

## NK9EOa – INNOVATION

### DECREASING AVERAGE LENGTH OF STAY BY REDESIGNING THE 9<sup>TH</sup> FLOOR UNITS

*Using the required empirical outcomes presentation format, provide one example of an improved outcome associated with nurse involvement with the design or redesign of the physical environment.*

#### **Problem**

Transplant patients at NewYork-Presbyterian/Columbia University Irving Medical Center (NYP/Columbia) are admitted to the Transplant (M9H-605160) [M9H] Unit. This unit was formerly 9 Hudson North (9HN), a 26-bed unit on the north wing of the 9<sup>th</sup> floor of the Hudson building, and included an extension of 10 beds within the Hospitalist/Ortho/Surgical (9GS-605124) [9GS] Unit, known as the 9 Extended Unit (9EU). A separate Hospitalist/Ortho Unit (9 Hudson South) [9HS] with 17 beds existed on the south wing of the 9<sup>th</sup> floor of the Hudson building. This setup of having transplant patients spread across two separate physical environment locations (9HN and 9EU) challenged clinical nurses to participate in huddles, make unit rounds, and coordinate care, impacting outcomes, including the average length of stay (ALOS). Matthew Cole, MSN, RN, CCRN, Patient Care Director, (Nurse Manager), 9HN, noted an increased ALOS among transplant patients.

#### **Pre-Intervention**

June 2021:

- The ALOS of transplant patients in M9H (previously 9HN and 9EU) was 16.34 days in June 2021.
- Mr. Cole; Jeffrey Hammond, MSc, BSN, RN, NEA-BC, Director of Nursing, Specialty and Operations; Josh Wansley, MSN, RN, NEA-BC, Patient Care Director, 9HS (at the time); and Nadine Couch, MSN, MHA, RN, Patient Care

Director, 9GS; identified an opportunity to relocate the transplant service and consolidate the care of transplant patients in a single location.

- Mr. Hammond spoke to Courtney Vose, DNP, MBA, APRN, RN, NEA-BC, Vice President and Chief Nursing Officer (at the time), and Laureen L. Hill, MD, MBA, Group Senior Vice President and Chief Operating Officer (at the time), NYP/Columbia, regarding the ongoing challenges of admitting transplant patients to multiple locations and proposed a plan to consolidate the care of these patients into a single location. Dr. Vose and Dr. Hill recommended that Mr. Hammond collaborate with Nate Sherman, MBA, Manager of Business Administration, Department of Nursing, to create a business proposal.
- Mr. Hammond and Mr. Sherman presented a draft of the 9th Floor Geolocalization Plan to Dr. Vose, Mr. Cole, Mr. Wansley, and Ms. Couch. The plan was to redesign 9HN and 9HS into one 43-bed transplant unit, known as 9 Hudson (M9H), permanently relocate transplant patients from 9EU to the newly redesigned M9H unit, and offer 9HS clinical nurses the choice to join the M9H Transplant Unit or the 9GS unit. The proposal was approved.

**Goal**

To decrease the ALOS in days for transplant patients in M9H (previously 9HN and 9EU).

**Participants**

<b>Name/Credentials</b>	<b>Discipline</b>	<b>Title</b>	<b>Department/Unit</b>
Matthew Cole, MSN, RN, CCRN	Nursing	Patient Care Director (Nurse Manager)	9HN
Josh Wansley, MSN, RN, NEA-BC	Nursing	Patient Care Director (Nurse Manager)	9HS, HP10, and Vascular Access Team (at the time)
Nadine Couch, MSN, MHA, RN	Nursing	Patient Care Director (Nurse Manager)	9GS
Jeffrey Hammond, MSc, BSN, RN, NEA-BC	Nursing	Director of Nursing	Specialty and Operations
Courtney Vose, DNP, MBA, APRN, RN, NEA-BC	Nursing	Vice President and Chief Nursing Officer (at the time)	Nursing Administration
Mary Clark, MBA, BSN, RN	Nursing	Program Director	Capacity Management

Diana Alemar, DNP, RN, AMB-BC, NPD-BC, NEA-BC, CNL	Nursing	Program Director	Nursing Professional Development
Laureen Hill, MD, MBA	Medicine	Group Senior Vice President and Chief Operating Officer (at the time)	NYP/Columbia
Colette Schafran, BSN, RN, CCRN	Nursing	Director of Supply Chain Logistics and Technology	Procurement and Strategic Sourcing
Vickie Powell, PharmD, MS, BS, FASHP	Pharmacy	Director (at the time)	Pharmacy
Nate Sherman, MBA	Healthcare Administration	Manager of Business Administration	Nursing
Emmanuel Taveras	Healthcare Administration	Project Manager (at the time)	Nursing
David Brown	Accounting	Controller, Workforce Operations	Accounting
Lorenzo Biagi	Human Resources	Human Resources Business Partner (at the time)	Human Resources
Andre Walcott, MS	Information Technology	Inpatient Applications Analyst	Epic Clinical Documentation

## **Intervention**

July 2021:

- Mr. Hammond, Mr. Cole, Mr. Wansley, and Ms. Couch reviewed the clinical nurses' preferences for choice of work location. They collaborated with Diana Alemar, DNP, RN, AMB-BC, NPD-BC, NEA-BC, CNL, Program Director, Nursing Professional Development, and provided training on stepdown level of care for 9HS clinical nurses who opted to transfer to M9H.

*Impact Statement: The training ensured patients received appropriate level of care seamlessly through the redesign of M9H.*

August 2021:

- Mr. Cole, Ms. Couch, and Mr. Taveras collaborated with Vickie Powell, PharmD, MS, BS, FASHP, Director of Pharmacy (at the time), on the changes in stocked

medications in M9H and 9GS Omnicell® machines. Omnicell is an automated medication dispensing system designed to create a safer, smarter medication administration.

*Impact Statement: These changes included removing transplant-related medications from the 9GS Omnicell and increasing transplant-related medications in the M9H Omnicell for the redesign to ensure there were no delays that would impact the ALOS.*

- Mr. Cole, Ms. Couch, and Mr. Taveras collaborated with Mary Clark, MBA, BSN, RN, Program Director, Capacity Management, and Andre Walcott, MS, Inpatient Applications Analyst for Epic Clinical Documentation, on the changes of unit mapping and bed assignment in Epic.

*Impact Statement: Patients admitted to the correct unit ensured that the ALOS was accurate for the population of transplant patients.*

- Mr. Wansley and the 9HS clinical nurses collaborated with Colette Schafran, BSN, RN, CCRN, Director of Supply Chain Logistics and Technology, on redesigning the two supply rooms for one combined unit. The nurses reviewed the changes in the redesign of the supply room, such as the location of frequently used supplies, and exchanged information to reach agreed upon par levels.

*Impact Statement: The supply rooms redesign ensured there was appropriate supplies for transplant patients and there were no delays caused by nurses not having the appropriate supplies that would impact the ALOS.*

- The transplant interprofessional team, including nurses, officially transitioned inpatient transplant services to the newly redesigned physical environment on M9H on August 9, 2021.

- **Key references:**

Fengzhi Lin, F., Chaboyer, W., Foster, M., Hervey, L., Marshall, A. (2019). Facilitating the relocation of an intensive care unit from shared room to single room setting: Staff perceptions on the effectiveness of a multicomponent intervention. *Australian Critical Care*, 32(4), 279-284. <https://doi.org/10.1016/j.aucc.2018.06.008>

Urasadettan, J. (2019). The Impact of Project Ambiguity on the Forms of Cooperation Developed: The Merging of Two Hospital Care Units. *M@n@gement*, 22, 56-91. <https://doi.org/10.3917/mana.221.0056>

**Outcome**

