Virtual Acute Care Nursing: An Innovative Approach to Transitions of Care

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The current and ongoing shortage of registered nurses, coupled with an aging population in the United States, is straining healthcare delivery systems to meet the growing demand for services (Perpetua et al., 2023). To mitigate this problem, ChristianaCare developed the Virtual Acute Care Nursing (VACN) program. The VACN program combines the expertise of acute care nurses with the convenience and accessibility of virtual care, enabling care coordination, assessments, admissions, and discharges to be completed virtually. The VACN partners with the bedside nurse to enable them to provide more direct patient care. The program started in September 2022 as a pilot on one medical and one surgical unit. After significant successes related to patient and organizational outcomes on the pilot units, the first expansion to additional inpatient units was completed in June 2023, with a total of 17 units live with VACN coverage. In July 2024, the second expansion was completed totaling 21 units providing VACN care.

VACN Nurses and the discharge process

VACN nurses play a crucial role in the discharge process by providing detailed discharge instructions, including education to patients and families, decreasing the time the bedside nurse spends delivering education. Discharge instructions are delivered through secure video calls to the patient and/or family, ensuring they understand their care plan, medication regimen, and follow-up appointments after hospital discharge. Real-time interaction between the virtual nurse and the patient allows for immediate clarification of any questions or concerns the patient or family might have, which can reduce misunderstandings, errors, and potential readmission. Virtual nurses tailor discharge instructions to the specific needs and conditions of the patient, providing customized advice that is relevant to their unique health situation. Additionally, virtual nurses utilize the evidence-based practice of teach-back to provide comprehensive discharge instructions and reinforcement of understanding without the distractions a bedside nurse may experience, such as other patient needs, phone calls, or emergency situations. By asking the patient to explain what they heard, the teach-back process ensures patient understanding and brings forth areas where additional information may be needed or reinforced (Oh et al., 2019). Educational materials can be shared electronically or printed based on patient preference, ensuring that patients have access to important information. By providing clear and thorough discharge instructions, virtual nurses can help prevent complications and readmissions, which are costly for healthcare systems and may have negative patient implications (Perpetua et al., 2023).

Virtual acute care nurses can significantly enhance the discharge process, leading to improved patient outcomes, reduced readmissions, and overall cost savings (Perpetua et al., 2023). Utilizing this innovative care delivery model, ChristianaCare improved patient experience scores for teach-back on 6 of our units and decreased readmission scores on four (4) units over a 5-month period.

Discharge medication reconciliation

Virtual nurses play a crucial role in ensuring discharge medications are ordered ac-

curately. Tasked with reviewing and verifying discharge medication instructions for completeness based on the patient's admission and discharge diagnoses and co-morbidities, virtual nurses prevent errors that can occur during the transition from hospital to home or hospital to a post-acute care facility. This role is vital in ensuring patient safety. Common errors regarding medications include medications missing from the instructions, duplication of medications on the instructions, dosing errors, and inaccurate instructions (Schuelke et al., 2019). By integrating a thorough medication review process, VACN plays a pivotal role in safeguarding patients during the discharge phase, ultimately enhancing the quality and safety of patient care and potentially reducing readmissions. Using a validated tool from the Society for Hospital Medicine, ChristianaCare was able to save an estimated $2 million dollars in harm avoidance over the past 12 months secondary to the VACN program (SHM, n.d.).

Reduced Hospital Length of Stay

Virtual care performed by a registered nurse can lead to more effective management of patients' conditions, potentially reducing their length of stay and enhancing patient experience (Schuelke et al., 2019). Improved care delivery using technology and communication with the interprofessional team has positively impacted the accuracy and timeliness of the discharge planning process, improving patient flow in the organization. Inpatient VACN can significantly influence the length of stay (LOS) for patients in a hospital. Frequent assessment of patient information in the electronic health record provides real-time data on patients' conditions, and early detection of changes can lead to earlier escalation and interventions, potentially reducing complications and improving outcomes. Prompt response to deteriorating conditions can decrease the need for more intensive treatments or extended hospital stays. By leveraging VACNs to manage inpatient care more effectively, hospitals can achieve a reduction in length of stay, leading to significant cost savings, improved operational efficiency, and enhanced patient outcomes and satisfaction (Trepanier et al., 2023). ChristianaCare LOS decreased over the past 5 months on nine (9) units post-implementation of the VACN program.

Transition of Care

Virtual nurses play an integral role in the transition of care for inpatients, particularly when they are moving from hospital settings to home or post-acute care facilities, as VACN provides enhanced care coordination and communication in these situations. They facilitate the transfer of care by ensuring that detailed, accurate information about the patient's condition, care plan, medications, and follow-up needs are communicated to the next care provider or to the patient's home care team.

Smooth transition of care reduces readmissions by improving follow-up management. Virtual nurses help to potentially reduce hospital readmission rates, which has a significant fiscal impact on healthcare systems. Accurate transfer of information in the transition process improves patient outcomes by reducing complications. ChristianaCare virtual nurses provide a detailed history of all patients' inpatient stays prior to discharge or transfer to post-acute care facilities. They provide real-time reporting, based on their interactions and assessments, in addition to the bedside nurse's feedback, to ensure a smooth and safe transition of care.

In conclusion, the implementation of VACN in the hospital setting has the potential to tremendously impact multiple outcomes ranging from patient experience to readmission rates and length of care. ■

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