment that has been created by years of process improvement and healthcare reform. A third goal is to create a study design that might inspire further investigation of the nurse work environment.

Objectives

Objectives were set to guide the intent of the project. The specific objectives for this project are listed below:

- Exemplify the accumulation of nursing tasks/interruptions due to healthcare reform and organizational demands
- Compile evidence of nursing work environment on LTACH
- Share findings with leadership to broaden understanding and to present evidence of the need for further improvement of the work environment

- Provide a study design that may result in nurse stressors that have not been discussed or recognized
- Help quantify some nurse stressors that may increase with inadequate staff and increased patient load.

Plan and Material

The nurse collected data in certain categories during a 12-hour shift. The data was collected from October 2021-February 2022 during shifts in which the nurse was not training nor performing charge duties. The data was only collected on the LTACH unit and did not include progressive care patient groups and high observation patient groups. The data collection did include the number of patients, level of care, number of patients in isolation, number of orders reviewed, number of medications administered, number of received texts and broadcasts, number of calls/alarms, number of dressing changes, number of tele sheets signed, face to face interruptions before 1200, number of tasks shift before 1200, and the number of miles walked during a 12-hour shift. There was also a place for comments on events that happened during the shift that was time-intensive or not a part of normal daily workflow.

Patient groups were randomly assigned by the charge nurse. The level of care and number of patients in isolation were random due to the random assignment. The number of orders reviewed only included the reviewed orders during the 12-hour shift, not all the current active orders. The number of medications counted off the number of medications administered during the shift. Multiple-step administration was only counted as one administration. For example, if a narcotic was administered, it was counted as one and did not include the steps of pre-and post-pain assessment or sedation level. The intricacies involved in medication administration are further exemplified in Appendix E. The number of texts/broadcasts received will be a count taken from the internal mobile phone at the end of the shift and will only include the number of received texts/broadcasts and not the responses. The number of calls/alarms counted were taken from the internal mobile phone system at the end of the shift. This included bed alarms and calls received on the internal mobile phone during the shift. The number of dressing changes were a count of wounds that had dressing change orders and required documentation. Tele sheets were signed at the end of the shift and were a count of sheets each requiring nurse verification and signature. Interruptions were counted as face-toface interruptions. Task shifts were counted any time the nurse has to shift tasks from the original task to complete another task and then return to the original task. Interruptions and task shifts were only collected until 1200. The miles walked were collected by the nurse's activity tracker on the phone and did not include any steps taken before the shift begins. A comment section was used for any task that arose requiring intensive time or attention or tasks that were not specific to the daily routine.

Unit data was collected to exemplify the amount of equipment a nurse on LTACH must understand and often utilize during patient care. Daily documentation is examined and listed in a tabular form and will include some aspects of documentation that may not be daily mandates but was a part of patient care documentation (Appendix A). A list of nurse measures and audits was gathered to examine the amount of measure and result reporting that a nurse often experiences within a shift (Appendix C). Nursing education was examined for February and will only include clinical updates or huddle cards specific to LTACH nursing and included in the leadership presentation. This did not include

system newsletters or information emails or unit newsletters or emails. This did not include mandatory module education, competencies, or mandatory system education. An incidental finding that was not planned but worth noting was the complicated medical waste receptacles and locations noted in Appendix D.

Timeline

Figure 1



Evaluation Plan

The effectiveness of this project will be evaluated by the leadership responsibility in the post-presentation discussion. Leadership will be asked to discuss if the findings in this project broadened their understanding of the nurse work environment. It will also allow for discussion of possible areas of improvement that may warrant further investigation on LTACH.

Conclusion

This project design is aimed at analyzing the work environment of a nurse for 12hour shifts on the LTACH unit. The collection of mandated documentation counts of nursing tasks and interruptions, and the focus on technological demands will exemplify the resiliency of nurses' ability to juggle patient care with many other tasks and duties. This picture of the nursing work environment is meant to spark conversation and inspire leaders to think about the nursing work environment that has been created by the healthcare demands and advancements. It is also meant to exemplify the number of interruptions that also may be occurring while delivering care to the patient which warrants further investigation into the effect on the patient experience.

CHAPTER V

Dissemination

This project was developed to provide an example of the current nursing work environment an LTACH. The accumulation of tasks and interruptions for nursing has increased over the past two decades with technological advancement and mandated documentation to prove the care and collect data. The accumulation of these unseen nursing stressors may increase when patient loads increase, or staffing is inadequate. These tasks often do not lead to a sense of accomplishment for nurses and the interruptions decrease opportunities for patient-centered focused care.

Dissemination Activity

A PowerPoint presentation was used along with handouts to disseminate the nursing work environment compilation to leadership. Attendees included facility specialty hospital leadership including the Director of Nursing, the Respiratory Manager, the Pharmacy Manager, the Ethics and Compliance Officer, the Nursing Unit Supervisor, and the New StaRN in training an LTACH.

The presentation was well received and generated some thoughtful discussion. Compiling findings on LTACH into one presentation was "thought-provoking" (J. Picker, personal communication, March 30, 2022). The number of medications given on small patient loads "is surprising" (J. Dikos, personal communication, March 30, 2022). There was a conversation regarding the total number of phone and face-to-face interruptions combined. The Nursing Unit Supervisor added that the Central Monitoring Unit is a large source of telephone alarms and calls (C. Mincey, personal communication, March 30, 2022). Possible solutions for phone interruptions included implementing battery changes and making sure the battery is changed appropriately because if the battery is backward, it will drain much faster. Other discussions included suggestions that the escalation process may not be working or completed as intended.

The Director of Nursing encouraged discussion and thought about how to get staff to understand that "behind the scene, care is still taking care of the patient" (J. Picker, personal communication, March 30, 2022). The author agreed with this statement and admitted personal struggle with this since the patient doesn't understand what nurses do behind the scenes. The author did not verbalize the concern that the patient may not understand or care about the behind-the-scenes if basic needs go unmet. The author also added that "though this is true, can we also focus on some of the interruptions that occur when nurses are giving patient-centered focused care so that the patient experiences some of the care the nurse is providing without interruption?". The Nursing Unit Supervisor agreed that interruptions during care are a source of concern for both nurses and the patient (C. Mincey, personal communication, March 30, 2022).

A suggestion was made by the Respiratory Manager that physical therapy (PT) helps put patients back to bed. The Respiratory Manager went on to say that "I often see physical therapy getting the patients up then leaving them until nurses can get them back to bed. Can we work with PT to ask for help getting at least some of the patients back to bed" (G. Hunt, personal communication, March 30, 2022)? The group agreed this would be worth further investigation.

The overall recommendation of the creation of a new nursing role aroused intrigued conversation but did not generate supportive conversation as it was suggested this was a very specialized role that would take development, monitoring, and role follow-up. The author agreed but suggested that it might be worth developing and seeing if this role would help improve patient care while streamlining processes. To this suggestion, the author received shrugged shoulders and head nods as to say "maybe".

The leadership was appreciative of discussing findings and the conversation. The author thanked the group for allowing the author to share positive aspects of LTACH as well as areas needing further investigation. The Nursing Unit Supervisor thanked the author for compiling this information. The Nursing Unit Supervisor indicated alike for having the data compiled.

The author did praise the LTACH culture during the dissemination discussion. Supportive leadership is a large part of the culture of a unit and LTACH has fair, supportive leadership that prides itself on listening to its staff. The author also indicated aspects that are above and beyond like the ancillary departments, rounds process, fair patient assignments, nurse rotation from high observation to progressive care, and the culture around preventative measures as well as safety measures. The author pointed out that LTACH is how all patient care should be. Each patient, no matter what unit deserves quality, focused, patient-centered care and the author appreciates that the patient-nurse ratio and teamwork on LTACH support such quality patient care. The author does leave work feeling as if good, safe patient care has been provided during the work shift.

Limitations

There were several limitations to this project. A random sample of the patient assignment was dependent on staffing. Each assignment was chosen when support staff was present and the nurse collecting the personal data was not trained. This decreased the number of appropriate shifts and limited the ability to capture a five-patient load as training was in progress with five patient assignments or included primary nursing care on part of the patient group. Another limitation was the inability to incorporate the timing of tasks. The timing of tasks may show some areas in which the count may be lower but the amount of time to complete the task may take longer than the actual count. For example, though a count of five dressing changes may be a low number, these may be very time-consuming tasks depending on the patient's specific condition and need. Task timing was not an option for this project as the nurse collecting data was also caring for patients. Timing would have delayed patient care, but counting the number of tasks was attainable.

Unfortunately, the limitation of being able to capture time also decreases the opportunity to identify factors that might need focused assessment for process improvement. To provide care for a typical patient, the nurse spends an average of 15-minutes with the patient each hour. If the nurse is assigned four patients for the shift, this leads to each hour consumed with patient care. However, the time the nurse is available to provide patient care decreases with tasks outside the room and does not result in even patient care when prioritization takes place due to patient acuity and immediate needs. Some patients may receive more actual nurse care time than others. Nurses also create opportunities for multitasking including building patient relations during medication administration and assessments. This does not allow for mindful, focused patient care delivery. This time will also decrease when nurses take lunch or a break within the 12-hour shift. Training, charge, unit secretary, and transport tasks also decrease this time allowed for patient care. Further investigation including timing would further support the increase in time away from patients when workload increases.

Implications for Nursing

This project exemplifies nursing tasks and stressors that are difficult to capture by observers or visualize when focusing on one area of improvement or change. Nurses are highly encouraged to be mindful, and engaged, own their practice, chart in real-time, and perform compassionate care. The results of this project show the number of expectations in nursing is not only vast but warrants further study and investigation. Further investigation is needed to improve the work environment to allow time for nurses to perform in a way that is conducive to patient-focused compassionate care, feel accomplished, deliver the patient care nurses are taught to provide, and make a positive difference during a patient's healthcare experience.

This project also shines a spotlight on the number of skills, interruptions, changes, technologies, and equipment that a nurse is responsible for on LTACH. All of this, in conjunction with the management of a volatile patient load, the ability to endure the mental, emotional and physical aspects of the nursing role, and keeping up with the everchanging care delivery processes, provides evidence that nurses are resilient.

Recommendations

Further study of this topic is needed to understand what a nurse means when the nurse says "that patient load is just not safe" or "six patient loads are just not safe". Nurses consistently report a concern with staffing ratios but have difficulty defining that for nonclinical, administrative, or leadership colleagues. Definition of staffing concerns does not stop at nurse-patient ratios. It calls for a more complex look at healthcare systems and processes, patient acuity and needs, and ever-changing nurse culture.

Process improvement should always be in the interest of safer, better patient

outcomes. One suggestion to improve the nurse work environment would be the development of a special nursing role. A role that allows a nurse to focus on improving processes while assisting with data collection, auditing, staff interviewing, research, and piloting tests of change. This role would work closely with management, process improvement, and nursing to be a bridge of opportunity for a deeper look at some underlying nurse stressors. This deeper look at the work environment and possible changes might allow nurses to spend more time with patients providing care to aid in recovery and preventing deterioration. This time with the patient might improve patient and staff satisfaction, decrease the length of stay, and prevent readmissions. It could also result in a nurse feeling more accomplished through the ability to spend more time with each patient showing compassion and focusing on the patient without interruptions or the underlying thought of needing to get leave the room to complete other tasks done on time. This role could be specific in that the nurse would perform patient care two shifts a week and spend the third shift in the Nurse Quality and Safety Coordinator role. This would keep the nurse closely engaged in patient care processes while allowing time for meetings and project work. This might also lighten the task load for management allowing management more focus time on managerial tasks and to round on patients and staff.

Conclusion

The author's overall impression of this project was a little surprising. The author did not realize the interruptions would be as plentiful as discovered on a 36-bed unit with manageable patient loads. The author reflected on previous work experience on a medical-surgical unit with a six-to-one patient-to-nurse ratio and wondered how this data

would have looked if caring for six patients at once. The author often felt the assigned patient load was unsafe for a nurse to provide safe, competent patient care. The unit was a bigger unit than the LTACH, and the author almost always walked 4 to 6 miles according to a personal step tracker. The author remembers feeling the required level of patients was not sustainable and left work feeling like mediocre patient care was provided at best. The author felt and still believes, it was the patient's right to receive better care. Six patients for 12-hours allows 10 minutes per patient per hour with a total of 2 hours of patient care in a 12-hour shift. Once a 30-minute lunch break, time spent walking, and time spent handling interruptions and completing tasks is allotted the nurse has less time to care for patients. Are healthcare systems and work environment setting nurses up for success? Even in a small unit with manageable patient-nurse ratios, there is room for improvement. After years of enduring this level of stress and moral turmoil, the author transferred to LTACH. In some ways, the author feels indebted to LTACH for reinspiring a desire to be a nurse and giving opportunities to experience being a "good" nurse again, and providing "good", quality, safe, patient care.

The number of medications was also a little surprised when the author reflects on the number of rules and steps it takes to retrieve, scan, open, and administer each medication. The amount of knowledge a nurse must have to safely administer and educate the patient is also enlightening when one sees an actual count of medications administered in a 12-hour shift. Again, medication administrations should be mindful and uninterrupted for the safety of the patient. Are healthcare systems allowing nurses enough guarded, uninterrupted time to be mindful and to think through all the rules and knowledge needed to safely administer each medication? The results of this project seem to suggest nursing time is often interrupted during the most crucial times of needed concentration and mindful attention.

References

Agency for Healthcare Research and Quality (AHRQ). (2021). Types of health care quality measures. Ahrq.gov

https://www.ahrq.gov/talkingquality/measures/types.html

American Nurses Association (ANA). (2021). Ethics topics and articles.

Nursingworld.org https://nursingworld.org/practice-policy/nursingexcellence/ethics-topics-and- articles/

Apha.org (2021). *American public health association*. For science. For action. For health. Health Reform. https://apha.org/topics-and-issues/health-reform

Bean, M. (2019). 3 most, least rewarding parts of working as an RN.

- Bikker, A. P., Fitzpatrick, B., Murphy, D., & Mercer, S. W. (2015). Measuring empathic, person-centered communication in primary care nurses: Validity and reliability of the consultation and relational empathy (CARE) measure. *BMC Family Practice*, 16, 149. https://doi.org/10.1186/s12875-015-0374-y
- Chan, E. A., Wong, F., Cheung, M.Y., & Lam, W. (2018). Patients' perceptions of their experiences with nurse-patient communication in oncology settings: A focused ethnographic study. *PloS One*, *13*(6), e0199183. https://doi.org/10.1371/joutnal.pone.0199183

Cho, S. H., Mark, B. A., Knafl, G., Chang, H. E., & Yoon, H. J. (2017). Relationships between nurse staffing and patients' experiences, and the mediating effects of missed nursing care. *Journal of Nursing Scholarship: An official publication of Sigma Theta Tau International Honor Society of Nursing, 49*(3), 347–355. <u>https://doi-org.ezproxy.gardner-webb.edu/10.1111/jnu.12292</u>

- Dean, W., Talbot, S., & Dean, A. (2019). Reframing clinician distress: Moral injury not burnout. *Federal practitioner*, *36*(9), 400-402.
 www.ncbi.nlm.nih.gov/pmc/articles/PMC6752815
- Gutsan, E., Patton, J., Willis, W., & Coustasse, A. (2018, April). Burnout syndrome and nurse-to-patient ratio in the workplace. Presented at the 54th Annual MBAA Conference, Chicago, IL.

https://mds.marshall.edu/cgi/viewcontent.cgi?referer=https://www.google.com/& httpsred%20ir=1&article=1196&context=mgmt_faculty

- Haahr, A., Norlyk, A., Martinsen, B., & Dreyer, P. (2020). Nurses experiences of ethical dilemmas: A review. *Nursing Ethics*, 27(1), 258–272. <u>https://doiorg.ezproxy.gardner-webb.edu/10.1177/0969733019832941</u>
- HG.org Legal Resources. (2021). Standards of care in nursing. <u>https://www.hg.org/legal-articles/standards-of-care-in-nursing-6237</u>
- Hunt, J. (2016). How should nursing productivity be measured? *Nursing Times, 39*(40), 18-20.
- Johnson, M., Sanchez, P., Langdon, R., Manias, E., Levett-Jones, T., Weidemann, G., Aguilar, V., & Everett, B. (2017). The impact of interruptions on medication errors in hospitals: An observational study of nurses. *Journal Of Nursing Management, 25*(7), 498–507. <u>https://doi-org.ezproxy.gardnerwebb.edu/10.1111/jonm.12486</u>
- Johnson, N. (2015). Why good nurses leave the profession. Nurse Minority. https://minoritynurse.com/why-good-nurses-leave-the-profession/

- Kalyani, M., Kashkooli, R., Molazem, Z., & Jamshidi, N. (2014). Qualitative inquiry into the patient's expectations regarding nurses and nursing care. *Advances in Nursing*, 2014. <u>https://doi.org/10.1155/2014/647653</u>
 - Lee, S. (2021). Measuring nurses' experiences with unintended adverse consequences in EMR use in acute care settings. CIN: Computers, Informatics, Nursing, 39(11), 747-754. https://doi.org/10.1097/CIN.000000000000788
 - Lee, S., & Kang, J. S. (2021) Unintended consequences and workarounds of electronic medical record implementation in clinical nursing practice. *CIN: Computers, Informatics, Nursing, 39*(12), 898-907.

https://doi.org/10.1097/CIN.00000000000785

- Mayoclinic.org. (2021). <u>https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-</u> <u>depth/burnout//art-20046642</u>
- Mcbride, S., Tietz, M., Robichaux, C., Stokes, L., Weber, E., (January 31, 2018)
 Identifying and addressing ethical issues with use of electronic health records. *OJIN: The Online Journal of Issues in Nursing*, 23(1), Manuscript 5.
 https://doi.org/10.3912/OJIN.Vol23No01Man05
- McComas, J., Riingen, M., & Chae Kim, S. (2014). Impact of an electronic medication administration record on medication administration efficiency and errors. *Computers, Informatics, Nursing: CIN, 32*(12), 589–595. <u>https://doiorg.ezproxy.gardner-webb.edu/10.1097/CIN.00000000000116</u>
- Mihdawi, M., Al-Amer, R., Darwish, R., Randall, S., & Afaneh, T. (2020). The influence of nursing work environment on patient safety. *Workplace Health & Safety*, 68(8), 384–390. <u>https://doi-org.ezproxy.gardner-webb.edu/10.1177/2165079920901533</u>

Nursing Solutions, Inc. (NSI). (2021). NSI National Health Care Retention & RN Staffing Report.

https://www.nsinnursingsollutions.com/Documents/Library/NSI_National_Health

Care_Retention_Report.pdf

Nursingtheory.org (2021) <u>https://nursing-theory.org/articles/nursing-theory-</u> <u>definition.php#:~:text=Theory%20is%20defined%20as%20%E2%80%9Ca,guide</u> <u>%20the%20practice%20of%20nursing%E2%80%9D</u>

Peters, E. (2018). Compassion fatigue in nursing: A concept analysis. *Nurs Forum*, 53, 466-480. <u>https://doi.org/10.1111/nuf12274</u>

Rapport, F., Hibbert, P., Baysari, M., Long, J. C., Seah, R., Zheng, W. Y., Jones, C., Preece, K., & Braithwaite, J. (2019). What do patients really want? An in-depth examination of patient experience in four Australian hospitals. *BMC health Services Research*, 19(1), 38. <u>https://doi-org.ezproxy.gardnerwebb.edu/10.1186/s12913-019-3881-z</u>

Rathert, C., Mittler, J., Banerjee, S., & McDaniel, J. (2016). Patient-centered communication in the era of electronic health records: What does the evidence say? *Patient Education and Counseling*, *100*(1), 50-64. https://doi.org/10:1016/j.pec.2016.07.031

Rodriguez, A. M., & Lown, B. A. (2019). Measuring compassionate healthcare with the 12-item schwartz center compassionate care scale. *PLoS one, 14* (9), e0220911. <u>https://doi.org/10.1371/journal.pone.0220911</u>

- Sassaki, R. L., & Perroca, M. G. (2017). Interruptions and their effects on the dynamics of the nursing work. Interrupções e seus efeitos sobre a dinâmica de trabalho do enfermeiro. *Revista Gaucha De Enfermagem*, 38(2), e67284. <u>https://doiorg.ezproxy.gardner-webb.edu/10.1590/1983-1447.2017.02.67284</u>
- Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., & Ali, M. K. (2021). Prevalence of and factors associated with nurse burnout in the us. *JAMA Network Open*, 4(2), e2036469. <u>https://doi-org.ezproxy.gardner-</u> webb.edu/10.1001/jamanetworkopen.2020.36469
- Suhonen, R., Stolt, M., Habermann, M., Hjaltadottir, I., Vryonides, S., Tonnessen, S., Halvorsen, K., Harvey, C., Toffoli, L., Scott, P. A., & RANCARE Consortium COST Action - CA 15208 (2018). Ethical elements in priority setting in nursing care: A scoping review. *International Journal Of Nursing Studies*, 88, 25–42. <u>https://doi-org.ezproxy.gardner-webb.edu/10.1016/j.ijnurstu.2018.08.006</u>
- Stotkowski, L., Yox, S., McBride, M., & Berry, E. (2017). Medscape nurse career satisfaction report 2017. <u>https://www.medscape.com/slideshow/2017-nurse-</u> career-satisfaction-6009297?faf=1#11
- The Joint Commission. (2021). <u>https://www.jointcommission.org/about-us/facts-about-</u> <u>the-joint-commission/joint-commission-faqs/</u>

Vahey, D. C., Aiken, L. H., Sloane, D. M., Clarke, S. P., & Vargas, D. (2004). Nurse burnout and patient satisfaction. *Medical Care*, 42(2 Suppl), II57–II66. <u>https://doi-org.ezproxy.gardner-webb.edu/10.1097/01.mlr.0000109126.50398.5a</u>

- Walke, E., Butler, C., & Griffin, M. (2014). Compassion fatigue, moral distress and work engagement in surgical intensive care unit trauma nurses: A pilot study. *Dimensions Of Critical Care Nursing: DCCN*, 33(4), 215-225. <u>https://doi-org.ezproxy.gardner-webb.edu/10.1097/DCC.000000000000056</u>
- Yen, P. Y., Kellye, M., Lopetegui, M., Saha, A., Loversidge, J., Chipps, E. M., Gallagher-Ford, L., & Buck, J. (2018). Nurses' time allocation and multitasking of nursing activities: A time motion study. *AMIA Annual Symposium Proceedings*. *AMIA Symposium*, 1137–1146

Appendix A

Nursing Documentation and Tasks

Nursing I	Ocumentation	and Tasks	
Nurse Documentation every shift for each patient	Every shift monitoring	As needed Documentation	Time- consuming monitoring and documentati on
1. Vital Signs per order	Every 2, 4, 8, 12, and post- procedure	1. Admission/transfer /DC checklist	1. Drip titrations with vital sign/CBG monitoring
2. Pain assessment every shift, as needed, and post-intervention assessment	1. Preassessm ent 2. 30 minutes post IV narcotic administrati on 3. 1-hour post-Oral narcotic administrati on	2. Provider notification	2. Restraint documentati on Every 2 hours with dignity checks 3 times per hour
3. Adult Assessment		3. Procedural time out	3. Wasting narcotics, pre and post assessment including sedation level, pain level, and respiratory rate if appropriate

4. Broset Risk type		4. Change in condition assessment, intervention, and post-intervention follow up/assessment	4. Independent double checks with Heparin and Insulin initiations, bag changes, and titrations
5. Delirium Scale		5. Family Contact	5. Post- procedure vital signs, operative site monitoring, Level of consciousnes s, and pain monitoring
6. Lines/Tubes with measurements	1. INTs, Central lines, Midlines, Ports, vas caths 2. Tubes may include NGs, Dobhoffs, PEG Tubes, trachs 3. Drains may include Jp's, axioms, wound managers, chest tubes	6. Refusal of care or interventions, explanation, education and follow up	6. Admissions including receiving report, completing documentati on for provider, completing consents, Admission history, admission orders, completing initial assessment, notifying family, completing orders and medications ++ Initial wound care assessment and

			documentati
			on
7. Wounds	Any wounds usually on any area of the body, the majority of these are once a day or twice a day change	7. Patient off the unit	
8. Activity/repositioning/mouthcare/ hygiene Every 2 hours		8. Patient return to the unit	
 9. Fall prevention measures every 2 hours 		9. Handoff of care	
10. Nutrition/supplements for each meal and snacks	Three times per day and PRN	10. Displays of aggression or combative behavior	
11. Braden scale		11. CHG bath ++PCTs are great at completing and documenting this task	
12. Preventative Skin interventions		12. Castille wipes for indwelling catheters ++PCTs are great at completing and documenting this task	
13. Safety checklist			
14. Morse Fall Scale			
15. VTE/PUD prophylaxis			
16. Education and fall education			
17. Intake	Includes meals, feeding tube flushes, and intake		
18. Output	Drains wound		

	vacs, wound managers, stools, urine	
19. IPOCs		
20. Order review		
21. EMAR- all meds and PRNs		
22. Patient-specific whiteboard in		
patient room		
23. Patient-specific target pain		
scorecard in patient room		

Other Nursing Tasks on LTACH

Shared tasks completed daily	Comments:	Non-patient care tasks often performed by nursing on LTACH	Comments:	Shared tasks that often require more than one person on LTACH
Pass trays 3 times per day	Pull patient upright, open containers	Switch beds/move patients	Remove bed, clean thoroughly, place new bed in room ++Wound care assists	Repositioning every 2 hours ++Hercules beds
Empty trash		Escorting patients across the street for tests	Sometimes requires hours off the unit ++RT assists ++Managed well by LTACH staff ++Transport nurse shifts offered	Perineal care

Empty Linens	Technology trouble shooting	Computers Scanners Pyxis Monitors Phones ++IT response improved	Dressing changes ++ Wound care assists
Vital signs			Retrieving meals or food if missing
Emptying drains/wound managers			Returning patients back to beds often requiring lifts
Emptying foleys, rectal tubes, external catheters			

Other shared tasks
Suctioning
Feed assistance
Pick up trays/document
intake
CBG's
Weights
Bladders scans
Rapid Response/team lead

Blue shading indicates daily

++ = LTACH Advantages/strengths

Highlighted tasks=time intensive
Appendix B

Technology and Equipment Nurses Use on LTACH





Computers/badge tap/label printers/immobile phone/pyxis





Desk monitor/Roving monitor/high observation monitor/dynamap/tele box



Code cart/zoll/rapid response cart



Glucometer/bladder scan/vein finder/heating pad/ IV pump/Sequential Compression device/sitter selects (kangaroo tubefeed pump and wound vacc not pictured)

ADO



O2 tanks/ suction and O2 delivery (Vents, cpap, bypap and other various O2 delivery not pictured)



Mobility equipment-walkers/gait belts/steadys/sara plus/maxi (hover mat and slide tubes not pictured)



Several various beds and functions

Appendix C

Nurse Measures and Audits on LTACH

Quality Board and national benchmark quality tracking	Catheter acquired urinary tract infections	Central line associated bloodstream infections	Hospital acquired infections	Falls rate
HCAHPS	Call bell response time	Noise level	Nurse to patient communication about medications	Nurse courtesy and respect
Other	Oral to IV opioid ratio	Key performance indicators		

Common Audits									
Complian ce	CHG baths	Castille wipes	BCMA	Hand hygiene	Narcotic delivery per policy	CL maintenan ce			
Narcotic review	Pre pain assessme nt	Post pain assessmen t	Sedation level						
Chart audits	Dressing changes	Assessme nts and screenings	Critical lab value physician notificati on	Active order vs. documentati on	Fall preventi on measure s	Skin prevention measures			

Appendix D

Medical Waste Disposal



Before and after med pass: all syringes and sharps go in sharps container, any harmful medications (ex. Warfarin, seizure meds) in Black bin, Narcotic waste in cactus, chemo waste and containers in yellow bin, other medication tubing and vials in purple bin.





Sharps Container in room, chemo bin and purple bin in med room, narcotic waste in med room.





Black bin in med room, Red biohazard bin (must be bagged first) in dirty linens and trash room, Black return bin for pharmacy in med room.

Regular trash in each room and linens in each room carried to dirty linens/trash room and placed in certain bins. Dirty equipment and dirty trays placed in a different location.

Appendix E

Medication Administration Process Example

Insulin Administration Example



- 1. Assess or take CBG
- Verify dosing scale ordered-low, medium, or high correction dose or meal dose based on meal % intake
- 3. Retrieve syringe from supply area
- 4. Retrieve insulin from pyxis
- 5. Wipe multidose vial with alcohol and draw up dose according to CBG and scale
- 6. Receive label for scanning
- 7. Badge tap and navigate to medication Administration screen
- 8. Verifier 2 pt. identifiers (name and date of birth)
- 9. Scan patient and verify med screen
- 10. Scan insulin label
- 11. Enter amount of units
- 12. Enter location of administration
- 13. Wipe with injection site alcohol and administer
- 14. Close needle safety
- 15. Dispose in Sharps container
- 16. Sign medication



Example of LTACH Med administration rules:

- Medications must be administered within one hour before or one hour after ordered time unless time sensitive (some antibiotics, seizure meds). Then there is a 30 minute before and after window.
- One patient, one pass- only administer one patient's medication at one time.

- 2 pt. identifiers (name and DOB) must be completed with every medication pass.
- Do not leave any medications unsecure (in room, at desk)
- No medications or patient supplies in nurses' stations, areas where staff eat or drink, pockets or on workstation on wheels (not available on LTACH).
- Narcotics must have a pre and post pain and sedation assessments. IV narcotics must have post assessment in 30 minutes and oral narcotics post assessment within one hour. Controlled substances must be administered within 30 minutes of removing from pyxis.
- If a narcotic is handed of the controlled substance hand off sheet must be filled out.
- All medications must be scanned using the BCMA. If medication does not scan a comment is helpful as to why the medication was not scanned (torn barcode, would not scan). This is measured and the nurse must not fall below a certain percentage.
- Chemo, heparin drips and insulin drips must have a witness or Independent Double check.