A Pod Design for Nursing Assignments


Key Concepts/Context

The Transforming Care at the Bedside (TCAB) Initiative affects four focus areas: patient-centered care, teamwork and vitality, value-added processes, and safe and reliable care. University of Pittsburgh Medical Center (UPMC) Shadyside began participating in TCAB 2003. The 38-bed cardiothoracic and vascular unit at UPMC was laid out along two 200-foot parallel hallways with a nursing core in between. Twenty rooms were located on side and eighteen on the other side. One of the key problems identified by the nurses at UPMC was the need to walk extensively to do their work because of patient assignments in different parts of the unit which were often distant from each other. The evidence provided very little support with regard to nurse assignment to patient rooms.

Methods

To justify the benefits of a pod assignment the authors collected different data from the unit. Spaghetti diagrams were created to track the path traveled by nurses. Patient complaints were assessed and Press Ganey patient satisfaction survey scores were collected. Particularly, Press Ganey responses on the following outcomes were reviewed: nurses’ promptness in responding to patient calls, attention to patients' personal needs, and overall care. The findings from this first study justified the creation of pods on the unit. Four pods were created with 8-10 rooms assigned to two nurses, with acute patients being equally distributed in different pods. UPMC started using the pods in April 2007. The entire unit participated in the intervention for 30 days. PDAs were used to track nurses’ activities after the change. Additionally, patient satisfaction and patient complaint data was analyzed for two months after the intervention and spaghetti diagrams were developed to track nurses’ path of travel.
Findings

- Consistent and sustained improvement was achieved in patient satisfaction scores in the months immediately after the pod design was implemented. Patient complaints decreased.
- The spaghetti diagram showed less erratic travel in the pod design, and the number of steps nurses had to take decreased significantly.
- There was consistent and sustained improvement in time spent on direct patient care with the pod design.

Limitations

- The study was conducted at only one site and a very small sample of nurses participated in the PDA study.
- Few details are provided in the study about the number of nurses that participated in the PDA study.
- The data collection period is very short.

Design Implications

The pod design which allows grouping of patients to nurses by geographic location reduces staff travel time and improves patient satisfaction. For the pod design to be successful, design of the unit and the staffing assignment should be considered together. Justification for any design improvements presented to the medical staff prior to implementation decreases resistance to change.