

Teaching Nursing Students Root-Cause Readmission Analysis

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Health care organizations are engaging bedside nurses to reduce hospital readmissions, yet undergraduate nursing curriculum may not prepare nurses to take an active role in readmission reduction. To improve health care delivery and unite quality care with hospital reimbursement, the Centers for Medicare & Medicaid Services (CMS) instituted the Hospital Readmission Reduction Program (HRRP), which decreases payments to hospitals with higher than expected 30-day hospital readmissions.¹ Hospitals continue to face challenges with decreasing hospital readmissions, and experts stress the need to improve outcomes especially for patients with chronic conditions.² Nurses are in a prime position to influence patient health outcomes, lead change, and participate in collaborative initiatives aimed at reducing readmissions and improving patient outcomes.²⁻⁴ In response to the need for nurses to understand components of readmission reduction, an innovative 2-part readmission root-cause analysis assignment was implemented in a prelicensure nursing program. This article describes the assignment aimed at teaching students the concept of root-cause readmission analysis and the interdisciplinary team's role in hospital readmission reduction.

Teaching Strategy

In the weeks leading up to the assignment, faculty discussed the complexity and challenges of hospital discharge, as well as strategies to enhance the process, including incorporating the teach-back methodology for all patient education. Faculty presented how various health care team roles and interdisciplinary interventions impact transitions of care, decrease a patient's risk for an unplanned readmission, and improve patient outcomes.^{2,4-9} The assignment required nursing students to use landmark and current strategies to assess a patient's risk for readmission, explore interdisciplinary roles, develop interdisciplinary interventions, evaluate outcomes, analyze a readmission, and revise interventions.

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Faculty combined professional experience with case information obtained from the university's academic electronic health record to create 9 new case scenarios focusing on chronic diseases included in the CMS HRRP (diabetes, chronic obstructive pulmonary disease, heart failure, pneumonia, and renal disease).¹ Case scenarios also included associated conditions increasing patient risk for a hospital readmission, such as cancer, dementia, depression, substance abuse, and obesity.⁵ Faculty created a 17-question readmission root-cause analysis tool to enable students to complete an in-depth review of the readmission using the Re-Engineered Discharge (RED) toolkit and strategies from the State Action on Avoidable Hospitalizations.^{6,10} The 2-part assignment was implemented in a live classroom setting over 2 days. The assignment was arranged on the course calendar with 3 to 4 days between parts 1 and 2, therefore providing faculty ample time to review all components of part 1 prior to students beginning part 2.

Part 1: Initial Hospital Admission

In part 1, students formed small groups and were provided a case scenario. Each group analyzed the case information and calculated the patient's risk for an unplanned hospital readmission using the evidence-based Modified LACE Tool. The Modified LACE Tool identifies factors potentially increasing a patient's risk for hospital readmission.¹¹ The Modified LACE Tool is organized by categories: L (patient's previous length of stay), A (current admission— inpatient or observation), C (Charlson comorbidity score), and E (number of emergency room visits in the last 6 months). A higher Modified LACE Tool score indicates an increased risk for readmission.¹¹

Based on the scenario and Modified LACE Tool score, each group created a handwritten interdisciplinary, patient-centered plan of care using a provided template. The plan of care was developed using components of the RED Toolkit, transitional care concepts, and teach-back methodology aimed at reducing a 30-day readmission. The RED Toolkit covers specific actions health care providers can implement to improve the discharge process and break down transition of care barriers.⁶ Students were required to include RED strategies such as forming a successful interdisciplinary implementation team, planning to follow up with pending laboratory results, educating in the patient's preferred language, providing a postdischarge follow-up phone call, establishing patient health literacy, and evaluating the

patient support system within the plan of care. Incorporating RED strategies enabled students to address patient needs beyond the inpatient setting.

Transitional care is designed to aid patients with chronic illness as they move through the complex health care system and require collaboration among all disciplines to be successful. Providers implementing patient-centered care transition interventions and support, including home visits and postdischarge telephone calls, decrease hospitalization rates.^{8,9,12,13} Therefore, students were required to include an interdisciplinary approach and use landmark transitional care concepts in the written plan of care. Transitional care initiatives are older but remain relevant and guide health care organizations to reduce hospital readmissions in patients with chronic illness.^{5,9,12,13}

Utilization of the teach-back method improves patient knowledge and self-management, as well as improves patient outcomes and decreases hospital readmissions. An assignment expectation was the inclusion of the teach-back method for evaluating patient learning.^{5,7} If the teach-back method was not appropriate based on the case scenario, students had to address what alternative method of evaluation would be used to assess patient understanding.

Part 2: Hospital Readmission

For part 2 of the assignment, each patient in part 1 was readmitted despite the health care team's best efforts. Students returned to the same small groups examining the readmission case summary and analyzing the root cause of the patient's hospital readmission. Using the faculty-created readmission tool, students reviewed the provided readmission case summary, evaluated the group's previously established plan of care, interviewed faculty who served as the patient, evaluated outcomes of the previous plan of care, analyzed the root cause of the readmission, classified the readmission (planned, unplanned new problem, unplanned but related), and developed new interventions aimed at improving patient outcomes. Root-cause analysis was used to identify why an outcome did not transpire as anticipated, as this analysis is an important component of readmission reduction.^{2,6} Each group finished the assignment with an informal verbal in-class presentation summarizing the case scenario. The readmission of the patient provided practical experience, as many times health care teams are perplexed when a readmission occurs despite a comprehensive discharge plan.

Conclusion

The readmission root-cause analysis assignment assists faculty to enhance nursing students' understanding of the significance of an interdisciplinary team and the role of the nurse in reducing hospital readmissions. Nursing students were able to identify patient factors increasing the risk for

readmission, develop and implement interdisciplinary patient-centered interventions, analyze a readmission, evaluate plan of care outcomes, and revise strategies aimed at decreasing future readmissions. The readmission root-cause analysis assignment provided relevant and applicable skills all prelicensure nursing students can apply to help improve patient outcomes and decrease hospital readmissions.

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