Nurses Driving Unit Design to Increase RN Time at the Bedside for Improved Outcomes

Sarah Cypher, MSN, RN, CMSRN; Pam Scherff, MSN, RN, NE-BC; Peter Mueller, BSN, RN, CMSRN

Background

Inpatient care units at the hospital included a centralized nurses’ station and resources for patient care. The need for a new unit provided the opportunity for nurses to design space to better meet patient and staff needs.

Significance

Clinical nurses spend a significant amount of non-value-added time going back and forth from centralized areas to obtain necessary resources for patient care. This inefficiency decreases the amount of time nurses can spend at the patient’s bedside.

Goal

Improve clinical efficiency, as measured by increased RN time at the bedside in value-added activities, resulting in:
- Improved RN satisfaction with physical environment
- Improved patient satisfaction
- Improved clinical outcomes

Interventions

- Clinical nurses were shadowed on the existing unit to identify “Critical to Quality” needs for the new unit. The information was used by nurses to create space adjacency diagrams. These diagrams helped to visualize the ideal state which led to a decentralized environment of care.
- Architects developed three separate floor plans based on adjacency diagrams, including a 24, 28, and 32-bed unit.
- The construction firm mocked up rooms according to all three floor plans.
- Nurses successfully advocated to change the plan from a 32-bed unit to a 24-bed unit to support improved outcomes.
- Design meetings occurred regularly with nurses to evaluate the equipment, resources and support needed to ensure success of the new decentralized environment.
- Nurse team members worked to ensure they could support the decentralized environment by implementing the following:
  1. Geographical patient assignments
  2. Decentralized linens, equipment, and supplies
  3. Increased number of medication rooms, nourishment centers, staff restrooms, and soiled hold rooms.
- Nurses were the driving force in every organizational and unit decision during the design process. As a result RN time at the bedside was increased and outcomes were improved.

Results

- Percentage of RN Time at the Bedside in Value-Added Activities and with Direct View of the Patient, Just Outside Patient Room
  - Pre-data: 30%
  - Post-data: 69%
- HCAHPS Overall Rating of Care Top Box Score
  - Surgical Oncology-General Surgery Unit
  - Pre-data: 4.17
  - Post-data: 9.52
- Percent of Surveyed Patients with Hospital-Acquired Pressure Ulcers Stages 2 and Above
  - Surgical Oncology/Gen Surgery Unit
  - Pre-data: 81.54
  - Post-data: 89.13
- NDNQI Mean Adult Surgical Bed Size 400 - 499
  - Pre-data: 1.57
  - Post-data: 0.99

For additional information please contact:
Pam Scherff or Sarah Cypher
Froedtert & the Medical College of Wisconsin Froedtert Hospital
Milwaukee, Wisconsin
Pamela.Scherff@froedtert.com or Sarah.Cypher@froedtert.com