Evaluating the Role of the Hospitalist Nurse Practitioner in Facilitating Early Discharge of Observation Patients

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Introduction

- The use of Nurse Practitioners (NP) as a hospitalist is a growing trend.
- NPs trained in specialized program can adapt well to the hospitalist role.
- The utilization of a hospitalist NP can improve efficiency and patient flow.
- The advent of Affordable Care Act of 2010 increase the demands for primary care services.

Significance

- The Centers for Medicare and Medicaid Services (CMS) has strict admission criteria for sick vs. not sick patients.
- Observation care is defined by CMS as an outpatient service which includes short term treatment, assessment, and reassessment.
- Patients placed under observation criteria must comply with the 2-midnight rule.
- Failure of the organization to determine the appropriate level of care may result in payment denials.

Objectives

- Improve the patient flow of the observation telemetry patients from the time of arrival to discharge.
- Explore the effectiveness of the role of the hospitalist NP in the assessment, evaluation and coordination of patient care.
- Improve the overall organizational throughput and reduction in the boarding of admitted patients in the emergency department.

Theoretical Framework

	Knowledge Formation and Distillation	Diffusion and Dissemination	Adoption, Implementation and Institutionalization
Process	1a. Creation of new knowledge, practices, or products. 1b. Distillation of key knowledge, practices, or products.	2a. Creation of dissemination, partnership/knowledge transfer teams. 2b. Mass diffusion of key knowledge, and products. 2c. Targeted dissemination/persuasion.	3a. Development of interventions. 3b. Adoption and implementation. 3c. Confirmation, adaption, and internal institutionalization. 3d. External institutionalization and routination.
Knowledge and dissemination sources	Role of Hospitalist NP was piloted 2018.	Organizational awareness of the new role by partnership with the Director, Nurse Manager, staff of Telemetry Unit. Attending staff meetings. DNP student attended interdisciplinary rounds with OBS team.	Dissemination of the new care model. Meets regulatory compliance, credentialing body, and institutional by-laws.
Actors/target audience	CMO, CNO, Physicians, APN/APC, Nursing staff, students, Utilization/Transitional care team, and other Interdisciplinary care team.		Additional NPs were hired for the pilot project.
Activities	Research question: Does the management by the hospitalist NP of the OBS patient diagnosed with chest pain achieve earlier discharge times than the hospitalist physician?	Stakeholder analysis and buy-ins. Analysis of the barriers/challenges of the new care model. Analysis of the reduction in LOS.	Institutionalize the new care model. Monitor outcomes and sustain the change overtime.

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Setting and Study Design

- 40 bed Telemetry unit of a nonprofit 361 bed acute care hospital in Northern New Jersey.
- Patient population were those placed on observation telemetry status admitted under the hospitalist group.
- Retrospective review of 40 random charts, 3 months pre- and post-intervention that meets the inclusion criteria.

Outcomes Measured

- Pre-intervention, 20 random charts from October 1, 2017 to December 31, 2017.
- Implementation of Hospitalist NP, October 2018.
- Post-intervention, 20 random charts from January 1, 2019 to April 30, 2019.
- Admission time and discharge time were compared between Hospitalist physician and Hospitalist NP.
- Time to order of consultation, time to imaging, and time to stress and interpretation of results were measured.
- Age and reported comorbidities and its association with LOS were measured.

Analysis

- SPSS statistical software, version 24 was used to analyze descriptive and correlational data.
- An Independent sample t-test was used to compare means between Hospitalist NP and Physician.
- The confidence interval of 95% was examined for t-test results.

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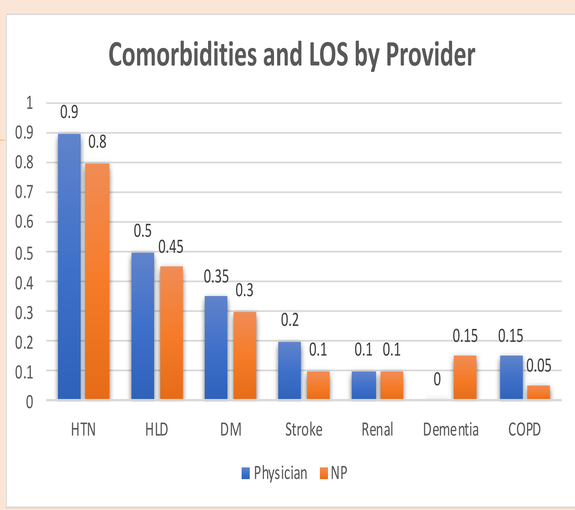
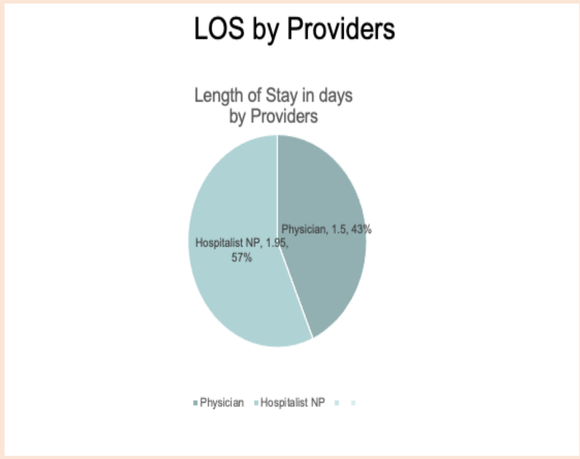
Results

Participant Demographics

Characteristic	n=40	
Gender		
Female	16	40%
Male	24	60%
Age		
18-30	0	0%
31-41	1	2.5%
41-50	3	7.5%
51-60	9	22.5%
61-70	10	25%
71-80	6	15%
81-90	7	17.5%
91-above	4	10%
Race		
Asian Indian	2	5%
Black or African American	8	20%
Filipino	3	7.5%
Korean	1	2.5%
Other Asian	1	2.5%
Other Race	8	20%
White	17	42.5%





Discussion

- Sample comprised of 40 observation telemetry patients, 20 admitted by the Physician and 20 by Hospitalist NP.
- The mean age was 69.02 (*sd*=15.3). White (n=17) was the largest group in race. In terms of gender Male (n=24), female (n=16).
- Age was moderately correlated to patients LOS (r=.32;p=.04).
- The total number of comorbidities that the patient had was weakly and not statistically correlated to LOS (r=.18;p=.28)
- The mean LOS admitted by Physician was 1.50 days (*SD*=0.69) while Hospitalist NP 1.95 days (*SD*=0.95).
- There were no statistically significant differences between the groups (t(38)=1.72; p=0.09).

Limitations/Gaps

- Sample size was small.
- The Hospitalist NP role started with only 2 FTE staff working on the overnight shift.
- There were limited resources on the overnight shift.
- Post implementation data was during the months of influenza season.

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