

Enhancing Patient Flow with Unit-Based Capacity Nurses and Workload Leveling

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Background

An interdisciplinary team investigated effective utilization of staffing and process improvement with emphasis on standard of work and nurse workload leveling. This team proposed the concept of creating a Unit-Based Capacity Registered Nurse (UBC RN) position to staff based on individual unit needs.

Literature Review

According to research, the admission/discharge process can be fragmented leading to staff and patient dissatisfaction. A dedicated capacity nurse, focusing on admissions, discharges, and transfers can be a key factor in decreasing RN workload, addressing the fragmented processes, and improving effectiveness and efficiency.

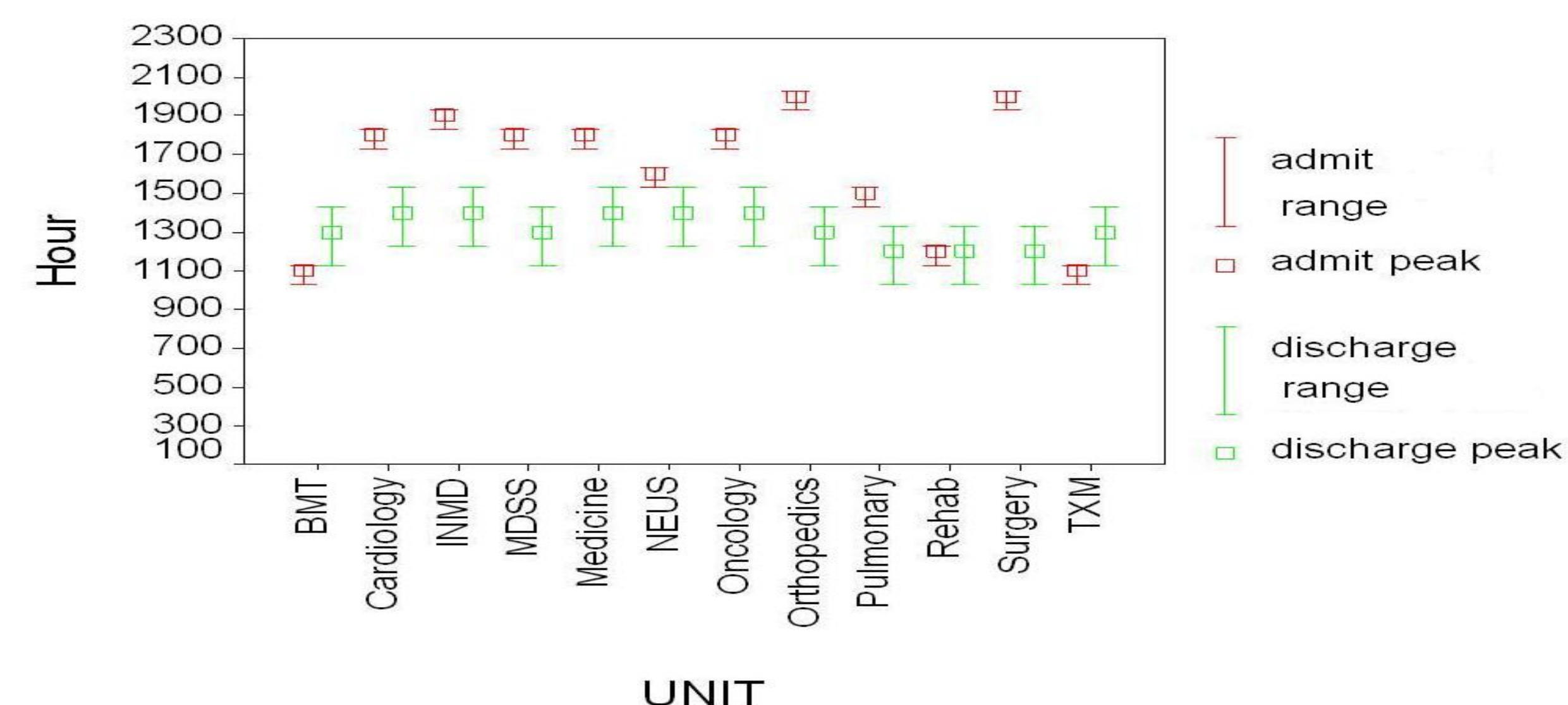
Purpose

- To improve the efficiency and quality of the admission and discharge process and the patient experience.
- To more efficiently manage workloads and balance staffing according to specific unit needs.

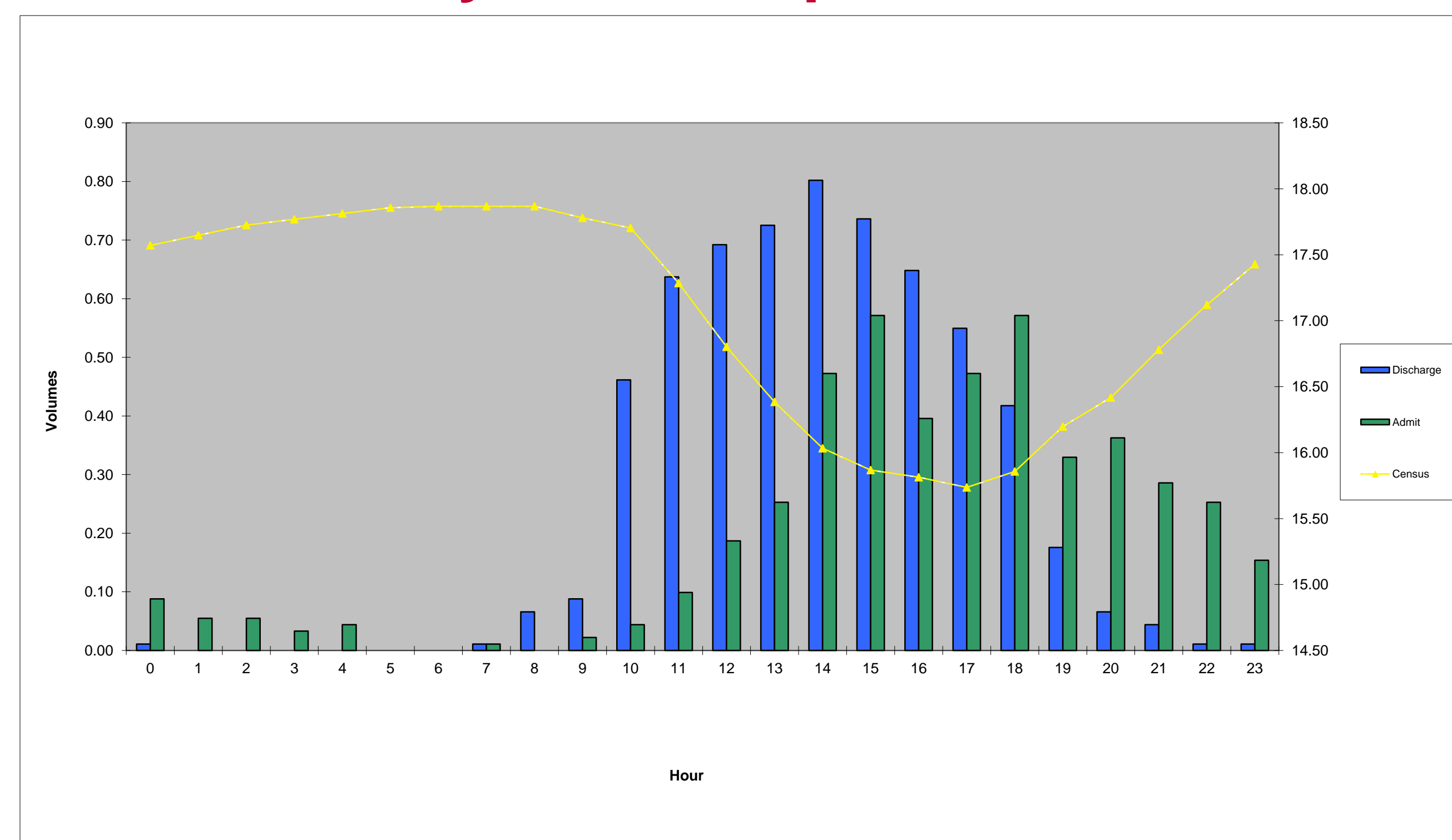
Methods

- Analyzed data over a 6 month period to depict average census, admits, discharges, and ICU transfers by day and hour for all acute care areas per unit.
- Individualized graphs reviewed per unit to delineate trends and volumes.
- Validated data trends for high peak admission, discharge, and ICU transfer times, including census levels.

Peak Admits and Discharges and Time Ranges by Hour per Unit



Sampling of Unit Average Admits, Discharges, and Census by Volumes per Hour



Short Shift Recommendation

- Shift hours varied. Hours were customized based on unit peak activity and intricacies/specifics to each area.
- Budget neutral position with no impact to unit of service.
- UBC RN to exclusively focus on admissions/discharges.
- Tailored short shift significantly impacted capacity metrics by providing the right role with the right responsibility at the right time

Workload Leveling

- Practical application of queuing theory and operations management field – the science of arrival rates and waits.
- Match staffing hours to meet peak activity times.
- Considerations to keep in mind when implementing the UBC RN role:
 - Goal is to overlap normal staff schedules.
 - UBC RN is to be utilized as a standardized resource on the unit.

Measuring Success Using NDNQI RN Survey and Organizational Critical Success Factors

- On a medical/surgical unit, RNs able to take meal breaks improved from 10th percentile to 25th percentile.
- Perceived Quality of Care rose from 75th to 90th percentile.
- Job Enjoyment increased from 75th to 90th percentile.
- Job Plans: RNs intent to remain on unit improved from 10th percentile to nearly 75th percentile.
- Contributed to the increase of total number of all admitted patients from a clean to occupied bed in under an hour from 46% to 54%.

References

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