

THERE'S NO PLACE LIKE HOME: Developing an Acute Home Hospital in an Academic Health System



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NYU Langone Home Hospital

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PRACTICE PROBLEM

High bed occupancy in hospitals can negatively impact patient flow, quality of care, and patient satisfaction. Hospitals with high bed occupancies often suffer from overcrowding of the emergency department (ED), limiting access to crucial emergency services for community members and prolonging acute inpatient ED boarding. Previous strategies to address high occupancy in this organization include the increase in the percentage of patients discharged before noon (DBN), and the reduction of both the length of stay (LOS) and the median discharge time. Utilizing new and innovative growth strategies to create bed capacity is crucial in maintaining efficient patient flow, high-quality outcomes, and a positive patient experience.

INTERVENTION

NYU Langone Home Hospital (NYULHH) is an innovative program that provides acute-level care at the patient's home setting as a substitute for inpatient hospitalization using a hybrid remote/in-person visit model in the comfort of their own home while maintaining the same high-quality care they would otherwise receive in the traditional brick and mortar. This Registered Nurse (RN) and Hospitalist Dyad model utilizes an interdisciplinary team approach that provides personalized care, improves communication between all team members, provides exceptional patient experience, and promotes the satisfaction of health care professionals.

PATHWAY & CARE DELIVERY MODEL

Home Hospital Inpatient Admission
There are three key components of the Home Hospital care delivery model, all working seamlessly together to manage patient care and coordinate clinical services virtually and in the home as needed

Epic / Remote Patient Monitoring
Support constant communication and visibility into patient's inpatient stay via integrated technology

At-Home Care Delivery
Provide care to patients in the comfort of their own home either virtually or in-person, including twice daily nursing visits, EAS support, radiology, labs, etc.

Command Center
The "Hub" of NYU-LI's Home Hospital. Enable the clinical services team to manage HH patients telemedically, includes the HH Hospitalist, Command Center Nurse, Consulting Physicians, etc.

HH Candidate Identification & Screening (ED Admissions) → Discharge (Home / Home Care Services)

CANDIDATE SCREENING & IDENTIFICATION*

- 01 Step: Patient Arrives to the Emergency Department**
HH Candidates are admitted via the Emergency Department meet specific clinical conditions, reside within 12 miles of the hospital, and be insured by in-scope payer
- 02 Step: Decision to Admit and Initial Candidate Identification**
Once a Decision to Admit is made, candidates are identified and screening initiated by a HH Nurse Navigator, Case Management / Social Work, and the ED Physician
- 03 Step: Patient HH Introduction and Continued Eligibility Screening**
Candidates continuing to meet non-clinical and clinical eligibility criteria are introduced to the HH program to gauge interest for a preliminary Home Hospital Assessment; Candidates that no longer fit criteria or are not interested in the program will follow traditional inpatient processes
**Patients can "fall out" of the HH screening at any point and revert to traditional inpatient processes*
- 04 Step: Physician Communication of Admission**
The Admitting Hospitalist is notified of potential HH candidate in order to communicate the inpatient admission to the patient's private / community physician and assign the dedicated HH Hospitalist appropriately
- 05 Step: Patient Consent and Final Physician Determination**
Patient consent into the HH program is obtained. The HH Hospitalist completes the inpatient H&P and initial orders.* The patient is transported home for their inpatient admission.
Patients are officially admitted to the HH Department at this point in the admission process

*This workflow represents admission from the ED. Patients can also be transferred to HH from the inpatient unit.

AT-HOME CARE DELIVERY

Ancillary and As Needed Services

- Consulting Physician
- Case Management / Social Work / Dietary
- Physical Therapy / Speech Therapy / Occupational Therapy / Respiratory Therapy
- Mobile Radiology / NYU Radiologist, Cardiologist (Imaging Reads)
- Oxygen Vendor
- EAS (Transport)
- Inpatient Pharmacy
- Laboratory
- Supplies / DME
- Remote Patient Monitoring MCIT Support

Direct Care Team

- Hospitalist
- Field Nurse (RN)
- Nurse Navigator (RN)
- Command Center Nurse (RN)
- On-Call Nurse (RN)

REMOTE PATIENT MONITORING

Real-time biometric monitoring*

- Wearable:** measures pulse, respiratory rate, oxygen saturation, and body temperature
- Tablet:** view care plan and communicate with clinicians
- Peripheral Devices:** includes blood pressure cuff and weight scale

*Clinicians utilize a dashboard to monitor the patients' vitals, review alarms, and take action

MEASURES OF SUCCESS

Since September 2022 over 240 patients have been admitted, Average daily census is 3.89

Clinical Outcomes

- Mortality (O:E) = 0.00
- 30-Day Readmission Rate = 6.9% (brick & mortar = 11.2%)
- Length of Stay (O:E) = 0.75 (target 0.82)
- Hospital-Acquired Conditions = Zero Harm!

Patient Experience

- 100% Overall Rating of Care

Staff Engagement

- 8 points higher than the organizational average (via Employee Engagement Survey)

WHAT MAKES OUR HOME HOSPITAL PROGRAM THE BEST?

- NYU Langone Home Hospital leverages its existing portfolio of home care services as a foundation**
 - NYU Langone's home care portfolio includes Home Health Care via NYU Langone's Certified Home Health Agency and Home Dialysis
- NYU Langone Home Hospital maintains the NYU Langone standards and expectations for clinical excellence and quality patient care and outcomes**
 - Utilizes NYU Langone resources rather than outsourcing services and clinicians wherever possible
- NYU Langone Home Hospital was created through robust internal and external collaboration**
 - Designed through partnership with clinical, ancillary, MCIT, and support NYU Langone departments
 - Incorporates lessons learned and success factors from external Hospital at Home relationships
- NYU Langone Home Hospital focuses on patient outcomes and safety rather than rapid growth**
 - Offers a tailored acute care solution rather than taking the Hospital at Home standard model and retro-fitting to our population

REFERENCES

References available upon request