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Nursing Sensitive Indicators During COVID-19

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UC San Diego Health (UCSDH) is compared nationally to other health systems through Vizient, a healthcare performance improvement company which ranks health systems based on their performance and quality data. Nursing quality metrics play a role in these rankings, reflecting nursing's contributions to providing excellent patient care. Nursing sensitive indicators (NSI) measure the quality of nursing care delivered in an acute hospital setting. NSI, also called quality metrics, are reviewed and analyzed with the goal of preventing hospital-acquired injuries and infections. Maintaining NSI excellence requires support for clinical teams and continuous evaluation of processes and outcome measures. Despite NSI rates increasing during the COVID-19 pandemic, UCSDH's Vizient ranking improved to third nationally among 565 academic medical centers in safety, mortality, effectiveness, efficiency, and patient centeredness. This reflects how UCSDH handled the challenges to patient safety brought on by the pandemic, and resulted in UCSDH being named "one of the safest health care systems in the nation."

NSI outcomes of care were challenged by the pandemic, but the UCSDH team rose to the occasion. During the pandemic, solutions to barriers in providing nursing care were found at the bedside. Clinical teams remain the eyes, ears, and hands of quality. NSI outcomes and nationally benchmarked data are posted on the Nursing Resource Hub and updated quarterly making this information easily accessible to all frontline staff. The Quality and Patient Safety (QPS)

department also made internal NSI and iReport data available to all nurses. This transparency allows nurses to easily access the outcomes of their work, appropriately target improvement projects, and celebrate when goals are met or/and exceeded as well.

Patient care during the COVID-19 pandemic created unprecedented challenges for nursing care, including resource and supply shortages, understaffing, and constantly evolving or changing clinical practice for patients with a new illness. Initially, when uncertainty about the transmission of COVID-19, coupled with the necessity of preserving personal protective equipment (PPE), safeguarding personal and patient safety created challenges for nurses and other team members. Nurse leaders and NSI teams were tasked with the preparation and education of team members to maintain excellence in nursing outcomes while caring for a new population of patients and keeping themselves safe. UCSDH nurses implemented unique interventions to maintain quality care and support each type of NSI event.

Catheter Associated Urinary Tract Infections (CAUTI)

Nurses addressed increasing CAUTI rates through the multidisciplinary work of the CAUTI Task Force. The CAUTI Task Force, which never paused despite the pandemic's competing needs, identified two themes that accompanied a rise in CAUTI rates in 2020: improper sampling and non-ideal insertion practices. The Information Services team partnered with nursing to leverage Epic to improve CAUTI outcomes. Sampling alerts, a catheter insertion task and insertion documentation updates put current guidelines in the hands of frontline nurses to make real-time improvements in sampling and insertion practice. The task force also



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serves as the Magnet and Nursing Quality Program Manager and is the co-chair of the CAUTI Prevention Task Force. Jennifer has worked at UC San Diego Health since 2003 in roles including Clinical Nurse and Clinical Nurse Educator. "The pandemic has taught me so much about my family. In particular, my daughter has taken on so many responsibilities so my husband and I could stay in the workplace. Her adaptability knows no bounds!"

identified new urinary management devices to trial. Two new external urinary management products were implemented during the pandemic to reduce the use of indwelling catheters, decreasing the risk of CAUTI through decreased catheter utilization.

Additionally, patients with COVID pneumonia required a nursing intervention called proning, which supported lung function by having the patient lying in a prone position, despite needing mechanical ventilation and other advanced treatments. This new intervention that required a multidisciplinary coordinated effort to log roll the patient and equipment putting them at risk for urine reflux. The development of the Prone Guideline addressed specific



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Development and Research. Laura has worked at UCSDH since 2001. She worked as a clinical nurse in the surgical ICU and trauma unit at another San Diego hospital for 9 years and a Clinical Nurse Specialist for 6 years. Prior to her current position, she was the CNS for the SICU and has worked closely with the Wound Ostomy nurse team since 2005. "I am grateful for the extra family time we spent during the pandemic with our college-age daughters. Having them home for that extra six months was a gift. I am humbled by the dedication of my team and all the clinical team members providing such excellent care through the tumultuous months of COVID."

interventions for prevention of reflux and urinary catheter care.

Central Line Associated Blood Stream Infections (CLABSI)

Patients with COVID-19 brought challenges for CLABSI prevention, particularly for patients who needed to be in the prone position for prolonged periods of time. The Prone Guideline supported a practice to manage dressing integrity of central lines by assuring dressing changes were completed prior to proning patients. Thanks to these interventions, CLABSI rates remained about the same as pre-pandemic numbers.

Non-intubated patients with COVID pneumonia were managed in a systematic way, assuring all equipment needed to manage sterile dressing change, dressing integrity and catheter maintenance were readily available.

Patient Falls

Patient falls increased during the COVID-19 pandemic and fall outcome data was evaluated. The NSI team identified inconsistencies in data between internal and external reporting due to different processes in the reporting of iReport data. The inconsistencies were identified and remedied by incorporating processes to quality check and dual verify reported data. The iReport and data review processes were aligned with Quality and Patient Safety (QPS). Through this partnership, an electronic dashboard was built to generate transparency of this information and help staff identify how, when, where and to whom falls and injuries are occurring. Additionally, the Falls Prevention Committee instituted scheduled reflective practice sessions to identify opportunities for improvement. The committee determined that preventing falls during the COVID-19 pandemic was more challenging because of understaffing, the need to group clinical tasks to preserve PPE and prevent transmission to staff, and the additional time required for donning PPE before entering patient rooms for an increased number of patients with isolation precautions.

Hospital Acquired Pressure Injuries (HAPI)

Prone patients with COVID-19 improved oxygenation and ventilation. Prone positioning is standard of care, especially for the most critically ill COVID-19 patients. At times, patients require prone positioning for 18 hours or greater. While the optimal position to improve blood flow to the lungs and improve oxygenation and ventilation, the prone position is associated with an increase in the number of pressure injuries to the face and chest, areas not typically subjected to this increased force and duration of pressure. Our experience at UCSDH was similar to that reported by our UC partners, and within the nursing literature. Nurses and respiratory therapists worked extremely hard to prevent hospital acquired pressure injuries (HAPI) by adding protection beneath devices and frequent repositioning. HAPI cases were

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Julie DeVaney, MSN, APRN, CNS, ACCNS-AG, CCRN, PCCN

serves as a clinical nurse specialist. Julie has worked for UC San Diego Health since 2005 in the role of Clinical Nurse Specialist with the progressive care specialty and is the nursing chair of the CLABSI prevention taskforce. "This pandemic has highlighted human kindness and resiliency in all areas of our lives."



Amy Kalinowski, MSN, RN, CCRN has been an RN for 12 years, mostly in critical care nurse. Amy has worked for UCSDH for 9 years and spent the last 3 years with Education Development and Research (EDR) Department. Amy has co-chaired the organizational Fall Prevention Committee since November 2020. COVID has challenged every aspect of life, both professionally and personally, but Christopher Robin said it best, "Always remember you are braver than you believe, stronger than you seem and smarter than you think."

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analyzed based on new guidelines from the National Pressure Injury Advisory Panel (NPIAP), allowing the Wound, Ostomy, and Continence (WOC) nurses to differentiate hospital acquired pressure injuries on normal skin from those related to COVID-19 physiologic changes and not caused by pressure. UCSDH nurses remain dedicated to early identification of wounds and aggressive prevention measures, which are both necessary to decrease our HAPI rate and keep our patients safe.

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